GANDHI INSTITUTE OF TECHNOLOGY AND MANAGEMENT(GITAM)
(Deemed to be University)

VISAKHAPATNAM * HYDERABAD * BENGALURU

Accredited by NAAC with A^+ Grade

REGULATIONS AND SYLLABUS

OF

BBA (BUSINESS ANALYTICS)

(for 2020-21 admitted batch)

Bachelor of Business Administrator (BA)

1. REGULATIONS (w.e.f.2020-21 admitted batch)

1.0 ADMISSION

Admission into BBA (Business Analytics) program of GITAM (Deemed to be University) is governed by GITAM (Deemed to be University) admission regulations.

2.0 ELIGIBILITY CRITERIA

- A minimum of 50% of marks in Pre-University / Higher Secondary / 10+2 / Intermediate examination with mathematics as one of the core subjects or equivalent from any recognized Board or Council.
- Qualified in UGAT or GAT (or) Qualified in GIM Online Test (GOT) conducted by GITAM Institute of Management, GITAM (Deemed to beUniversity)

3.0 CHOICE BASED CREDIT SYSTEM

Choice Based Credit System (CBCS) is introduced with effect fromthe admitted Batch of 2015-16 based on UGC guidelines to promote:

* Student centered learning
* Cafeteria Approach
* Students to learn courses of their choice
* Learn at their own pace
* Inter-disciplinary learning

Learning goals/ objectives and outcomes are specified leading to what a student should be able to do at the end of the programme.

4.0 MEDIUM OF INSTRUCTION

The medium of instruction (including examinations and project reports)shall be English.

5.0 REGISTRATION

Every student has to register himself/herself for each semester individually at the time specified by the Institute / University.

6.0 ATTENDANCE REQUIREMENTS

- A student whose attendance is less than **85**% in all the courses put together in any semester will not be permitted to attend the end-semesterexamination and he/she will not be allowed to register for subsequent semester of study. He/she has to repeat the semester along with his/herjuniors.
- However, the Vice Chancellor on the recommendation of the Principal /Director of the University College / Institute may condone the shortageof attendance to the students whose attendance is between 66% and 74% on genuine medical grounds and on payment of prescribed fee.

7.0 EVALUATION

7.1 The assessment of the student's performance in a Theory course shall be based on two components: Continuous Evaluation (40 marks) and Semester-end examination (60 marks).

7.2 A student has to secure an aggregate of 40% in the course in the two components put together to be declared to have passed the course, subject to the condition that the candidate must have secured a minimum of 24 marks (i.e. 40%) in the theory component at the

semester-end examination.

7.3 Practical/ Project Work/ Industrial Training/ Viva voce/ Seminar etc. course are completely assessed under Continuous Evaluation for a maximum of 100 marks, and a student has to obtain a minimum of 40% to secure Pass Grade. Details of Assessment Procedure are furnished below in Table 2.

Table -1 Assessment Procedure

S.No.	Component of Assessment	Marks Allotted	Type of Assessment	Scheme of Evaluation
1		40	Continuous Evaluation	(i)Mid Semester examinations: Two mid examinations will be conducted for 20 marks each. **Better of two** will be considered for final 20 marks. If the student is absent for one Mid exam, the marks secured in the other mid exam will be considered as final marks. **No** more examinations will be conducted under any circumstances except exceptional cases as approved by the HOI. Coursera course/online Course: 10 marks. (Students need to complete respective subject wise Coursera course/ on line course listed by GIM through online and required to submit the course completion certificate. Up on which student need to give presentation/viva for awarding marks up to 10) Classroom Presentations/Seminars and Case analysis/workshop/training/ Assignments/survey/ project work: 10 marks
		60	Semester-end Examination	The semester-end examination in theory subjects: Sixty (60) Marks. Note: In respect of courses having practicals, theory examination shall be for forty (40) marks and practical exam for twenty (20) marks.
	Total	100		
2	Practicals (Note: Courses like Tally and Ms-Excel)	100	Continuous Evaluation	1.Forty (40) marks for lab performance, record and Viva-Voce Sixty (60) marks for two tests of 30 marks each (one at the mid-term and the other towards the end of the Semester) conducted by the concerned lab Teacher.
3	Semester End Viva-voce	50	Continuous Evaluation	Fifty (50) marks for Viva Voce Examination conducted orally after the completion of every Semester.
4	Summer Practice School Report	50	Training Report Evaluation	Project report: 30 marks. Viva : 20 marks.

Table:2 Assessment Procedure Professional competency development courses

S.No.	CourseCode	Course	Total Credits	Marks	Evaluation
1.	MBG356	CourseraCourse	1	50	Will be evaluated on submission of course completion certificate by the student. Marks will be awarded based on the student performance in the respective Coursera Course and presentation thereon.
2.	MBG350	Yoga	1	50	Attendance- 5 Marks Viva- 5 Marks Practical Exercises- 40
3.	MBG348	Public Speaking	1	50	Practical Exercises 40 Marks Attendance 10 Marks
4.	VDC 111	Venture Discovery	2	100	Internal assessment as per VDC Guide-lines/regulations
5.	MBA362	BEC	1	50	As per the British Council norms
6.	MBG 344	General Book Review	1	50	Self-Study& Presentation of the review –evaluated by Internal panel members
7.	MBG346	Introduction to GandhianThoughts	1	50	Mid Exam 20 Marks Attendance 10 Marks Sem End Exam 20 Marks
8.	MBG354	Soft Skills	1	50	Practical Exercises 40 Marks Attendance 10 Marks
TOTAL		**9**	**450**		

8.0 RETOTALLING, REVALUATION & REAPPEARANCE AS PERNEW REFORMS

8.1 Retotaling of the theory answer script of the semester-end examinationis permitted on request by the student by paying the prescribed fee within one week after the announcement of the results.

8.2 Revaluation of the theory answer scripts of the semester-end examinationis permitted on request by the student by paying the prescribed fee within one week after the announcement of the result.

8.3 A student who has secured 'F' grade in a theory course shall have to reappear at the subsequent Semester - end examinations held for that course.

8.4 A student who has secured 'F' grade in Project work/industrial trainingetc. shall have to improve his/her report and reappear for viva voce withthe juniors for the first two years, whereas the final year student will appear for re-examination at the instant special examination.

9.0 Provision for Answer Book Verification & Challenge Evaluation:

9.1 If a student is not satisfied with his/her grade after revaluation, the student can apply for, answer book verification on payment of prescribed fee for each course within one week after announcement of revaluationresults.

9.2 After verification, if a student is not satisfied with revaluation marks/ grade awarded, he/she can apply for challenge valuation within one week after announcement of answer book verification result/ two weeksafter the announcement of revaluation results, which will be valued bythe two examiners i.e., one Internal and one External examiner in the presence of the student on payment of prescribed fee. The challenge valuation fee will be returned, if the student is succeeded in the appeal with a change for a better grade.

10.0 Supplementary Examinations & Special Examinations:

10.1 The odd semester supplementary examinations will be conducted on daily basis after conducting regular even semester examinations in April/May.

10.2 The even semester supplementary examinations will be conducted on daily basis after conducting regular odd semester examinations during Oct/Nov.

10.3 A student who has completed his/her period of study and still has"F" grade in final semester courses is eligible to appear for Special Examination normally held during summer vacation.

11.0 Promotion to the Next Year of Study

11.1 A student shall be promoted to the next academic year only if he/she completes the academic requirements of 60% of the credits till the previous academic year

11.2 Whenever there is a change in syllabus or curriculum, he/she has to continue the course with new regulations after detention as per the equivalency established by the BoS to continue his/her further studies. The courses like Workshop, Industrial tour and Industrial training are tobe considered in supplementary exams.

11.3 A student who has secured 'F' Grade in project work / Industrial Training shall be permitted to submit the report only after satisfactory completion of the work and viva-voce examination.

12.0 Repeat Continuous Evaluation:

12.1 A student who has secured 'F' grade in a theory course shall have to reappear at the subsequent examination held in that course. A student who has secured 'F' grade can improve continuous evaluation marks upto a maximum of 50% by attending special instruction classes held during summer.

12.2 A student who has secured 'F' grade in a practical course shall have to attend Special Instruction classes held during summer.

12.3 A student who has secured 'F' grade in a combined (theory and practical) course shall have to reappear for theory component at the subsequent examination held in that course. A student who has secured 'F' grade can improve continuous evaluation marks upto a maximum of 50% by attending special instruction classes held during summer.

12.4 The Repeat Continuous Evaluation (RCE) will be conducted during summer vacation for both odd and even semester students. A can student can register a maximum of 4 courses. Biometric attendanceof these RCE classes has to be maintained. The maximum marks in RCE be limited to 50% of Continuous Evaluation marks. The RCE marks are considered for the examination held after RCE except for final semester students.

12.5 RCE for the students who completed course work can be conducted during the academic semester. The student can register a maximumof 4 courses at a time in slot of 4 weeks. Additional 4 courses can be registered in the next slot.

12.6 A student is allowed to Secial Instruction Classes (RCE) 'only once' percourse.

13.0 SPECIAL EXAMINATION

A student who has completed the stipulated periods of study for the B.Com (Hons.) programme and still has failure grade 'F' in not more than **Four theory courses**, as detailed below is eligible to appear for special examinations conducted during summer vacation.

Note: Calculated based on the prescribed years of study of a programme (n) +one course. For example, a 3-year B. Com (Hons.) programme student can appear for Special Examinations if he has "F" Grade in a maximumof four theory courses (3 + 1) only.

14.0 BETTERMENT OF GRADES

Students who secured second class or pass who wish to improve their grades will be permitted ONLY ONCE to improve their grades at the end the program.

1. Candidates who have passed all the courses of a program within the stipulated period of study and who have obtained a Pass or Second Class only are eligible for Betterment of Grades.
2. Candidates who have already secured First Class or First Class with Distinction are not eligible for betterment of Grades.
3. Candidates who have completed the program of study beyond the stipulated period of study i.e. through Special examinations or subsequently, are not eligible for betterment of Grades
4. Betterment of Grades is permitted only through appearance of the theory examinations.
5. Betterment of Grades is permitted only once, at the end of the programof study, simultaneously along with Special examinations.
6. Candidates can appear for betterment at one course, across the semesters, for the number of semesters they have studied. i.e. a Six semester B.Com. (Hons) student can appear for betterment in any Six courses of study.
7. The better Grade secured either in the first or betterment appearance shall beconsidered as the final Grade.
8. New Grade Card/PC shall be issued to candidates who have improved their Grades/Class after submitting the old Grade Card/PC.
9. The date, month, and year of the declaration of betterment result shall beprinted on the Grade Card/PC
10. Betterment marks shall not be taken into consideration for award ofranks, prizes, and medals.
11. Candidates have to pay a betterment fee as prescribed by the University.
12. Betterment of Grades is permitted 'only once', immediately aftercompletion of the program of study.
13. The rules & regulations framed by the University from time to time shall be applicable.

15.0 GRADING SYSTEM

Based on the student performance during a given semester, a final lettergrade will be awarded at the end of the semester in each course. The letter grades and the corresponding grade points are as given in Table 3.

Table 3: Grades and Grade Points

Sl.No.	Grade	Grade Points	Absolute Marks
1	O (outstanding)	10	90 and above
2	A+ (Excellent)	9	80 to 89
3	A (Very Good)	8	70 to 79
4	B+ (Good)	7	60 to 69
5	B (Above Average)	6	50 to 59
6	C (Average)	5	45 to 49
7	P (Pass)	4	40 to 44
8	F (Fail)	0	Less than 40
9	Ab.(Absent)	0	--

16.0 A student who earns a minimum of 4 grade points (P grade) in a courseis declared to have successfully completed the course and is deemedto have earned the credits assigned to that course, subject to securing aGPA of 5 for a pass in the semester.

This is applicable to both theory and practical papers. In the case of project Report (dissertation) and Vice-Voce also, the minimum pass percentage shall be 40%.

17.0 GRADE POINT AVERAGE

17.1 A Grade Point Average (GPA) for the semester will be calculated according to the formula:

$$GPA = \frac{\Sigma [CxG]}{\Sigma C}$$

Where

C = number of credits for the course,

G = grade points obtained by the student in the course.

17.2 GPA is awarded to those candidates who pass in all the subjects of the semester. To arrive at Cumulative Grade Point Average (CGPA), a similar formula is used considering the student's performance in all the courses taken, in all the semesters up to the particular point of time.

17.3 CGPA required for classification of class after the successful completion of the programme is shown in Table 4.

Table 4: CGPA required for award of Class

Distinction	≥ 8.0*
First Class	≥ 6.5
Second Class	≥ 5.5
Pass	≥ 5.0

*In addition to the required CGPA of 8.0, the student must have necessarily passed all the courses of every semester in first attempt.

18.0 ELIGIBILITY FOR AWARD OF THE B.Com (Hons.) DEGREE

18.1 **Duration of the programme:**

A student is ordinarily expected to complete the B.Com (Hons.) Programme in six semesters of three years. However, a student may complete the programme in not more than five years including study period.

18.2 However, the above regulation may be relaxed by the Vice Chancellor in individual cases for cogent and sufficient reasons.

18.3 A student shall be eligible for award of the B. Com (Hons.) Degree if he/ she fulfills all the following conditions.

18.3.1 Registered and successfully completed all the courses and projects.

18.3.2 Successfully acquired the minimum required credits as specified in the curriculum corresponding to the programme of his/her study within the stipulated time.

18.3.3 Has no dues to the Institute, hostels, Libraries, NCC / NSS etc, and

18.3.4 No disciplinary action is pending against him / her.

18.4 The degree shall be awarded after approval by the Academic Council.

19.0 PEDAGOGY

The classroom pedagogy is customized by individual faculty to enhance the learning experience, which is dependent on the course and the degree of absorption by students. It has been proven that the degree of absorption is directly proportional to self-learning or preparedness before the classroom sessions and the interactions during the classes. Knowledge thus gained builds a strong long-lasting foundation. Typically, classroom pedagogy ranges from instructions, simulations, case discussions, role plays, etc. Simulations and case discussions are adopted extensively across the curriculum, to supplement classroom instructions/lectures.

20.0 Experiential Learning

Rather than giving cut flowers to students, at GITAM INSTITUTE OFMANAGEMENT (GIM) we would prefer to teach them how to grow their own plants. Practical field-based experiential learning enhances class-room instructions and links theory to practice, which is highly emphasized in this curriculum.

Classrooms can teach how a bee looks, but to taste honey one should venture into the fields. At GITAM INSTITUTE OF MANAGEMENT (GIM) we endorse this learning philosophy by inviting senior leaders from Commerce and business, organizing interactions with Chartered Accountants / CEO Finance / Deputy CEO Finance, and by conductingvisits to Chartered Accountant firms which can help connect and reinforce class work with real world solutions.

21.0 Guest and Visiting Faculty

Senior executives from the corporate arena dealing with Accounting andFinance are invited periodically to serve as guest and visiting faculty. Attendance for guest lectures is mandatory. Students are required to submit a reflective report about each guest lecture to their respective faculty member.

22.0 SEMESTER END EXAMINATIONS

22.1 Examinations

Examinations are not the end, but a launching platform into a brighter future. The knowledge gained during the semester is tested through thesemester end-examinations. Violation of norms regarding behavior in the examination hall will attract severe penalty. Students found copyingin the examination halls will have one grade point less or asked to leavethe programme basing on the consequences.

22.2 Examination Duration

The duration of each semester end-examination shall be for 3 hours. In case of courses having practicals, the duration of the theory exam shallbe for 2 hours and the practical for an additional hour.

The medium of semester end examination for all the courses shall beEnglish with the exception of languages (other than English)

22.3 Examination pattern

A. The following shall be the structure of the question papers of differentcourses with case Analysis

S.No.	**Pattern**	**Marks**
1.	**Section A :** Ten questions each carry 2 marks	10X2= 20 marks
2.	**Section B :** Five Essay type questions (either or choice Questions from each unit**)**	5 X6 = 30 marks
3.	**Section C : One Case let** (not more than 200 words)	1X10 =10 marks
	Total	**60 arks**

B. The following shall be the structure of question paper for courses with numerical problems.

S.No.	Pattern	Marks
1.	**Section A :** Ten questions each carry 2 marks	10X2= 20 marks
2.	**Section B : Problems/Theory** (either or choice Questions from each unit)	5 X 8 = 40marks
	Total	**60 marks**

C. The following shall be the structure of question paper for all the othertheory courses

S.No.	Pattern	Marks
1.	**Section A :** Ten questions each carry 2 marks	10X2= 20 marks
2.	**Section B :** Five Essay type questions (either or choice Questions from each unit**)**	5 X8 = 40 marks
	Total	**60 arks**

23.0 VIVA VOCE

The Comprehensive Viva-Voce Board consists of: Director/Dy. Director : Chairman One Senior Faculty from the Institute : Member Program Coordinator : Convener Senior Faculty/Practitioner: Member

24.0 STRUCTURE OF THE PROGRAMME:

24.1 The Programme Consists of

i. Foundation Courses (compulsory) which give general exposure to a student in communication and subject related area.
ii. Core Courses (compulsory).
iii. Discipline centric electives which
   a) Are supportive to the discipline
   b) Give expanded scope of the subject Intra DepartmentalElectives
   c) Give inter disciplinary exposure
   d) Nurture the student skills Inter Departmental Electives
iv. Open electives - which are of general nature and unrelated to the discipline to expose the student in areas such as general knowledge, personality development, economy, civil society, governance etc.

24.2 Each course is assigned a certain number of credits depending upon thenumber of contact hours (lectures and tutorials) per week.

24.3 In general, credits are assigned to the courses based on the following contact hours per week per semester.

24.3.1 One credit for each Lecture / Tutorial hour per week.

24.3.2 One credit for two hours of Practicals per week.

24.3.3 Two credits for three (or more) hours of Practicals per week.

24.4 Range of credits:

Course	Range of Credits
Theory	2 to 6
Practical	2 or 3
Project Work	1 to 5
Professional Competency Development	1 or 2
Viva Voce	1 or2
Seminar	1or 2

24.5 The curriculum of the six semester B. Com (Hons.) programme isdesigned to have a total of 152 credits out of which 147 minimum credits required for the award of B. Com (Hons.) degree as shown in **Table 1**.

Table 1: Course Structure

Course Level	No. of Courses	Total Credits	Minimum Credits required to be earned	%
Foundation Compulsory /General Courses	17	25	25	21
Core Courses including core skill	21	101	98	60
Elective Discipline Centric	4	24	24	17
Open Electives	2	6	3	2
PCDs		9	6	
TOTAL	**44**	**165**	**156**	**100**

NOTE:

1. A student has to earn a total of 156 credits out of 165Credits in Foundation, Core and Elective Courses which are compulsory courses.
2. A Student has to secure 6 out of 9 credits in Professional Competency Development Courses.
3. A minimum of 156 Credits out of 165 credits are compulsory to complete the program and for awarding of the degree.

Every course offered as part of the curriculum, has been carefully pickedand the course objectives clearly defined, based on the competency outcome that is expected to be delivered by the end of the course. Creditsare assigned to a course, depending on the effort that is required to teachthe laid-out course objectives and the effort expected from students. One credit is represented by 1 hour of contact class interactions per week.

NOTE: GITAM Institute of Management reserves the right to change the totalcredits/courses offered without prior notice.

PROGRAM EDUCATIONAL OBJECTIVES (PEOs)

PEO1	To develop individuals with conceptual knowledge in the multiple disciplines of analytics comprising of mathematics, statistics, information technology and management
PEO2	To develop individuals who can pursue career in the area of analytics and continue their professional development by obtaining masters degree specializing in different domains related to analytics.
PEO3	To develop individuals who can apply analytics tools and techniques tosolve business analytics problems.
PEO 4	To imbibe value based education to the students that will help them to function effectively in their business analytics career.
PEO 5	To train the students in emerging as efficient managers equipped with innovation, rationality.

PROGRAM OUTCOMES(POs) &

At the end of the program the students would be able to

PO1	Acquire adequate knowledge through principles, theories and models of business management, Accounting, Marketing, Finance, IT, Operations and Human Resource.

PO2	Demonstrate proficiency for Business Communication for effective and professional business management.
PO3	Acquire employability skills through practical exposure of IT and its usage in different domains of management.
PO4	Analyze and comprehend the applicability of management principles in solving complex business challenges.
PO5	Develop entrepreneurial skills among the students, to venture out their own domain proficiencies.
PO6	Build a perspective about global competitive environment including socio-cultural, technical and sustainability issues.
PO7	Develop leadership skills to achieve the individual, group and organizational goals.
PO8	Appreciate the importance of ethics in decision-making and inculcate the spirit of social responsibility.
PO9	Comprehend the applicability of management principles in the situations pertaining to global business world.
PO10	Illustrate various concepts, theories and models in the functional areas of business to face the challenges of changes.
PO11	Apply business analytics in different functional area for organizational effective results.
PO12	Interpret the legal environment and its dynamics to various business operations for effective end-results.

PROGRAM SPECIFIC OUTCOMES(PSOs):

PSO1	Utilize the tools such as Excel, SPSS, R, Weka and Tableau to solve business analytics problem.
PSO2	Analyze, design and develop solutions to a business problem
PSO3	Apply analytics techniques to analyze and interpret the data.

24.6. Semester Wise Structure

SEMESTER – I

S. No.	Course Code	Level of Course	Title of the Course	Sessions			Marks			Credits
				Theory	Prac.	Total	CA	SEE	Total	
1	GEL131	Foundation Compulsory	Communicative English	3	-	3	40	60	100	3
2	MBG103	Foundation Compulsory	Business Economics	3	-	3	40	60	100	3
3	MFT101	Foundation Compulsory	Financial Accounting and Analysis	4	-	4	40	60	100	4
4	MBG109	Foundation Compulsory	Indian Business Environment	3	-	3	40	60	100	3
5	MAN123*	Foundation Compulsory	Programming in C++	2	2	4	100	-	100	3
6	MAN101	Foundation Compulsory	Calculus - I	4	-	4	40	60	100	4
7	MAN191	Core Skill Building	Semester End Viva-Voce				50		50	1
	Total			**19**	**2**	**21**	**350**	**300**	**650**	**21**

Note: *100% Internal evaluation

PROFESSIONAL COMPETENCY DEVELOPMENT COURSES

S. No.	Course Code	Level of Course	Title of the Course	Sessions			Marks			Credits
				Theory	Prac.	Total	CA	SEE	Total	
1	MBG 356	Skill Based	*Coursera Course	-	2	2	50	-	50	1
2	MAN342	Foundation Elective	Introduction to Sociology	2	-	2	50	-	50	1
	Total			2	2	4	100	-	100	2

Note: credits of Professional Competency Development courses will be added in the 6th Semester only.

Prac:Practicals,CA: Continuous Assessment, SEE: semester End Examination

*****the student need to choose a coursera course from the GITAM University listed courses, and required the complete the course through online and submitthe course completion certificate and presentation thereon for awarding marksup to 50.

SEMESTER – II

S. No.	Course Code	Level of Course	Title of the Course	Sessions			Marks			Credits
				Theory	Prac.	Total	CA	SEE	Total	
1	MBG102 / MBG104 / MBG106 / MBG108	Foundation Elective	Telugu/ Sanskrit/ Hindi/ Special En-glish**	3	-	3	40	60	100	3
2	MBG110	Foundation Compulsory	Principles and Practice of Manage- ment	3	-	3	40	60	100	3
3	MAN126*	Core	Data Analy- sis with MS Excel	2	2	4	100	-	100	3
4	MAN106	Core	Calculus - II	4	-	4	40	60	100	4
5	MAN108	Core	Discrete Mathemat-ics	4	-	4	40	60	100	4
6	MAN124*	Core	Data Struc-tures with C++	2	2	4	100	-	100	3
7	MAN192	Core Skill Building	Semester end Viva Voce				50		50	1
	Total			**18**	**4**	**22**	**410**	**240**	**650**	**21**

Note: ** The Foreign students are offered special English course

***** 100% Internal evaluation

PROFESSIONAL COMPETENCY DEVELOPMENT COURSES

S. No.	Course Code	Level of Course	Title of the Course	Sessions			Marks			Credits
				Theo-ry	Prac.	Total	CA	SEE	Total	
1	MBG344	Foundation Elective Skill Based	Book review	2	-	2	50	-	50	1
2	MBG346	Foundation Elective Value Based	Introduction to Gandhian Thoughts	2	-	2	50	-	50	1
	VDC111	Skill Based	Venture Discovery	2		2	100		100	2
	Total			**6**	**-**	**6**	**200**	**-**	**200**	**4**

Note: credits of Professional Competency Development courses will be added in the 6th Semester only

Prac:Practicals, CA: Continuous Assessment, SEE: semester End Examination

Note: The Student has to do a Social Project/Rural Project for a period of 20-30 days during First year, carrying 1 credit which will be shown in III Semester . The student can study/analyze any social/rural issues or challenges in form of survey and needs to submit a report . A Viva will be conducted for awarding marks.

SEMESTER – III

S. No.	Course Code	Level of Course	Title of Course	Sessions			Marks			Credits
				Theo-ry	Prac.	Total	CA	SEE	Total	
1	MBG201	Foundation compul- sory	Indian Her-itage and Culture	2	-	2	40	60	100	2
2	MBG205	Core	Human Re-source Man-agement	3	-	3	40	60	100	3
3	MBG207	Core	Marketing Management	3	-	3	40	60	100	3
4	MAN203	Core	Statistical Methods	4	-	4	40	60	100	4
5	MAN225*	Core	Data Visual-ization with Tableau	1	2	3	100	-	100	2
6	MAN227*	Core	Data Analy-sis with R	2	2	4	100	-	100	3
7	MAN 295	Skill based	Social/Rural Project				50		50	1
8	MAN293	Core Skill Building	Semester End Viva				50		50	1
	Total			**15**	**4**	**19**	**460**	**240**	**700**	**19**

Change in course title

Note: *100% Internal evaluation

PROFESSIONAL COMPETENCY DEVELOPMENT COURSES

S. No.	Course Code	Level of Course	Title of the Course	Sessions			Marks			Credits
				Theo-ry	Prac.	Total	CA	SEE	Total	
1	MBG352	Foundation Elective Skill Based	Business English Certificate (BEC)	-	2	2	50	-	50	1
2	MBG350	Foundation Elective Value Based	Yoga and Meditation	-	2	2	50	-	50	1
	Total			**-**	**4**	**4**	**100**	**-**	**100**	**2**

Note: credits of Professional Competency Development courses will beadded in the 6th Semester

Prac: Practicals, CA: Continuous Assessment, SEE: semester EndExamination

SEMESTER – IV

S. No.	Course Code	Level of Course	Title of the Course	Sessions			Marks			Credits
				Theory	Prac.	Total	CA	SEE	Total	
1	MBG202	Foundation compulsory	Environmen-tal science	3	-	3	40	60	100	3
2	MAN210	Core	Business Research Methodology	3	-	3	40	60	100	3
3	MAN206	Core	Predictive Analytics and Decision Making	4	-	4	40	60	100	4
4	MAN224*	Core	Data Analysis with Python	2	2	4	100	-	100	3
5	MBG206	Core	Financial Management	4	-	4	40	60	100	4
6	MAN208	Core	Artificial Intelligence	3	-	3	40	60	100	3
7	MAN292	Core skill building	Semester end Viva Voce	-	-		50		50	1
	Total			**19**	**2**	**21**	**350**	**300**	**650**	**21**

Note: *100% Internal evaluation

PROFESSIONAL COMPETENCY DEVELOPMENT COURSES

S. No.	Course Code	Level of Course	Title of the Course	Sessions			Marks			Credits
				Theory	Prac.	Total	CA	SEE	Total	
1	MBG348	Foundation Elective Skill Based	Public Speaking		2	2	50	-	50	1
2	MBG354	Foundation Elective Skill Based	Soft Skills		2	2	50	-	50	1
	Total				**4**	**4**	**100**	**-**	**100**	**2**

Note: Professional Competency Development course credits will be addedin the 6th Semester

Prac:Practicals,CA: Continuous Assessment, SEE: semester End Examination

*Note: The Student has to do a Summer Project for a period of 6 weeks duringsummer at end of 2 year , carrying 1 credit which will be shown in V semester.

SEMESTER – V

S. No.	Course Code	Level of Course	Title of the Course	Sessions			Marks			Credit
				Theo-ry	Prac.	Total	CA	SEE	Total	
1	MBG301	Core	Production and Operations Management	3	-	3	40	60	100	3
2	MAN305	Core	Operations Research	4	-	4	40	60	100	4
3	MAN303	Core	Project Man-agement	3	-	3	40	60	100	3
4	MAN329*	Core	Database Management Systems	2	2	4	100	-	100	3
5	MAN327*	Core	Machine Learning	2	2	4	100	-	100	3
6	MAN307	Core	Innovation by Design	3	-	3	40	60	100	3
7	MAN391*	Core Skill Building	Summer Proj-ect	-	-	-	50		50	1
8	MAN393	Core Skill Building	Semester End Viva Voce	-	-	-	50		50	1
	Total			**17**	**4**	**21**	**460**	**240**	**700**	**21**

Shifted from VI Semester

Note: *100% Internal evaluation

PROFESSIONAL COMPETENCY DEVELOPMENT COURSES

S. No.	Course Code	Level of Course	Title of the Course	Sessions			Marks			Credit
				Theo-ry	Prac.	Total	CA	SEE	Total	
1	MAN346	Foundation Elective Value Based	Foundations of Psychology	2	-	2	50	-	50	1
	Total			**2**	**-**	**2**	**50**	**-**	**50**	**1**

Note: Professional Competency Development course credits will be addedin the 6th Semester

Prac:Practicals,CA: Continuous Assessment, SEE: semester End Examination

SEMESTER – VI

S. No.	Course Code	Level of Course	Title of the Course	Sessions			Marks			Credits
				Theo-ry	Prac.	Total	CA	SEE	Total	
1	MAN322*	Core	Big Data Analytics	2	2	4	100	-	100	3
2	MBG304	Core	Ecommerce	3	-	3	40	60	100	3
3	MAN306	Core	Statistical Quality Control and Six Sigma	4	-	4	40	60	100	4
4	MAN304	Core	Web Analytics	3	-	3	40	60	100	3
5	MBG302	Core	Entrepreneur-ship	3	-	3	40	60	100	3
6	MAN392	Core Skill Building	Semester End Viva Voce				50		50	1
	Total			**15**	**2**	**17**	**310**	**240**	**550**	**17**

COMPLETE SYLLABUS

SEMESTER – I

S. No.	Course Code	Level of Course	Title of the Course	Sessions			Marks			Credits
				Theory	Prac.	Total	CA	SEE	Total	
1	GEL131	Foundation Compulsory	Communicative English	3	-	3	40	60	100	3
2	MBG103	Foundation Compulsory	Business Economics	3	-	3	40	60	100	3
3	MFT101	Foundation Compulsory	Financial Accounting and Analysis	4	-	4	40	60	100	4
4	MBG109	Foundation Compulsory	Indian Business Environment	3	-	3	40	60	100	3
5	MAN123*	Foundation Compulsory	Programming in C++	2	2	4	100	-	100	3
6	MAN101	Foundation Compulsory	Calculus - I	4	-	4	40	60	100	4
7	MAN191	Core Skill Building	Semester End Viva-Voce				50		50	1
	Total			**19**	**2**	**21**	**350**	**300**	**650**	**21**

Note: *100% Internal evaluation

PROFESSIONAL COMPETENCY DEVELOPMENT COURSES

S. No.	Course Code	Level of Course	Title of the Course	Sessions			Marks			Credits
				Theory	Prac.	Total	CA	SEE	Total	
1	MBG 356	Skill Based	*Coursera Course	-	2	2	50	-	50	1
2	MAN342	Foundation Elective	Introduction to Sociology	2	-	2	50	-	50	1
	Total			2	2	4	100	-	100	2

Note: credits of Professional Competency Development courses will be added in the 6th Semester only.

Prac:Practicals,CA: Continuous Assessment, SEE: semester End Examination

*****the student need to choose a coursera course from the GITAM University listed courses, and required the complete the course through online and submitthe course completion certificate and presentation thereon for awarding marksup to 50.

GITAM Institute of Management (GIM)
Gandhi Institute of Technology and Management (GITAM)(Declared as Deemed to be University u/s 3 of UGC Act. 1956) Visakhapatnam – 45.

Course Code: GEL 131	**Course Title**: Communicative English	
Semester: I	**Course Type: Core**	**Credits:3**
Home Programme(s): BBA (BA)	**Batch:** 2020-2023	
Course Leader:		

The course is a unified approach to enhance language skills of learners with anaim to hone their social skills and to increase their employability. The course is designed to acquaint the learners with the necessary LSRW (Listening/ Speaking / Reading/ Writing) skills needed either for recruitment or further studies abroad for which they attempt international exams like TOEFL, IELTSand GRE. It enables the learners improve their communication skills which arecrucial in an academic environment as well as professional and personal lives.

COURSE OBJECTIVES

- To enable learners to develop listening skills for better comprehension ofacademic presentations, lectures and speeches.
- To hone the speaking skills of learners by engaging them in variousactivities such as just a minute (JAM), group discussions, oral presentations, and role plays.
- To expose learners to key Reading techniques such as Skimming andScanning for comprehension of different texts.
- To acquaint the learners with effective strategies of paragraph and essaywriting, and formal correspondence such as email, letters and resume.
- To provide learners with the critical impetus necessary to forge a path inan academic environment, in the professional life and in an increasinglycomplex, interdependent world.

UNIT I

LISTENING: Listening for gist and specific information

SPEAKING: Introducing self and others; Developing fluency through JAM READING: Skimming for gist and Scanning for specific information

WRITING: Paragraph writing-writing coherent and cohesive paragraph(narrative and descriptive); use of appropriate Punctuation.

GRAMMAR & VOCABULARY: Articles & Prepositions;

Word Families (Verbs, Nouns, Adjectives, Adverbs; Prefixes and Suffixes)

Learning Outcomes:

After completion of this unit, the learners will be able to

- Apply the requisite listening skills and comprehend at local and globallevel. (L4 and L2) (L5)
- Introduce themselves with accurate structure in diverse social andprofessional contexts. (L3)
- Apply relevant reading strategies for comprehension of any given text(L3)
- Write a paragraph using cohesive devices maintaining coherence (L3)
- Understand the Use of Articles and Prepositions, and apply appropriatelyfor meaningful communication (L3)

Understand the relevance of various categories in word family and apply themmeaningfully in context (L3)

UNIT II

LISTENING: Listening for Note taking and Summarizing

SPEAKING: Role plays and Oral Presentations. READING: Intensive Reading-

Reading for implicit meaningWRITING: Note making and summarizing

GRAMMAR & VOCABULARY: Verb forms-Tenses; synonyms to avoid

repetition in speech and writing.

Learning Outcomes:

After completion of this unit, the learners will be able to

- Employ note taking and summarizing strategies to comprehend the listening text (L2)
- Use strategies for successful and relevant oral presentation (L3, L4)
- Demonstrate effective communication skills by applying turn-taking and role distribution techniques for meaningful and contextual Speaking(L3 and L4)
- Apply various reading strategies imbibing inferential and extrapolative comprehension of any given text. (L2, L3)
- Apply various note-making techniques while comprehending the reading text to present a complete and concise set of structured notes (,L3, L4, L5)
- Apply the notes to draft a summary (L3)
- Use correct tense forms and appropriate structures in speech and written communication (L3)
- Context specific use of Prefixes and Suffixes for meaningful communication (L3)

UNIT III

LISTENING: Listening for presentation strategies: introducing the topic,organization of ideas, conclusion.

SPEAKING: Aided presentations READING: Inferring using textual

clues WRITING: Formal Letter and Email writing

GRAMMAR & VOCABULARY: Active and Passive Voice; linkers and discourse markers.

Learning Outcomes:

After completion of this unit, the learners will be able to

- Notice and understand effective listening strategies to identify discourse markers in presentations. (L1, L2)
- Make formal oral presentations using effective strategies such as audio – visual aids (L3)
- Infer meaning and inter – relatedness of ideas (L4)
- Understand relevant structures and draft formal letters in suitable format (L3, L4)
- Construct relevant sentences in active and passive voice for meaningful communication (L2, L3)
- Comprehend and apply available vocabulary items relevant to the context (L1, L2, L3)

UNIT IV

LISTENING: Listening for labeling-maps, graphs, tables, illustrations SPEAKING: Aided group presentation using charts, graphs etc.

READING: Reading for identification of facts and opinions

WRITING: Information transfer (writing a brief report based on information from graph/chart/table)

GRAMMAR & VOCABULARY: Subject-verb agreement; language for comparison and contrast; Antonyms

Learning Outcomes:

After completion of this unit, the learners will be able to

- Match visual and auditory inputs and use the information comprehensively and will adequately demonstrate important relationships or patterns between data points (L2)
- choose and coordinate resources appropriate to context and speak intelligibly (L3, L4)
- Develop advanced reading skills for analytical and extrapolative comprehension (L4, L5)
- Make decisions on arrangement of ideas and transfer them from visual to verbal form using context appropriate structure. (L3, L4)
- Demonstrate ability to use task specific grammatically correct structures (L3)
- Comprehend and use expressions for negation/contradiction ((L2, L3)UNIT V

LISTENING: Listening to discussions for opinions SPEAKING: Group Discussion

READING: Reading for inferences

WRITING**:** Coursera Course-Essay Writing-Getting Started with EssayWriting (UCI Division of Continuing Education) 24 hours

GRAMMAR & VOCABULARY: Editing short texts: correcting common errors in grammar and usage; Action verbs for fluency and effective writing.

Learning Outcomes:

After completion of this unit, the learners will be able to

- Apply analytical and problem-solving strategies to identify and interpret facts and opinions from a dialogue. (L3)
- Able to administer group dynamics to contribute valid ideas to a discussion with clarity and precision (L3)
- Demonstrate techniques to analyze contextual clues(L4)
- Compare and correlate ideas and facts to produce an organized essay with adequate supporting evidences (L4, L5)
- Organize the available structural/grammatical knowledge and apply them in a real time context (L3)
- Comprehend meaning for new words/phrases used and apply them in a new context. (L2, L3)

Course Outcomes:

- Think critically, analytically, creatively and communicate confidently in English in social and

professional contexts with improved skills of fluency and accuracy

- Write grammatically correct sentences employing appropriate vocabulary suit-able to different contexts.
- Comprehend and analyze different academic texts.
- Make notes effectively and handle academic writing tasks such as Paragraphwriting and Essay writing.
- Effectively handle formal correspondence like e-mail drafting and letter writing.

Assessment methods

Task	Task type	Task mode	Weightage (%)
A1	Mid exam	Individual	20
A2	Coursera	Individual	10
A3	Class room presentation/Seminars and Case analysis/workshop/training/ Assignments/survey/ Project	Individual / Group	10
A4	End-term examination	Individual	60

Evaluation pattern

A1:Mid exam (20 marks): Two mid examinations will be conducted for 20 marks each. **Best of two** will be considered for final 20 marks. If the studentis absent for one Mid exam, the marks secured in the other mid exam will be considered as final marks. **No** Re examinations will be conducted under any
circumstances except exceptional cases as approved by the HOI.

A2: Coursera Course (10 marks): student need to complete respective subjectwise Coursera course/ on line course listed by GIM through online and requiredto submit the course completion certificate. Up on which student need to givepresentation/viva for awarding marks up to 10

A3: **Class room presentation/Seminars and Case analysis/workshop/ training/Assignments/survey/ Project** ***(10 marks):*** Individual or Group taskswould be given. Marks will be allotted for the quality of work, report writing,and presentation. In a group task, differential marks will be allotted to the individual based on performance in the presentations.

A4. End-term examination (60 marks)**:** Short and Essay questions mainly based on the application of knowledge in the area of Decision and Support Systems. The syllabus is from all five units

Reference Books:

1. Arosteguy, K.O. and Bright, A. and Rinard, B.J. and Poe, M. ***A Student's Guide to Academic and Professional Writing in Education***,UK, Teachers College Press,2019
2. Raymond Murphy, ***English Grammar in Use A Self-Study Reference and Practice Book for Intermediate Learners of English*** : CambridgeUniversity Press;2019
3. Peter Watkins, ***Teaching and Developing Reading Skills***: UK, CUP, 2018
4. Deeptha Achar et al. ***Basic of Academic Writing***. (1and 2) parts New Delhi: Orient BlackSwan. (2012& 2013).
5. Kumar S and Lata P, ***Communication Skills***: New Delhi Oxford University Press, 2015

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Gandhi Institute of Technology and Management (GITAM)(Declared as Deemed to be University u/s 3 of UGC Act. 1956) Visakhapatnam – 45.

Course Code: **MBG103**	**Course Title**: **BUSINESS ECONOMICS**	
Semester: I	**Course Type:** Core	**Credits**: 3
Home Programme(s):BBA (BA)	Batch: 2020-2023	
Course Leader: Dr.M. Sudha		

In today's competitive business environment, effective managerial/business decision making requires use of economic concepts and tools. Business efficiency depends on minimization of cost and maximization of production which requires perfect understanding of the economic concepts like demand, supply, production, cost and market conditions. (Managerial) Business economics uses economic concepts and principles by emphasizing on demandand Supply analysis, production & cost analysis and different market structures which are fundamental for further study. This course also introduces important macroeconomic concepts which are indispensable for understanding the functioning of an economy and which also affects the business performance.

Course Objectives:

The course intent to enable students to

- Give outline on the fundamental concepts of business economics
- Choose the right demand forecasting technique based on the impartedknowledge about demand and supply concepts
- Specify the importance of cost and output relationships to takeproduction decisions
- Analyse the market structures under different competitive conditions
- Apply relevant information for business decisions by gaining knowledgeabout various macro-economic aspects.

Unit I (8 sessions – CO1, CO2, L2)

Managerial Economics – Nature, scope, importance and applicationof Managerial Economics concepts in business decision making.

Unit II (8 sessions – CO1, CO2, L2)

Demand and Supply Analysis: Determinants of demand, types of demand, Law of Demand, determinants of supply, law of supply, market equilibrium, price mechanism. Elasticity of demand, types of elasticity, methods to measure elasticity, demand forecasting, Methods (Qualitative and Quantitative) of demand forecasting.

Unit III (8 sessions – CO1, CO3, L3)

Production and Cost Analysis: Production function, Laws of Production - Short run - one variable production function, Long run – Iso-quants, Iso-cost line, producer's equilibrium, expansion path, Law of returns to scale. Cost - Cost concepts, Cost output relation - short run cost output relationship, long run cost output relationship, Economies of scale.

Unit IV (8 sessions – CO1, CO2, CO4, L3)

Market Structure - Basis for classification of market power, kinds of competitive market, price and output decisions in perfect competition and imperfect market, Monopoly, Monopolistic, Oligopoly market . Market Failures – public goods, social goods, merit goods, administered prices (ceiling price and floor price) and Externalities – Positive and negative externalities.

Unit V (8 sessions – CO1, CO5, L3)

Macroeconomics- National Income-Concepts of national income, methods of calculating national income. Inflation- causes-demand pull and cost push inflation, measures to control inflation, business cycles -phases of business cycles and measures to control business cycles. Stabilization policies – Monetary Policy and Fiscal Policy.

Case Analysis (Not Exceeding 200 words)

Course Outcomes:

- Discuss the nature and scope of business economics concepts
- Classify the differences between demand and supply analysis and the balancethe market forces through price mechanism and government interference
- Apply the techniques of production and the concepts of cost in production decisions
- Differentiate the price and output decisions under various market structures.
- Apply macroeconomic concepts knowledge in business decision making.

Assessment methods

Task	Task type	Task mode	Weightage (%)
A1	Mid exam	Individual	20
A2	Coursera	Individual	10
A3	Class room presentation/Seminars and Case analysis/workshop/training/Assignments/ survey/ Project	Individual / Group	10
A4	End-term examination	Individual	60

Evaluation pattern

A1:Mid exam (20 marks): Two mid examinations will be conducted for 20 marks each. **Best of two** will be considered for final 20 marks. If the studentis absent for one Mid exam, the marks secured in the other mid exam will be considered as final marks. **No** Re examinations will be conducted under any circumstances except exceptional cases as approved by the HOI.

A2: Coursera Course (10 marks): student need to complete respective subjectwise Coursera course/ on line course listed by GIM through online and requiredto submit the course completion certificate. Up on which student need to givepresentation/viva for awarding marks up to 10

A3: **Class room presentation/Seminars and Case analysis/workshop/ training/Assignments/survey/ Project** ***(10 marks):*** Individual or Group taskswould be given. Marks will be allotted for the quality of work, report writing,and presentation. In a group task, differential marks will be allotted to the individual based on performance in the presentations.

A4. End-term examination (60 marks)**:** Short and Essay questions mainly based on the application of knowledge in the area of Decision and Support Systems. The syllabus is from all five units

Mapping Cos – Blooms Levels – Assessment Tools

Knowledge Dimension/ Cognitive Di-mension	L1 Remember (Recall)	L2 Understand- ing (Examine)	L3 Apply	L4 Analyze	L5 Evaluate	L6 Create
Factual Knowledge						
Conceptual Knowledge	CO1 (A1, A2)		CO3 (A1, A3, A4)			
Procedural Knowledge		CO2 (A1,A2, A3)	CO4 and CO5 (A1, A3, A4)			
Meta-cognitive Knowledge						

Learning and teaching activities

Case Analysis ,Situation Analysis Brainstorming Group DiscussionResearch Project Chalk and Talk Student Presentations

Indicative Teaching and learning resources

Soft copies of teaching notes/cases etc. will be uploaded onto the G-learn. Wherever necessary, printouts, handouts etc. will be distributed in the class. Prescribed text book will be provided to all. However, you should not limit yourself to this book and should explore other sources on your own. You needto read different books and journal papers to master certain relevant concepts to analyse cases and evaluate projects. Some of these reference books given below will be available in our library.

1. Geetika, P.Ghosh, P.R.Choudhury, Managerial Economics, McGrawHill Education Private Limited,New Delhi, 2018.
2. Dominick Salvatore, Seventh Edition, Adapted Version, Oxford
3. Publication New Delhi, 2014.
4. Dr.D.N.Dwivedi, Managerial Economics, Vikas Publishing House,NewDelhi,2015/Latest Edition.
5. Paul G. Keat, Phili K. Y. Young, Sreejata Banerjee, "ManagerialEconomics", Pearson, New Delhi, 2012/Latest Edition.

Journals:

1. Economic and Political Weekly, Sameeksha Trust, Mumbai
2. GITAM Journal of Management, GITAM Institute of Management,GITAM University, Visakhapatnam
3. Indian Journal of Economics, Academic Foundation, New Delhi4.GITAM Journal of Management
4. E- Books and E-Journals

Company Profiles

Daily English Business News Papers

1. The Economic Times, 2. Business Standard, 3. Mint

CO PO Mapping

This is to map the level of relevance of the Course Outcome (CO) with Programme Outcome (PO).

0= No Relevance; 1= Low Relevance; 2= Medium Relevance; 3= HighRelevance

CO PO Mapping	PO1	PO2	PO3	PO4	PO5	PO6	Sum
CO1	3	0	0	1	1	3	8
CO2	3	0	0	1	1	3	8
CO3	3	0	0	1	1	3	8
CO4	3	0	0	1	1	3	8
CO5	3	0	0	1	1	3	8
Target Level Max.	15	0	0	5	5	15	40

Program Outcomes

1	Ability to understand the business problem with their knowledge in differentfunctional areas of management
2	Ability to work with structured, semi – structured and unstructured data.
3	Ability to use tools such as Microsoft Excel, SPSS, R, Weka and Tableau tosolve business analytics problem
4	Ability to apply analytics techniques to analyze and interpret the data.
5	Ability to perform descriptive, predictive and prescriptive analytics.
6	Have necessary skills and understanding to take up advanced topics in the areaof analytics and thus enhance their career.

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Course Code: MFT 101	**Course Title**: Financial Accounting and Analysis	
Semester: I	**Course Type:**	**Credits:**
Home Programme(s): BBA (BA)	**Batch: 2020-2023**	
Course Leader:		

In an economy, every manufacturing & trading entity inherently has financial transactions. These financial transactions form the backbone of accounting framework, which is as important as technical or legal framework. Knowledgein Financial Accounting enables managers understand and interpret financial reports which is essential for financial decision making & problem solving. A manager should be competent to understand the accounting framework to effectively manage the business.

Course Objectives

- To understasnd the basic concepts of Accounting
- To analyse the components and prepare financial statements
- To analyse the main features, create and maintain a firm's accounting information using Tally software.
- To analyse the financial statements of a company.

UNIT-I: Introduction to Accounting: Introduction, need, meaning & definition of Accounting, importance of Accounting, users of Financial Accounting records, Accounting concepts and conventions - Accounting Equation - Basicsof IFRS

UNIT-II: Preparation of Journal and Ledgers -Types of Subsidiary books- preparation of Triple Column Cash Book - Trial balance - Definition - Importance and methods of preparation. (NP)

UNIT-III: Preparation of Final Accounts : Objective and need for preparationof Income Statements- Form and contents of income statements - Preparation of Trading Account, Profit and Loss Account with adjustments. Preparation of Balance Sheet - Objectives and need for balance sheet - form and contents of balance sheet-Preparation of balance sheet with AdjustingClosing Entries relating to Depreciation on Fixed Assets (Straight Line Method and Written Down Value Method), outstanding expenses, prepaid expenses, Income received in advance, accrued income, debtors, creditors and closing stock. (NP)

UNIT- IV: Financial Statement Analysis- : Funds flow analysis - Statement of funds from operations - Preparation of Funds flow statement. Cash flow analysis
- Statement of cash from operations -preparation of Cash Flow Statements (NP)

UNIT-V: Ratio Analysis: Meaning and types of ratios: Return on Capital Employed; Gross and Net Profit Margins; Asset Turnover; Trade ReceivablesCollection Period and Trade Payables Payment Period; Current and Quick Ratios; Inventory Turnover; Capital Gearing Ratio. (NP)

(A workshop on Application of Tally Accounting Software will be organized for a week by external agencies. It will be assessed for 10 marks as a partof internal assessment)

Course Outcomes

- Understand preparation of Journals and Ledgers.
- Prepare Trail Balance with adjustment.
- Prepare Final Accounts of trading concern.
- Understand the features of tally
- Analyse financial statements using ratio analysis.

Assessment methods

Task	Task type	Task mode	Weightage (%)
A1	Mid exam	Individual	20
A2	Coursera	Individual	10
A3	Class room presentation/Seminars and Case analysis/workshop/training/ Assignments/survey/ Project	Individual / Group	10
A4	End-term examination	Individual	60

Evaluation pattern

A1:Mid exam (20 marks): Two mid examinations will be conducted for 20 marks each. **Best of two** will be considered for final 20 marks. If the studentis absent for one Mid exam, the marks secured in the other mid exam will be considered as final marks. **No** Re examinations will be conducted under any circumstances except exceptional cases as approved by the HOI.

A2: Coursera Course (10 marks): student need to complete respective subject wise Coursera course/ on line course listed by GIM through online and requiredto submit the course completion certificate. Up on which student need to givepresentation/viva for awarding marks up to 10

A3: **Class room presentation/Seminars and Case analysis/workshop/ training/Assignments/survey/ Project** ***(10 marks):*** Individual or Group taskswould be given. Marks will be allotted for the quality of work, report writing,and presentation. In a group task, differential marks will be allotted to the individual based on performance in the presentations.

A4. End-term examination (60 marks)**:** Short and Essay questions mainly based on the application of knowledge in the area of Decision and Support Systems. The syllabus is from all five units

Learning and teaching activities Lectures, Case studies,

Discussions**Teaching and learning resources**

1. Maheswari S. N., and Maheswari S. K., "Accounting for Management",Vikas Publishing House, New Delhi, 2014.
2. S.P. Jain &Narang, "Financial Accounting - I, Kalyani Publishers, 201
3. Hanif and Mukarjee, "Financial Accounting", Tata McGraw Hill Ltd.,New Delhi, 2011
4. Tulsian P.C., "Financial Accounting", Volume I, Pearson Education,New Delhi: 2013
5. Narayanaswamy, R., "Financial Accounting - A ManagementPerspective", PHI, New Delhi, 2013

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Course Code: MBG109	**Course Title**: Indian Business Environment	
Semester I	**Course Type: Core**	**Credits**: 3
Home Programme(s): BBA (BA)	Batch: 2020 – 2023	
Course Leader:		

The business environment in India is undergoing a dynamic change; what was lookeduponasanunderdevelopednationisnowregardedasapotentialeconomic power and emerged as one of the emerging nation of the world. With the eruption digitization and e-commerce its service industry is providing multinational companies with unparalleled opportunities. With liberalization, privatization and further on globalization India's business world is occupyinga place in almost all major sectors of the world economy. In this context, the nature and extent of the role of the state is undergoing fundamental changes with digitization and financial inclusion. In this dynamic and changing external environment of such gigantic dimensions, this course is aimedat sensitizing the students to the value implications of environment on business, in general. The main drive of this course addresses structural changes, external environmental changes, planning and polices of the state ,economic trends, information technology and its impact .Knowing the major legal environment concepts and acts in addition to other environments is also to be discussedin this course. Though business is an economic activity, business ethics, social responsibilities of business and corporate governance is introduced in this course.

Course Objectives

- To make the students to understand different facets of BusinessEnvironment in Indian.
- To enhance student's ability to understand economic planning andindustrial policy in India.
- To sensitize students about monetary and fiscal policy in India and its
- impact on business.
- To enable the student to understand social responsibility of business.
- To create awareness among the students about corporate governance.

UNIT-I: Business Environment: Nature, scope and objectives of business- Environment of business description-internal environment and external environment- Political environment- Economic environment- Social Environment- Technological environment- Ecological & Legal environment- Macro environment and Micro environment.

UNIT-II: **Economic Planning and Industrial Policy:** Economic Planning
impact on business environment- Meaning and Objectives of Industrial Policies
-Need for Industrial Policies- Salient features of 1948, 1956, 1991 Industrial Policies- Closed economy and open economy- Liberalization, Privatization and Globalization-NITI AAYOG and its objectives- Ease of doing business- FERA- FEMA- Competition Act.

UNIT-III: Monetary and Fiscal Policy: Monetary Policy and its objectives -CRR and SLR-Money Supply- instruments of money supply- RBI's Monetary Policy Measures- Fiscal Policy and its objectives-Techniques of Fiscal Policy- Impact of Monitory and Fiscal Policy on business environment- Central and States Budget- finances of the central and state budgets.

UNIT-IV: Business and Social Environment: Business and Society- objectives and importance of business-Professionalization of Business- Ethicsin business-Impact of cultural factors in business-Social Responsibility of Business-giving back to the society-Social involvement, social audit-Companies Act 2013 and CSR.

UNIT-V: Corporate Governance: Description of Corporate Governance- reasons for the growing demand for corporate governance-importance ofcorporate governance- prerequisites; regulatory and

voluntary actions;recommendations of Birla Committee; legal environment of corporate governance in India.

Case Analysis (not exceeding 200 words)

Course Outcomes

- Discuss about the various business environmental factors
- Assess the impact of Economic Planning and economicpolicies on the business environment
- Appraise Monetary Policy and Fiscal Policy as stabilizationtechniques.
- Illustrate the importance of ethical practices and socialinvolvement of business.
- Explain the need for Corporate Governance.

Assessment methods

Task	Task type	Task mode	Weightage (%)
A1	Mid exam	Individual	20
A2	Coursera	Individual	10
A3	Class room presentation/Seminarsand Case analysis/workshop/ training/Assignments/survey/ Project	Individual / Group	10
A4	End-term examination	Individual	60

Evaluation pattern

A1:Mid exam (20 marks): Two mid examinations will be conducted for 20 marks each. **Best of two** will be considered for final 20 marks. If the studentis absent for one Mid exam, the marks secured in the other mid exam will be considered as final marks. **No** Re-examinations will be conducted under any circumstances except exceptional cases as approved by the HOI.

A2: Coursera Course (10 marks): student need to complete respective subjectwise Coursera course/ on line course listed by GIM through online and requiredto submit the course completion certificate. Up on which student need to givepresentation/viva for awarding marks up to 10

A3: **Class room presentation/Seminars and Case analysis/workshop/ training/Assignments/survey/ Project** ***(10 marks):*** Individual or Group taskswould be given. Marks will be allotted for the quality of work, report writing,and presentation. In a group task, differential marks will be allotted to the individual based on performance in the presentations.

A4. End-term examination (60 marks)**:** Short and Essay questions mainly based on the application of knowledge in the area of Decision and Support Systems. The syllabus is from all five units

Mapping COs-Blooms levels- Assessment Tools

Cognitive Dimension/ Knowledge Dimension	L1 Remember	L2 Understand-ing	L3 Apply	L4 Analyze	L5 Evaluate	L6 Create
Factual Knowledge	CO1 (A1, A2, A3, A4)	CO1 A1, A2, A3, A4)	CO1 A1, A2, A3, A4)			
Conceptual Knowledge				CO2, CO3 & CO5 (A2, A3 A4)	CO2, CO4, CO5 (A2, A3, A4)	

Procedural Knowledge						
Meta-cog-nitive Knowledge						

Learning and teaching activities Lectures, Case studies,

Discussions**Teaching and learning resources**

1. Cherunilam, Francis, "Business Environment, Text & Cases", HimalayaPublishing House, New Delhi,2019
2. Aswathappa, K, "Essentials of Business Environment",HimalayaPublishing House, NewDelhi.
3. Dutt, Ruddra and Sundaram, K.P.M., "Indian Economy", S. Chand&Co. Ltd., NewDelhi.
4. Misra and Puri, Indian Economy, Himalaya Publishing House.NewDelhi : 2019
5. Joshi&Kapoor,BusinessEnvironment,KalyaniPublishers,NewDelhi, 2019
6. Pual, Justin, Business Environment Text and Cases, Tata McGrawHill,New Delhi
7. Worthington, Ianand Britton, Chris, "TheBusiness Environment",Pearson Education Ltd, New Delhi, 2019
8. Fernando, A.C., Indian Economy, Pearson Education Ltd, New Delhi,2019.

GITAM Institute of Management (GIM)
Gandhi Institute of Technology and Management (GITAM)(Declared as Deemed to be University u/s 3 of UGC Act. 1956) Visakhapatnam – 45.

Course Code: MAN123	**Course Title**: PROGRAMMING IN C++	
SEMESTER: I	**Course Type: Core**	**Credits**: 3
Home Programme(s):**BBA (BUSINESS ANALYTICS)**	Batch: 2020 -2023	
Course Leader:		

C++ is a general purpose programming language and has imperative, object- oriented and generic programming features. Understanding the concepts in C++ would lay the foundation for learning the other programming languages.

Course Objectives

- To acquaint the students with the programming concepts of C++
- To give hands on experience in writing basic programs in C++
- To enable students to write OOP programs in C++

Unit - I: (10 sessions) (CO1, L2) Introduction to C++: C++ characteristics, Identifiers and Keywords, Basic Data Types, Variables and Constants, Input and Output Statements, Operators and Expressions

Unit – II: (10 sessions) (CO2, L3, L4, L5) Control Structures: Conditional Statements, Looping Statements; Arrays – Single dimensional, Multi dimensional, Working with Strings, Functions, Recursion, Pointers, Structures in C++

Unit - III: (10 sessions) (CO3, L3, L4, L5) Object Oriented Programming: Object Oriented Concepts, Classes and Objects, Constructors and Destructors, Inheritance – Single Inheritance, Multiple Inheritance, Protected Keyword, Polymorphism

Unit – IV: (10 sessions) (CO4, L3, L4, L5) C++ Files and Streams: Opening a File, Writing to a File, Reading from a File, Managing I/O Streams

Unit – V: (10 sessions) (CO5, L3, L4, L5) Exception handling: Throwing an exception, catching an exception: The try block, Exception handler

Course Outcomes

- Understand different elements in C++ programming language
- Write basic programs in C++
- Write object oriented programs in C++
- Work with C++ files
- Do Exception handling in C++ program

Assessment methods

Task	Task type	Task mode	Weightage (%)
A1	Quiz	Individual	10
A2	Assignments / Lab Tasks / Written Test/Coursera Groups* or Individual	Individual / Group	20
A3	Record Work	Individual	10
A4	Lab Exam	Individual	60

Evaluation pattern

A1: Quiz (10 marks; 10 minutes duration): Comprehensive Quiz comprising all the five units. Consisting of 20 questions with each question carrying ½ mark.

A2: Assignments / Lab Tasks / Written Test/Coursera (20 marks)***:*** An assignment, project or lab tasks to apply the skills gained through the course.

A3. Record Work (10 marks)**:** Lab tasks involving usage of different techniques are to be done

regularly in the lab and recorded in record book. Therecord should show the inputs, procedure and output produced with necessaryinterpretation.

***A4: Lab Examination (30 x 2 = 60 marks)*:** Two lab examinations, one at themid semester and another at the end semester where a problem is given whichneed to be analyzed and solved using the tool.

Mapping Cos – Blooms Levels – Assessment Tools

Knowledge Dimension / Cognitive Dimension	L1. Remem-ber	L2. Under-stand	L3. Apply	L4. Analyze	L5. Evaluate	L6. Create
Factual Knowledge						
Conceptual Knowledge		CO1 (A1)				
Procedural Knowledge			CO2(A3) CO3(A3) CO4(A3) CO5(A3)	CO2(A2) CO3(A2) CO4(A2) CO5A2)	CO2(A4) CO3(A4) CO4(A4) CO5(A4)	
Meta Cogni-tive Knowl- edge						

Learning and teaching activities

Classroom Lectures, Application cases, Demonstration, Lab Sessions

Teaching and learning resources

Computer Lab, C++ Editor and Compiler, Textbooks, Ebooks, ReferenceMaterials, Web resources

Textbook(s):

1. Balagurusamy E, Object Oriented Programming with C++, McGraw Hill

Reference Book(s):

1. Herbert Schildt, C++: The Complete Reference, McGraw Hill

2.Robert Lafore, Object Oriented Programming in C++, Pearson Education

CO PO Mapping

This is to map the level of relevance of the Course Outcome (CO) withProgramme Outcome (PO).

0= No Relevance; 1= Low Relevance; 2= Medium Relevance; 3= HighRelevance

CO PO Mapping	PO1	PO2	PO3	PO4	PO5	PO6	Sum
CO1	0	1	2	1	1	3	8
CO2	0	1	2	1	1	3	8
CO3	0	1	2	1	1	3	8
CO4	0	1	2	1	1	3	8
CO5	0	1	2	1	1	3	8
Target Level Max.	0	5	10	5	5	15	40

Program Outcomes

1	Ability to understand the business problem with their knowledge in differentfunctional areas of management
2	Ability to work with structured, semi – structured and unstructured data.
3	Ability to use tools such as Microsoft Excel, SPSS, R, Weka and Tableau tosolve business analytics problem
4	Ability to apply analytics techniques to analyze and interpret the data.
5	Ability to perform descriptive, predictive and prescriptive analytics.
6	Have necessary skills and understanding to take up advanced topics in the areaof analytics and thus enhance their career.

GITAM Institute of Management (GIM)
Gandhi Institute of Technology and Management (GITAM)(Declared as Deemed to be University u/s 3 of UGC Act. 1956) Visakhapatnam – 45.

Course Code: **MAN 101**	**Course Title**: **Calculus -1**	
Semester: I	**Course Type:** Core	**Credits:** 4
Programme(s):BBA(BA)	**Batch/AcademicYear**: 2020-2023	
Course Leader:		

This course is designed to students of business and economics. This course introduces the basic conceptof limit and its application to continuity, differentiation, integration, maximization, minimization andpartial derivatives. Applications to the social sciences, especially business and economics, are stressed.The calculus of trigonometric functions is not covered.

Course objectives:

- Analyze limits and the continuity properties of mathematical functions.
- Evaluate derivatives and analyze the properties of mathematicalfunctions by using derivatives.
- Determine and evaluate both definite and indefinite integrals of mathematical functions.
- Use the tools of differentiation and integration to solve applicationsproblems from various disciplines.

Unit – I(13 sessions) **(CO1, CO2, L2, L3)**

Basic mathematics : Introduction of basic concepts of definition indices and properties , Set, Relation , functions , fundamental of Trigonometric .

Unit – II(12 sessions) **(CO2, CO3, CO4, L2, L3, L4)**

Limits and Continuity : Introduction, Interval and neighborhoods, Limits andContinuity

Unit – III(11 sessions) **(CO2, CO3, CO4, L3, L4, L5)**

Methods of differentiation: Introduction, Derivative as a rate of change, Slopes Derivative of a function , Elementary properties, Some DifferentiationFormulas- The Product and Quotient Rules, Higher Order Derivatives, The Chain Rule.

Unit – IV(11 sessions) **(CO1, CO3, L2, L4)**

Differentiation: Successive differentiation- Second order derivatives, derivative of an implicit functions, Partial derivative of first and second order derivatives.

Unit – V (13 sessions)**(CO1, CO4, L2, L4)**

Application of derivatives: Geometrical interpretation of a derivative, Equation of tangents and normal, Lengths of tangent , normal , sub tangent and sub normal , Angles between two curves and condition for orthogonally ofcurves, problems involving maxima and minima values.

Problems will be given from all the units.

Course Outcomes

- Understanding of a basic knowledgeof limits and continuityof mathematical functions
- Apply of the explore the properties of derivatives and theirapplications
- Analyze enhance problem-solving skills using the tools ofdifferentiation
- Evaluate of the provide the skills necessary for success insubsequent mathematics courses.

- Create an edge for the business

Note:

1. Proofs of theorems and derivations of formulae are excluded. Assessment methods

Task	Task type	Task mode	Weightage (%)
A1. Mid exam	Individual	Written	20
A2. Coursera	Individual	Presentations / Q&A/Viva	10
A3. Class room presentation/Seminars and Case analysis/workshop/ training/Assignments/ survey/Project	Groups	Presentations/Report with Q & A/Viva	10
A4. End-term exam	Individual	Written (short/long)	60

Mapping COs - Blooms levels- Assessment Tools

Knowl-edge Di-mension / Cognitive Dimen- sion	L1. Remem-ber	L2. Under-stand	L3. Apply	L4. Analyze	L5. Evaluate	L6. Create
Factual Knowl-edge		Co1 (A1, A3)				
Con-ceptual Knowl-edge			Co2 (A1, A3)			
Proce-dural Knowl-edge		Co1 (A1, A3)	Co2 (A1, A3)	Co3 (A2,A3)	Co4 (A2,A3)	
Meta Cognitive Knowl-edge				Co4 (A2,A3)	Co5(A2, A3,A4)	

Learning and teaching activities

Mixed pedagogy approach is adopted throughout the course. Classroom basedface to face teaching, directed study, independent study via G-Learn, case studies, projects and practical activities (individual & group).

Teaching and learning resources

Soft copies of teaching notes/cases etc. will be uploaded onto the G-learn. Wherever necessary, printouts, handouts etc. will be distributed in the class. Prescribed text book will be provided to all. However, you should not limit yourself to this book and should explore other sources on your own. You needto read different books and journal papers to master certain relevant concepts to analyse cases and evaluate projects. Some of these reference books given below will be available in our library.

***Books for Reference*:**

1 The required text is CALCULUS, 9th Edition, by Anton, Bivens, and Davis.

CO PO Mapping

This is to map the level of relevance of the Course Outcome (CO) withProgramme Outcome (PO).

0= No Relevance; 1= Low Relevance; 2= Medium Relevance; 3= HighRelevance

CO PO Mapping	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	Sum
CO1	3	2	0	0	2	2	0	0	9
CO2	2	2	0	0	2	2	0	0	8
CO3	3	3	0	0	1	1	0	0	8
CO4	2	2	0	0	2	2	0	0	8
CO5	2	2	0	0	2	2	0	0	8
Target Level Max.	12	11	0	0	9	9	0	0	41

BBA(BA) -Programme Outcomes (POs)	
1	Ability to understand the business problems with their knowledge in differentfunctional areas of management.
2	Integrate with structured, semi – structured and unstructured data.
3	Utilize the tools such as Microsoft Excel, SPSS, R, Weka and Tableau to solvebusiness analytics problems.
4	**A**bility to apply analytics techniques to analyze and interpret the data.
5	Incorporate the descriptive, predictive and prescriptive analytics.
6	Evaluate the necessary skills and understanding to take up advanced topics in thearea of analytics and thus enhance their career prospects.

SEMESTER – II

S. No.	Course Code	Level of Course	Title of the Course	Sessions			Marks			Credits
				Theory	Prac.	Total	CA	SEE	Total	
1	MBG102 / MBG104 / MBG106 / MBG108	Foundation Elective	Telugu/ Sanskrit/ Hindi/ Special English**	3	-	3	40	60	100	3
2	MBG110	Foundation Compulsory	Princi- ples and Practice of Manage- ment	3	-	3	40	60	100	3
3	MAN126*	Core	Data Anal- ysis with MS Excel	2	2	4	100	-	100	3
4	MAN106	Core	Calculus - II	4	-	4	40	60	100	4
5	MAN108	Core	Discrete Mathemat-ics	4	-	4	40	60	100	4
6	MAN124*	Core	Data Struc- tures with C++	2	2	4	100	-	100	3
7	MAN192	Core Skill Building	Semester end Viva Voce				50		50	1
	Total			**18**	**4**	**22**	**410**	**240**	**650**	**21**

Note: ** The Foreign students are offered special English course

***** 100% Internal evaluation

PROFESSIONAL COMPETENCY DEVELOPMENT COURSES

S. No.	Course Code	Level of Course	Title of the Course	Sessions			Marks			Credits
				Theory	Prac.	Total	CA	SEE	Total	
1	MBG344	Foundation Elective Skill Based	Book re- view	2	-	2	50	-	50	1
2	MBG346	Foundation Elective Value Based	Introduc- tion to Gandhian Thoughts	2	-	2	50	-	50	1
	VDC111	Skill Based	Venture Discovery	2		2	100		100	2
	Total			**6**	**-**	**6**	**200**	**-**	**200**	**4**

Note: credits of Professional Competency Development courses will be added in the 6th Semester only

Prac:Practicals, CA: Continuous Assessment, SEE: semester End Examination

Note: The Student has to do a Social Project/Rural Project for a period of 20-30 days during First year, carrying 1 credit which will be shown in III Semester . The student can study/analyze any social/rural issues or challenges in form of survey and needs to submit a report . A Viva will beconducted for awarding marks.

BBA (BA) – II SEMESTER

MBG102: TELUGU

INTRODUCTION

This course contains a rich selection from Telugu language and literature.

COURSE OBJECTIVES

1) To enlighten students about the richness and value of the regional language
2) To offer working knowledge of Telugu to the students.

SYLLABUS

ప్రాచీన కవిత్వం :

1. నన్నయ - గవంగాశవంతనుల కథ
   ఆవంధ్ర మహాభారతవం - ఆదిపర్వం - నాల్గవ ఆశ్్సవం (120-165) ‘‘నరనరుడగు శవంతనునకు’’ నువండి ‘‘దివ్యభూషణాలవంకృత’’ వరకు
2. తిక్కన - మూషిక మార్జాల వృత్తవంతవం
   ఆవంధ్రమహాభారతవం - శ్వంతిపర్వం - మూడవ ఆశ్్సవం (202 - 242) అడవిలో నొకమఱ్ఱి నువండి సౌఖ్యము బవందెన్.
3. అల్లసాని పెద్దన - హవంసీ చక్రవాక సవంవాదవం
   మనుచరిత్రము - ఆరవ ఆశ్్సవం (62-68) ‘‘గవంగాతరవంగిణి’’ నువండి ‘‘జవంభారి భిదుర సవంరవంభవంబు’’ వరకు
4. తరిగవండ వవంగమావంబ - ఎఱుకత శ్రీ వవంకటాచల మాహాత్మ్యం ఆశ్్సవం (4-51) ‘‘వకుళను నేనా వివాహ ప్రయత్నవంబు’’ నువండి ‘‘అని యిట్్ల’’ వరకు

ఆధునిక కవిత్వం

5. గరిమెళ్ళ సత్యనార్యణ - మాకొద్్ద తెల్లదొరతనము
6. శ్రీశ్రీ - మహాప్రసాథానవం
7. జాషువ - ముసాపరులు
8. పుట్టపరిత నార్యణాచార్యులు- మేఘదూతము కథానికలు
9. పాలగుమ్్మ పద్మర్జు - గాలివాన
10. కొలకటూరి ఇనాక్ - ఆకలి
11. కేతువిశ్నాథ రెడిడి - నమ్మకున్ననేల
12. పాట్లపలీల ర్మారవ్ - జైలు వ్యయకరణవం
13. సవంధులు - సవర్ణద్ర్వ, గుణ, యణాదేశ, వృదిధి, త్రిక, గ, స, డ, దవా దేశ, రుగాగమ, ట్గాగమ, ఆమ్రేడిత, ఆత్సవంధి మొదలైనవి.
14. సమాసాలు- తతుపురుష, కర్మధారయ, ద్వంధ్, దిగు, బహువ్రీహీ మొదలైనవి.

COURSE OUTCOMES

1) The student learns reading and writing Telugu
2) Understands and learns proper use of Grammar
3) Develops communication Skills.

BBA (BA) – II SEMESTER

MBG104: SANSKRIT

This course contains a rich selection from Sanskrit language andliterature.

Course Objectives

- To enlighten students about the richness and value of the classicallanguage
- To offer working knowledge of Sanskrit to the students.

POETRY : Lesson No. 1 Saranagathi

From Valmiki Ramayanam Yuddhakanda17th Canto Slokas 11 – 68

Lesson No. 2 Ahimsa Paramodharmah

From Srimadbharatam, Adiparva 8th chapterSloka 10 – to the end of 11 Chapter

Lesson No. 3 Raghoh Audaryam

From Raghuvamsa 5th Canto 1 – 35 Slokas

PROSE : Lesson No. 4 Mitrasampraptih

From Pancatantra – Ist Story (Abridged)Lesson No. 5 Modern prose Chikroda katha

Andhra Kavya Kathah

By Sannidhanam Suryanarayana SastryLesson No. 6 Computer Yanthram

By Prof. K.V. Ramakrishnamacharyulu

Course Outcomes

- The student learns reading and writing Sanskrit
- Understands and learns proper use of Grammar
- Develops communication Skills.

GRAMMAR

DECLENSIONS:

Nouns ending in Vowels:

Deva, Kavi, Bhanu Dhatr, Pitr, Go, Rama, Mati, Nadee, Tanu, Vadhoo,Matr, Phala, Vari & Madhu

SANDHI:

Swara Sandhi : Savarnadeergha, Ayavayava, Guna, Vrddhi, Yanadesa Vyanjana Sandhi : Scutva, Stutva, Anunasikadvitva, Anunasika, Latva,JastvaVisarga Sandhi : Visarga Utva Sandhi, Visargalopa Sandhi, Visarga

Repha Sandhi, Ooshma Sandhi

SAMASA :

(1) Dwandwa (2) Tatpurusha (Common)

(2a) Karmadharaya (2b) Dwigu

(2c) Paradi Tatpurusha (2d) Gatitatpurusha

(2e) Upapada Tatpurusha (3) Bahuvrihi

(4) Avyayibhava

CONJUGATONS

Ist Conjugations – Bhoo, Gam, Shtha, Drhs Labh, Mud,IInd Conjugation – As (

)

IIIrd Conjugation – Yudh,IV th Conjugation – Ish

VIII Conjugation – Likh, Kri ( ) IXth Conjugation – Kreen ( )

Xth Conjugation – Kath, Bhash, Ram, Vand,

BBA (BA) – II SEMESTER

MBG106: HINDI

This course contains a rich selection from Hindi poetry and prose. Grammar and translations from official language are also included.

Course Objectives

- To enlighten students about the richness and value of the nationallanguage
- To offer working knowledge of Hindi to the students.

SYLLABUS

गद्य विभाग (Prose Detailed Text)

1. बाजार दर्शन' - श्री जैनेंद्र कुमार
2. ईर्ष्या, तू न गई मेरे मन से - रामधारी सिंह 'दिनकर
3. आपने मेरी रचना पढ़ी? - हज़ारी प्रसाद द्विवेदी
4. भारतीय साहित्य की एकता - नन्ददुलारे वाजपेयी
5. अतिथि - राम विलास शर्मा
6. मेरी रुमाल खो गई - विद्यानिवास मिश्र
7. कवि और कविता - आचार्य महावीर प्रसाद द्विवेदी
8. सोना हिरनी - महादेवी वर्मा
9. *कफ़न* - मुंशी प्रेमचन्द

उपवाचक विभाग (Non Detailed Text)

1. पुरस्कार - जयशंकर प्रसाद
2. **हार** - मन्नू भंडारी
3. सदाचार का तावीज - हरिशंकर परसाई
4. आदमी का बच्चा - यशपाल
5. हार की जीत - सुदर्शन
6. ठाकुर का कुआं - मुंशी प्रेमचन्द
7. उसने कहा था - चंद्रधर शर्मा गुलेरी
8. रोज - अज्ञेय
9. चीफ की दावत - भीष्म साहनी

व्याकरण विभाग

I. निर्देश के अनुसार वाक्यों को बदलकर लिखिए
(Rewriting of sentences as directed)

1. कारक (case)
2. लिंग (gender)
3. वचन (number)
4. वाच्य (voice)

II. शुद्ध कीजिए (correction of sentences)

- चाहिए प्रयोग
- लिंग और वचन संबंधी

III. वाक्य प्रयोग (make your own sentences)

IV. कार्यालय हिंदी: प्रशासनिक
शब्दबली / परनाम (karyalay Hindi : Administrative terminology)

- कार्यालयो के नाम

- पद नाम

V. संधि विच्छेद

VI. विलोम शब्द

VII. पत्र लेखन

VII. गंधाश के आधार पर दिए गये प्रशनो का उत्तर देना चाहिए

VII. निबंध

Course Outcomes

- The student learns reading and writing Hindi
- Understands and learns proper use of Grammar

Develops communication Skills

TEXT BOOK

1. Prose Text: Dr. Ajaya Kumar Patnaik, **Gadya Gaurav**, Sonam Prakashan, Badamdadi, Cuttak.
2. Non, Detailed Text: Dr. Gulam Moinuddin Khan, **Charchit Kahaniyan**, Shabnam Pustak Mahal, Badamdadi, Cuttak.Text: Dr.T.Nirmala & Dr. S. Mohan, Padya Manjari, Rajkamal Prakashan, New Delhi.* Latest Editions

BBA (BA) – II SEMESTER

MBG108: SPECIAL ENGLISH

Course Objectives

- Understand and appreciate different literary genres.
- Recognize and analyse the main elements of different literary genres particularly short stories, essays, and poetry.
- Demonstrate in written and oral form both the comprehension and the analysis of literary texts (poetry,prose,short stories and essays)
- Appreciate and apply stylistic differences while communicating in a contemporary context for different purposes
- Create reasonably professional scripts with correct and varied usage of grammatical structures and punctuation for accurate communication of ideas

Learning Outcomes

Upon successful completion of Unit 1, the student will be able to:

- Demonstrate an understanding of poetry as a literary genre (L2)
- Identify and describe poetic forms and poetic devices (L2,L3)
- Analyze and effectively communicate ideas related to the poetic works for their structure and meaning, using correct terminology. (L3,L4)

UNIT -I

Poetry

1. The Road Not Taken by Robert Frost
2. The Walrus and the Carpenter by Lewis Carroll 3. Captain! My Captain! by Walt Whitman
4. Sonnet 'No-60'-William Shakespeare
5. "The Sun Rising" by John Donne

Learning Outcomes

Upon successful completion of Unit II, the student will be able to:

- Demonstrate an understanding of short story as a literary genre (L2)
- Identify and describe distinct literary characteristics of the short story form (L2,L3)
- Analyze and effectively communicate ideas related to the short stories for their structure and meaning. (L3,L4)

UNIT-II

Short Stories

1. *My Financial Career* -Stephen Leacock
2. *A Story from Confucius*- Confucius
3. The Barber's Trade Union-Mulk Raj Anand
4. An Occurrence at Owl Creek Bridge by Ambrose Bierce

5. The Story of an Hour by Kate Chopin

Learning Outcomes

Upon successful completion of the course, the student will be able to:

- Recognize and incorporate proper grammar and other mechanics of language in one's communication acts.(L1, L3)
- Demonstrate an understanding of the distinct literary characteristics of poetry, short story and essay as literary genres (L2)
- Analyze and effectively communicate ideas related to the prescribed literary genres for their structure and meaning, using correct terminology. (L3,L4)
- Write paragraphs, essays and reviews with the complexity considered appropriate for the undergraduate level (L3,L5)
- Analyze, describe, and debate the complexities of globalization, situating own reading in terms of society, religion, caste, region, gender,and politics (L3, L4)

Learning Outcomes

Upon successful completion of Unit III, the student will be able to:

- Read essays, and opinions while analyzing the structural and sentencelevel arrangement of the writing.(L1)
- Examine effective unity, support, coherence, and mechanics in essays.(L4)
- Write essays considered appropriate for the undergraduate level (L5)

UNIT-III

Essays

1. "A Hanging" – George Orwell

2. "Self-Reliance"- Ralph Waldo Emerson

3. "Attitude"- Margaret Atwood

4. "The Responsibility of Intellectuals"- Noam Chomsky 5. "Letter To His 10-Year-Old Daughter- Richard Dawkins

Learning Outcomes

Upon successful completion of Unit IV, the student will be able to:

- Engage with relevant scholarly works on contemporary issues (L1)
- Able to analyze, describe, and debate the complexities ofglobalization(L3)
- Situate one's own reading in terms of society, religion, caste, region,gender, and politics(L4)

UNIT-IV:

Contemporary Issues

1 . " The Globalisation of Inequality"- P. Sainath

2. "Words from an Open Mind to a Closed or Sealed One"- Ramachandra Guha

3. "The idea of India" - Aruna Roy

4. “Why not a separate UN Charter on Casteism?”- K. Balagopal
5. “The root cause of corruption” -Tabish Khair

Learning Outcomes

Upon successful completion of Unit V, the student will be able to:

- Use prewriting techniques to develop ideas in paragraphs and essays.(L2)
- Practice unity, coherence (including transitions), and appropriatewriting style.(L2)
- Recognize and incorporate proper grammar and mechanics includingparts of speech, verb tense, subject-verb agreement, word choice, spelling, commas, and other punctuation.(LI)
- Write a book/film review(L3)

UNIT-V:

Coursera Courses:

- Advanced Grammar & Punctuation Project (UCI Division ofContinuing Education) 20 hours
- Advanced Writing (UCI Division of Continuing Education) 26 hoursBook/Film Review

Course Outcomes

Upon successful completion of the course, the student will be able to:

- Recognize and incorporate proper grammar and other mechanics of language in one’s communication acts.(L1, L3)
- Demonstrate an understanding of the distinct literary characteristics of poetry, short story and essay as literary genres (L2)
- Analyze and effectively communicate ideas related to the prescribed literary genres for their structure and meaning, using correct terminology. (L3,L4)
- Write paragraphs, essays and reviews with the complexity considered appropriate for the undergraduate level (L3,L5)
- Analyze, describe, and debate the complexities of globalization, situating own reading in terms of society, religion, caste, region, gender,and politics (L3, L4)

GITAM Institute of Management (GIM)
Gandhi Institute of Technology and Management (GITAM)(Declared as Deemed to be University u/s 3 of UGC Act. 1956) Visakhapatnam – 45.

Course Code: MBG110	**Course Title**: Principles and Practice of Management	
Semester: II	**Course Type: Core**	**Credits: 3**
Home Programme(s): BBA (BA)	**Batch/AcademicYear**: 2020 - 2023	
Course Leader:		

One of the most important human activities is managing. Management, in fact can be traced back to the ancient times whenever there was large scale endeavor like great pyramids in Egypt, Great Wall of China, Taj Mahal in India. All these required a large number of people working in groups in a better coordinated way to achieve a well-defined target over a period of time.

In the present context, of globalization, because of increasing role of largeand complex organizations for the development of economy, the concept of management has become very significant for managing the business efficiently.

Course Objectives

- To enable the students to understand the fundamental principles ofmanagement
- To enable students to apply the practices of management

UNIT–I:

Management: Nature, Concept, Scope and Significance; Functions; Management: Art or Science or Profession, Organization Vs. Administration Vs. Management, Schools of Management: Contributions of F.W. Taylor, Henry Fayol, Elton Mayo; Roles of Managers; Social Responsibility and Business Ethics.

UNIT–II:
Planning: Concept, Objectives, Types, Steps and Techniques; Making Planning Effective; Decision Making: Steps in Decision Making and Types; Management by Objectives (MBO).

UNIT -III:

Organizing: Structure, Nature, Types of Organisations, Principles of Organising, Departmentalisation, Delegation, and Decentralisation of Authority, Span of Control - Line and Staff Functions. Staffing: Concept, Significance and Functions.

UNIT-IV:

Leading: Introduction, Characteristics of a Leader, Functions of a Leader, Leadership and Management, Principles of Leadership, Styles of Leaders

UNIT–V:

Controlling: Introduction, Concept of Controlling, Purpose of Controlling, Types of Control, Steps in Controlling, Techniques in Controlling

Case Analysis (Not exceeding 250 words).

Course Outcomes

- able to understand and explain the concept of management andits managerial perspective.
- It will equip students to map complex managerial aspectsarising due to ground realities of an organization.
- They will gain knowledge of contemporary issues inmanagement and various approaches to resolve those issues.

Assessment methods

Task	Task type	Task mode	Weightage (%)
A1	Mid exam	Individual	20
A2	Coursera	Individual	10
A3	Class room presentation/ Seminars and Case analysis/ workshop/training/Assignments/survey/ Project	Individual / Group	10
A4	End-term examination	Individual	60

Evaluation pattern

A1:Mid exam (20 marks): Two mid examinations will be conducted for 20 marks each. **Best of two** will be considered for final 20 marks. If the studentis absent for one Mid exam, the marks secured in the other mid exam will be considered as final marks. **No** Re examinations will be conducted under any circumstances except exceptional cases as approved by the HOI.

A2: Coursera Course (10 marks): student need to complete respective subjectwise Coursera course/ on line course listed by GIM through online and required

to submit the course completion certificate. Up on which student need to give presentation/viva for awarding marks up to 10

A3: **Class room presentation/Seminars and Case analysis/workshop/ training/Assignments/survey/ Project** ***(10 marks):*** Individual or Group taskswould be given. Marks will be allotted for the quality of work, report writing,and presentation. In a group task, differential marks will be allotted to the individual based on performance in the presentations.

A4. End-term examination (60 marks)**:** Short and Essay questions mainly based on the application of knowledge in the area of Decision and Support Systems. The syllabus is from all five units

Learning and teaching activities

Lectures, Discussions, Case studies, Presentations

Teaching and learning resources

1. Harold Koontz & Heinz Weirich (2012), *Management, a Global and Entrepreneurial Perspective*, New Delhi: Tata McGraw Hill Publishingcompany.
2. Dipak Kumar Bhattacharyya (2012), *Principles of Management Text and Cases*, New Delhi: Pearson.
3. Balasubrahmanian. N. (2012), *Management Perspectives*, New Delhi: Mac Millian India Ltd.
4. Charles Hill, Steven Mc Shane (2012), *Principles of Management*, NewDelhi: Tata McGraw Hill.
5. Ricky W. Griffin . (2012), *Management,* New Delhi: Cengage Learning.
6. Terry and Franklin. (2011), *Principles of Management,* New Delhi:AITBS Publishers.
7. Robert Kreitner. (2012), *Principles of Management,* New Delhi:Cengage South-Western 12 E

JOURNALS

1. Vikalpa, Indian Institute of Management
2. Journal of General Management., Mercury House Business Publications, Limited
3. Harvard Business Review, Harvard Business School Publishing Co.USA
4. Indian Management, AIMA, New Delhi
5. IJBMT Global Business Innovation, SPIRI
6. GITAM Journal of Management, GIM, GITAM (Deemed to beUniversity).

GITAM Institute of Management (GIM)
Gandhi Institute of Technology and Management (GITAM)(Declared as Deemed to be University u/s 3 of UGC Act. 1956) Visakhapatnam – 45.

Course Code: MAN126	**Course Title**: DATA ANALYSIS WITH MS EXCEL	
SEMESTER: II	**Course Type: Core**	**Credits**: 3
Home Programme(s):**BBA (BUSINESS ANALYTICS)**		Batch: 2020 -2023
Course Leader:		

Business analytics refers to the skills and technologies for exploring and investigating large amount of data to attain new insights that will help an organization to gain a competitive edge. MS Excel is spreadsheet software thatis used by many companies to perform basic analysis.

Course Objectives

- To give hands on experience in working with MS Excel
- To perform data analysis with MS Excel

Unit – I: (10 sessions) (CO1, L2) Introduction to Business Analytics: Benefits of Business Analytics, Types of Data – Structured, Semi Structured and Unstructured, Application areas of Business Analytics, Categorizationof Analytical methods and models – Descriptive, Diagnostic, Predictive and Prescriptive

UNIT – II: (10 sessions) (CO2, L3,L4,L5) Working with MS Excel: Uses ofExcel, Working with MS Excel Workbook, Worksheet Management, Sorting,Filters, Conditional Formatting, Working with Charts, Trend lines

Unit – III: (10 sessions) (CO3, L3,L4,L5)Working with Excel Functions: Text Functions, Logical Functions, Lookup Functions, Math Statistical Functions

UNIT – IV: (10 sessions) (CO2, L3,L4,L5) Statistical Analysis with Excel: Working with Statistical Functions, Descriptive Statistics in Excel, Using Data Analysis Tool pack in Excel

UNIT V: (10 sessions) (CO2, CO3, L3,L4,L5)What if Analysis and Pivot Tables: Data Tables, Scenario Manager, Goal Seek, Creating PivotTables, Working with Pivot Charts, Working with Power Pivot

Course Outcomes

- Understand importance of Business Analytics
- Perform basic operations in Excel
- Work with Excel Functions
- Perform basic statistical analysis with Excel
- Perform what if analysis
- Work with Pivot tables and charts

Assessment methods

Task	Task type	Task mode	Weightage (%)
A1	Quiz	Individual	10
A2	Assignments / Lab Tasks / Written Test/Coursera Groups* or Individual	Individual / Group	20
A3	Record Work	Individual	10
A4	Lab Exam	Individual	60

Evaluation pattern

A1: Quiz (10 marks; 10 minutes duration): Comprehensive Quiz comprising all the five units. Consisting of 20 questions with each question carrying ½ mark.

A2: Assignments / Lab Tasks / Written Test/Coursera (20 marks)***:*** An assignment, project or lab tasks to apply the skills gained through the course.

***A3. Record Work (10 marks)*:** Lab tasks involving usage of different techniques are to be done regularly in the lab and recorded in record book. Therecord should show the inputs, procedure and output produced with necessaryinterpretation.

***A4: Lab Examination (30 x 2 = 60 marks)*:** Two lab examinations, one at themid semester and another at the end semester where a problem is given whichneed to be analyzed and solved using the tool.

Learning and teaching activities

Classroom Lectures, Application cases, Demonstration, Lab Sessions

Teaching and learning resources

Computer Lab, MS Excel, Textbooks, Ebooks, Reference Materials, Webresources

Textbook(s):

Wayne L. Winston, Microsoft Excel - Data Analysis and Business Modeling, Prentice Hall of India

Reference Book(s):

Paul Mcfedris, Excel Data Analysis Visual Blueprint, Wiley

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Course Code: **MAN 106**	**Course Title**: **Calculus -2**	
Semester: II	**Course Type:** Core	**Credits:** 4
Home Programme(s):BBA(BA)	**Batch/AcademicYear**: 2020-2023	
Course Leader:		

Sequence of differential and integral calculus with applications. The course covers the techniques and applications of integration, the transcendental functions, and their inverses, as well as an introduction to differential equations.

Course objectives:

- Investigate important applications of integration, such as arc length,area of surfaces, and volume of solids.
- Introduce and explore the calculus of exponential, logarithmic, andinverse trigonometric functions.
- Study some more advanced techniques of integration and estimation of definite integrals.
- Explore basic techniques for solving and applications of ordinarydifferential equations.

Unit – I(12 sessions) **(CO1, CO2, L2, L3)**

Successive differentiation: Introduction, Successive differentiation – nthderivatives, Leibnitz theorem and its application **.**

Unit – II(13 sessions) **(CO2, CO3, CO4, L2, L3, L4)**

Indefinite integration: Standard forms , properties of integrals , Methods of substitution – integration of algebraic , Exponential , logarithmic , trigonometricand inverse trigonometric functions, integration by parts , integration – partialfraction methods

Unit – III (11 sessions)**(CO2, CO3, CO4, L3, L4, L5)**

Definite integration : The definite integrals , interpretation of definite integral as an area , Fundamental theorem of integrals calculus , properties of calculus

Unit – IV(11 sessions) **(CO1, CO3, L2, L4)**

Applications of integration : Areas under and between curves, integration using partial fractions, integration by parts, Some Business applications.

Unit – V(13 sessions) **(CO1, CO4, L2, L4)**

Differential Equations : Formation of differential equations – Degree and order of an ordinary differential equation , Solving differential equation by Variable separable method , Homogeneous differential equation , Non - Homogeneous differential equation , First and Second order Linear Differential Equations with constant coefficients-.

Problems will be given from all the units.

Course Outcomes

- Understanding to basic techniques for solving and applicationsof ordinary differential equations

- Apply to advanced techniques of integration and estimation

  of definite integrals.
- Analyze to investigate important applications of integration, such as arc length, area of surfaces, and volume of solids.
- Evaluate to the calculus of exponential, logarithmic, and inverse trigonometric functions
- Create an edge for the business

1. **Proofs of theorems and derivations of formulae are excluded. Assessment methods**

Learning and teaching activities

Mixed pedagogy approach is adopted throughout the course. Classroom based face to face teaching, directed study, independent study via G-Learn, case studies, projects and practical activities (individual & group).

Teaching and learning resources

Soft copies of teaching notes/cases etc. will be uploaded onto the G-learn. Wherever necessary, printouts, handouts etc. will be distributed in the class. Prescribed text book will be provided to all. However, you should not limit yourself to this book and should explore other sources on your own. You need to read different books and journal papers to master certain relevant concepts to analyse cases and evaluate projects. Some of these reference books given below will be available in our library.

***Books for Reference*:**

1 The required text is CALCULUS, 9th Edition, by Anton, Bivens, and Davis.

CO PO Mapping

This is to map the level of relevance of the Course Outcome (CO) with Programme Outcome (PO).

0= No Relevance; 1= Low Relevance; 2= Medium Relevance; 3= High Relevance

CO PO Mapping	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	Sum
CO1	3	2	0	0	2	2	0	0	9
CO2	2	2	0	0	2	2	0	0	8
CO3	3	3	0	0	2	2	0	0	10
CO4	2	2	0	0	2	2	0	0	8
CO5	2	2	0	0	2	2	0	0	8
Target Level Max.	12	11	0	0	10	10	0	0	43

BBA(BA) -Programme Outcomes (POs)	
1	Ability to understand the business problems with their knowledge in different functional areas of management.
2	Integrate with structured, semi – structured and unstructured data.
3	Utilize the tools such as Microsoft Excel, SPSS, R, Weka and Tableau to solve business analytics problems.
4	**A**bility to apply analytics techniques to analyze and interpret the data.
5	Incorporate the descriptive, predictive and prescriptive analytics.
6	Evaluate the necessary skills and understanding to take up advanced topics in the area of analytics and thus enhance their career prospects.

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Course Code: **MAN 108**	**Course Title**: **Discrete Mathematics**	
Semester: II	**Course Type:** Core	**Credits:** 4
Home Programme(s):BBA(BA)	**Batch/AcademicYear**: 2020-2023	
Course Leader:		

To introducethe students to the topics and techniques of discrete methods and combinatorial reasoning.Tointroduce a wide variety of applications. The algorithmic approach to the solution of problems is fundamental in discrete mathematics, and this approach reinforces the close ties between this disciplineand the area of computer science.

Course objectives:

- Complete and use truth tables for expressions involving the following logical connectives: negation, conjunction, disjunction, conditional,and bi conditional.
- Understand and use the terms cardinality, finite, count ably infinite, andunaccountably infinite, and determine which of these characteristics is associated with a given set.
- Solve counting problems involving the multiplication rule, permutations, and combinations (with and without replacement). Use standard notation.
- Show that a binary relation on a set is an equivalence relation, or give acounterexample to show that it is not.
- Understand and use many terms associated with a simple and directed graphs.

Unit – I(13 sessions) **(CO1, CO2, L2, L3)**

Mathematical Logic: Propositional Calculus: Statements and Notations, Connectives, Well Formed Formulas, Truth Tables, Tautologies, Equivalence of Formulas, Duality Law, Tautological Implications, Normal Forms, Theory of Inference for Statement Calculus, Consistency of Premises, Predicate Calculus: Predicative Logic, Statement Functions, Variables, Free and BoundVariables.

Unit – II(12 sessions) **(CO2, CO3, CO4, L2, L3, L4)**

Set Theory: Introduction, Operations on Binary Sets, Principle of Inclusion and Exclusion, *Relations:* Properties of Binary Relations, Relation Matrix , Operations on Relations, Partition and Covering, Transitive Closure, Equivalence, Compatibility and Partial Ordering Relations, Hasse Diagrams, *Functions:* Bijective Functions, Composition of Functions, Inverse Functions.

Unit – III (11 sessions)**(CO2, CO3, CO4, L3, L4, L5)**

Combinatorics: Basic of Counting, Permutations, Permutations with Repetitions, Circular

Permutations, Restricted Permutations, Combinations, RestrictedCombinations, Generating Functions of Permutations and Combinations, Binomial Coefficients, Binomial Theorem.

Unit – IV(12 sessions) **(CO1, CO3, L2, L4)**

Recurrence Relations: Generating Functions, Function of Sequences, Partial Fractions, Calculating Coefficient of Generating Functions, Recurrence Relations, Formulation as Recurrence Relations.

Unit – V (12 sessions) **(CO1, CO4, L2, L4)**

Graph Theory: Basic Concepts of Graphs, Sub graphs, Matrix Representationof Graphs: Adjacency Matrices, Incidence Matrices, Isomorphic Graphs, Paths and Circuits, Eulerian and Hamiltonian Graphs, Euler's Formula.

Problems will be given from all the units.

Course Outcomes

- Understanding to demonstrate skills

  in solving mathematical problems
- Apply to comprehend mathematical principles and logic
- Analyze to demonstrate knowledge of mathematical modeling and proficiency in using mathematical software
- Evaluate to communicate effectively mathematical ideas/results verbally or in Writing
- Create an edge for the business

Note:

1. Proofs of theorems and derivations of formulae are excluded.

Assessment methods

Task	Task type	Task mode	Weightage (%)
A1. Mid exam	Individual	Written	20
A2. Coursera	Individual	Presentations / Q &A/Viva	10
A3. Class room presentation/ Seminars and Case analysis/ workshop/training/ Assignments/survey/ Project	Groups	Presentations/Report with Q&A/Viva	10
A4. End-term exam	Individual	Written (short/long)	60

Mapping COs - Blooms levels- Assessment Tools

Knowledge Dimension / Cognitive Dimension	**L1. Remember**	**L2. Under-stand**	**L3. Apply**	**L4. Analyze**	**L5. Evaluate**	**L6. Create**
Factual Knowledge		Co1 (A1, A3)				
Conceptual Knowledge			Co2 (A1, A3)			
Procedural Knowledge		Co1 (A1, A3)	Co2 (A1, A3)	Co3 (A2,A3)	Co4 (A2,A3)	
Meta Cogni-tive Knowl-edge				Co4 (A2,A3)	Co5 (A2, A3,A4)	

Learning and teaching activities

Mixed pedagogy approach is adopted throughout the course. Classroom basedface to face teaching, directed study, independent study via G-Learn, case studies, projects and practical activities (individual & group).

Teaching and learning resources

Soft copies of teaching notes/cases etc. will be uploaded onto the G-learn. Wherever necessary, printouts, handouts etc. will be distributed in the class. Prescribed text book will be provided to all. However, you should not limit yourself to this book and should explore other sources on your own. You needto read different books and journal papers to master certain relevant concepts to analyze cases and evaluate projects. Some of these reference books given below will be available in our library.

***Books for Reference*:**

1. Discrete Mathematical Structures with Applications to Computer Science, J. P. Tremblay and P. Manohar, Tata McGraw Hill.
2. Elements of Discrete Mathematics-A Computer Oriented Approach, C. L. Liu and D. P. Mohapatra, 3rdEdition, Tata McGraw Hill.
3. Discrete Mathematics and its Applications with Combinatorics andGraph Theory, K. H. Rosen, 7th Edition, Tata McGraw Hill.
4. Discrete Mathematics for Computer Scientists and Mathematicians, J. L. Mott, A. Kandel,T.P. Baker, 2nd Edition, Prentice Hall of India.
5. Discrete Mathematical Structures, BernandKolman, Robert C. Busby,Sharon Cutler Ross, PHI.
6. Discrete Mathematics, S. K. Chakraborthy and B.K. Sarkar, Oxford, 2011.

CO PO Mapping

This is to map the level of relevance of the Course Outcome (CO) withProgramme Outcome (PO).

0= No Relevance; 1= Low Relevance; 2= Medium Relevance; 3= HighRelevance

CO PO Mapping	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	Sum
CO1	3	2	0	0	2	2	0	0	9
CO2	2	2	0	0	2	2	0	0	8
CO3	3	3	0	0	1	1	0	0	8
CO4	2	2	0	0	2	2	0	0	8
CO5	2	2	0	0	2	2	0	0	8
Target Level Max.	12	11	0	0	9	9	0	0	41

BBA(BA) -Programme Outcomes (POs)	
1	Ability to understand the business problems with their knowledge in different functional areas of management.
2	Integrate with structured, semi – structured and unstructured data.
3	Utilize the tools such as Microsoft Excel, SPSS, R, Weka and Tableau to solvebusiness analytics problems.
4	**A**bility to apply analytics techniques to analyze and interpret the data.
5	Incorporate the descriptive, predictive and prescriptive analytics.
6	Evaluate the necessary skills and understanding to take up advanced topics inthe area of analytics and thus enhance their career prospects.

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Course Code: MAN124	**Course Title**: DATA STRUCTURES WITH C++	
SEMESTER: II	**Course Type: Core**	**Credits**: 3
Home Programme(s):BBA (BUSINESS ANALYTICS)		Batch: 2020- 2023
Course Leader:		

Data Structure is a particular way of organizing data in a computer so thatit can be used efficiently. Understanding the data structure will help in efficiently managing the data and coming up with effective algorithms. The implementation of data structures are done in C++, one of the most popular object oriented language.

Course Objectives

- To acquaint students with the concepts of Data Structures
- To implement data structures in C++

Unit – I: (10 sessions) (CO1, L2) Introduction to Data Structures – Basic Concepts, Classification of Data Structures, Algorithm: Basics, Algorithm Complexity and Asymptotic Analysis, Types of Algorithms – Greedy Algorithms, Divide and Conquer, Dynamic Programming

Unit – II: (10 sessions) (CO2, L3, L4, L5) Linked Lists: Concept, Types ofLinked List – Single, Double, Circular, Operations in Linked List, Applications of Linked List

Unit – III: (10 sessions) (CO3, L3, L4, L5) Stack and Queue: – Concept, Operations on stack, Array representation, Linked List representation, application of stacks, Queues - Concept, operation on queues, types of queues,Array representation, Linked List representation application of queues

Unit – IV: (10 sessions) (CO4, L3, L4, L5) Searching and Sorting: Introduction to searching – Linear search, Binary Search, Sorting – Bubble, Insertion, Selection, Quick, Hashing

Unit – V: (10 sessions) (CO5, L3, L4, L5) Trees and Graphs: Trees - Basicterminology, Types of trees – General trees, Forest, Binary Tree, Binary Searchtree, creating binary tree from general tree, traversing a binary tree, applicationof trees, Graphs - Basic terminology, Directed graph, representation of graph, graph traversal algorithms, Application of graphs

Course Outcomes

- Calculate Time Complexity of different algorithms
- Work with Linked Lists
- Implement Stack and Queue in C++
- Perform Searching and Sorting using C++
- Understand different concepts in trees and graphs

Assessment methods

Task	Task type	Task mode	Weightage (%)
A1	Quiz	Individual	10
A2	Assignments / Lab Tasks / Written Test/Coursera Groups* or Individual	Individual / Group	20
A3	Record Work	Individual	10
A4	Lab Exam	Individual	60

Evaluation pattern

A1: Quiz (10 marks; 10 minutes duration): Comprehensive Quiz comprising all the five units.

Consisting of 20 questions with each question carrying ½ mark.

A2: Assignments / Lab Tasks / Written Test/Coursera (20 marks)***:*** An assignment, project or lab tasks to apply the skills gained through the course.

A3. Record Work (10 marks)**:** Lab tasks involving usage of different techniques are to be done regularly in the lab and recorded in record book. Therecord should show the inputs, procedure and output produced with necessaryinterpretation.

A4: Lab Examination (30 x 2 = 60 marks)**:** Two lab examinations, one at themid semester and another at the end semester where a problem is given whichneed to be analyzed and solved using the tool.

Mapping Cos – Blooms Levels – Assessment Tools

Knowl- edge Di- mension / Cognitive Dimension	**L1. Remem-ber**	**L2. Under-stand**	**L3. Apply**	**L4. Analyze**	**L5. Evaluate**	**L6. Create**
Factual Knowl- edge						
Conceptu- al Knowl- edge		**CO1 (A1)**				
Procedur- al Knowl-edge			**CO2(A3) CO3(A3) CO4(A3) CO5(A3)**	**CO2(A2) CO3(A2) CO4(A2) CO5(A2)**	**CO2(A4) CO3(A4) CO4(A4) CO5(A4)**	
Meta Cognitive Knowl- edge						

Learning and teaching activities

Classroom Lectures, Application cases, Demonstration, Lab Sessions

Teaching and learning resources

Computer Lab, C++ Editor and Compiler, Textbooks, Ebooks, ReferenceMaterials, Web resources

TEXT BOOKS

Adam Drozdek, Data Structures and Algorithms in C++, Cengage Learning

REFERENCE BOOKS

1. Mark Allen Weiss, Data Structures and Algorithm Analysis in C++, Pearson Education
2. Seymour Lipschutz, Data Structures (Schaum's Series), McGraw Hill Education

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Course Code: VDC111	**Course Title**: Venture Discovery	
Semester: II	**Course Type:** Internal	**Credits**: 2
Program BBA		
Course Leader: Venture Discovery Centre		

India as part of its Make in India initiative has been focusing on creating incubation centers within educational institutions, with an aim to generate successful start-ups. These start-ups will become employment creators than employment seekers, which is the need of the hour for our country.

This common course for all the disciplines is a foundation on venture development. It is an experiential course that lets students venture and find outwhat is a business, financial and operating models of a business are. How to design and prototype a solution that meets their customers' needs and generate revenue for the business.

Course Objectives

- Discover who you are – Values, Skills, and Contribution to Society.
- Gain experience in actually going through the innovation process.
- Conduct field research to test or validate innovation concepts with
- target customers.
- Understand innovation outcomes: issues around business models, financing for start-ups, intellectual property, technology licensing, corporate ventures, and product line or service extensions.

Unit I (6 sessions)

Personal Values: Defining your personal values, Excite & Excel, Build a Team, Define purpose for a venture. Four stages: Personal Discovery, Solution Discovery, Business Model Discovery, Discovery Integration.

Unit II (6 sessions)

Solution Discovery: Craft and mission statement, Experience design, Gaininguser insight, Concept design and positioning, Product line strategy, Ideation &Impact.

Unit III (6 sessions)

Business Model Discovery: Prototyping solutions, Reality Checks, Understand your industry, Types of business models, Define Revenue Models, Define Operating Models

Unit IV (6 sessions)

Discovery Integration: Illustrate business models, Validate business models,
Define company impact

Unit V (6 sessions)

Tell a Story: Can you make money, Tell your venture story.

Course Outcomes

- Understand conceptual framework of the foundation of a venture
- Understand the concept of purpose, mission and value-addservice offered by a venture
- Analyze design and positioning of the product
- Demonstrate prototyping
- Analyze business, revenue and operating models

Assessment methods

Task	Task type	Task mode	Weightage (%)
A1. Assignments	Individual	Report/Presentation	20
A2. Case / Project/ Assignment	Groups* or Individual	Presentations/Report/ Assignment	40
A3. Project	Individual/ Group	Report/Pitch	40

Transferrable and Employability Skills

	Outcomes	Assessment
1	Know how to use online learning resources: G-Learn, onlinejournals, etc.	A1 & A2
2	Communicate effectively using a range of media	A1& A2
3	Apply teamwork and leadership skills	A2
4	Find, evaluate, synthesize & use information	A1 & A2
5	Analyze real world situation critically	A3
6	Reflect on their own professional development	A3
7	Demonstrate professionalism & ethical awareness	A2
8	Apply multidisciplinary approach to the context	A2

Learning and teaching activities

Mixed pedagogy approach is adopted throughout the course. Classroom basedface to face teaching, directed study, independent study via G-Learn, case studies, projects and practical activities (individual & group)

Teaching and learning resources

Soft copies of teaching notes/cases etc. will be uploaded onto the G-learn. Wherever necessary, printouts, handouts etc. will be distributed in the class. Prescribed text book will be provided to all. However, you should not limit yourself to this book and should explore other sources on your own. You needto read different books and journal papers to master certain relevant concepts to analyze cases and evaluate projects. Some of these reference books given below will be available in our library.

***Prescribed Modules*:**

Access to NU-IDEA online modules will be provided.

***Referential text books and journal papers*:**

Personal Discovery Through Entrereneurship, Marc H. Meyer and ChaewonLee, The Institute of Enterprise Growth, LLC Boston, MA.

Suggested journals:

Vikalpa, Indian Institute of Management, Ahmedabad

Journal of General Management, Mercury House Business Publications, Limited

Harvard Business Review, Harvard Business School Publishing Co. USA

SEMESTER – III

S. No.	Course Code	Level of Course	Title of Course	Sessions			Marks			Credits
				Theory	Prac.	Total	CA	SEE	Total	
1	MBG201	Foundation compulsory	Indian Heritage and Culture	2	-	2	40	60	100	2
2	MBG205	Core	Human Resource Management	3	-	3	40	60	100	3
3	MBG207	Core	Marketing Management	3	-	3	40	60	100	3
4	MAN203	Core	Statistical Methods	4	-	4	40	60	100	4
5	MAN225*	Core	Data Visualization with Tableau	1	2	3	100	-	100	2
6	MAN227*	Core	Data Analysis with R	2	2	4	100	-	100	3
7	MAN 295	Skill based	Social/Rural Project				50		50	1
8	MAN293	Core Skill Building	Semester End Viva				50		50	1
	Total			**15**	**4**	**19**	**460**	**240**	**700**	**19**

Change in course title

Note: *100% Internal evaluation

PROFESSIONAL COMPETENCY DEVELOPMENT COURSES

S. No.	Course Code	Level of Course	Title of the Course	Sessions			Marks			Credits
				Theory	Prac.	Total	CA	SEE	Total	
1	MBG352	Foundation Elective Skill Based	Business English Certificate (BEC)	-	2	2	50	-	50	1
2	MBG350	Foundation Elective Value Based	Yoga and Meditation	-	2	2	50	-	50	1
	Total			**-**	**4**	**4**	**100**	**-**	**100**	**2**

Note: credits of Professional Competency Development courses will be added in the 6th Semester

Prac: Practicals, CA: Continuous Assessment, SEE: semester End Examination

GITAM Institute of Management (GIM)
Gandhi Institute of Technology and Management (GITAM)(Declared as Deemed to be University u/s 3 of UGC Act. 1956) Visakhapatnam – 45.

Course Code: **MBG 201**	**Course Title**: **INDIAN HERITAGE AND CULTURE**	
Semester: III	**Course Type:** Core	**Credits:** 3
Home Programme(s):B.B.A.Business Analytics	**Batch/Academic Year**: 2020-2023	
Course Leader: Dr. V. Gowri Lakshmi		

In a broad sense culture means anything physical or non-physical which we produce and cultivate. Heritage is something, which we receive from our ancestors. Culture is a product of great forces. This is the peculiarity of Indianculture. It is unique in the world and we Indians are proud of it.

Course objectives:

- To enable the students to have an insight into and understanding of thegreat heritage and culture of India.
- To sensitize them towards preservation and progression of the same.

UNIT- I(14 sessions) (CO1, CO2, L2, L3)

Fundamental Unity of India-Harappan and Vedic Culture- Evolution of Caste System- Political unification of India under Mauryas and Guptas - Cultural achievements. Cultural conditions under the Satavahanas. Contribution of Pallavas and Cholas to art and letters.

UNIT- II(11 sessions) (CO2, CO3, CO4, L2, L3, L4)

Influence of Islam on Indian Culture- The Sufi, Bhakti and Vishnavite

Movements. Cultural achievements of Vijayanagar rulers. Contributionof Shershah and Akbar to the evolution of administrative system in India- Cultural Developments under Mughals.

UNIT- III(13 sessions) (CO2, CO3, CO4, L3, L4, L5)

Western Impact on India- Introduction of Western Education- Social and Cultural awakening and Social reform movements- Raja Ram Mohan Roy- DayanandSaraswati Theosophical Society- Ramakrishna Paramhamsa and Vivekananda – IshwarchanderVidyasagar and Veeresalingam. Rise of Indian Nationalism- Mahatma Gandhi- Non violence and satyagraha.

UNIT - IV(12 sessions) (CO1, CO3, L2,L4)

Nature and meaning of Culture, the Vedic culture- Upanishadic Culture, ArthaSastra, Culture in Ramayana and Mahabharata.

UNIT –V(10 sessions) (CO1,CO4, L2, L4)

The culture of Jainism and Buddhism, Vedanta and Indian culture. Religion and ethical practices.

Course Outcomes

- Understand about Indian culture traditions
- To understand the features of Vedic and Harappa civilization
- To know about influence of Islam religion on Indian culture
- To differentiate the traditions followed during different periods
- To know the culture in Vedic period

Assessment methods

Task	Task type	Task mode	Weightage (%)
A1. Mid exam	Individual	Written	20
A2. Coursera	Individual	Presentations / Q&A/Viva	10
A3. Class room presentation/ Seminars and Case analysis/ workshop/training/Assignments/survey/ Project	Groups	Presentations/ Report with Q&A/Viva	10
A4. End-term exam	Individual	Written (short/ long)	60

Mapping COs - Blooms levels- Assessment Tools

Knowl- edge Di- mension / Cognitive Dimension	L1. Remem- ber	L2. Under-stand	L3. Apply	L4. Analyze	L5. Evaluate	L6. Create
Factual Knowl-edge		Co1 (A1,A3)				
Conceptu- al Knowl- edge			Co2 (A1,A3)			
Procedur- al Knowl-edge		Co1 (A1,A3)	Co2 (A1,A3)	Co3 (A2,A3)	Co4 (A2, A3)	
Meta Cognitive Knowl- edge				Co4 (A2,A3)	Co5 (A2, A3,A4)	

Learning and teaching activities

Mixed pedagogy approach is adopted throughout the course. Classroom basedface to face teaching, directed study, independent study via G-Learn, case studies, projects and practical activities (individual & group).

Teaching and learning resources

Soft copies of teaching notes/cases etc. will be uploaded onto the G-learn. Wherever necessary, printouts, handouts etc. will be distributed in the class. Prescribed text book will be provided to all. However, you should not limit yourself to this book and should explore other sources on your own. You needto read different books and journal papers to master certain relevant concepts to analyze cases and evaluate projects. Some of these reference books given below will be available in our library.

***Books for Reference*:**

MadanlalMalpani&ShamsunderMalpani (2009),*Indian Heritage and Culture*,
New Delhi:Kalyani Publishers.

JOURNALS

1. GITAM Journal of Management, GITAM Institute of Management,Visakhapatnam.
2. Harvard Business Review, Harvard Business School Publications, US.
3. International Journal of Cross Culture Management, Sage Publication,New Delhi.

BBA (BA) – III SEMESTER

MBG205: HUMAN RESOURCE MANAGEMENT

The purpose of this course is to provide the students with the basic understanding of the concepts, systems of human resource development in organizations. The turbulent business climate, caused by increased global price competitiveness, changing technologies, changing employment legislations and challenging work force composition is challenging managers to utilize their employees more effectively to gain competitive advantage. In recent years, there have been significant practical developments with increasing numbers of private and public sector organizations adopting HRM initiatives alongside downsizing and reengineering the organization.

Course Objectives

- To provide an understanding of the strategic importance of managing human resources within an organization.
- To provide an overview of the various functions of the HR management and a range of practices employed by organizations across the globe for building a competitive advantage.

UNIT-I:

Introduction: Nature, scope and significance of HRM - Evolution of HRM – Recent trends in HRM – Functions of HRM – Challenges of HR managers

UNIT-II:

Procurement: Human Resource Planning – HR Forecasting methods - Job analysis and Job design – Recruitment - Selection – Induction

UNIT-III:

Development: Identification of training needs - designing the training program– Methods of training – Difference between Training & Development

UNIT-IV:

Compensation and Integration: Introduction - Basic factors in determining pay rates – Basic, Supplementary and Executive Remuneration – types of employee benefits and services - Quality of work life – Collective Bargaining.

UNIT-V:

Separation and Maintaining: Communication and Counseling - Safety and Health – Internal mobility - Retirement and Retirement benefits.

Case Let (Not Exceeding 200 Words)

Course Outcomes

After completion of this course students will be able to –

- understand the various HRM initiatives
- understand and apply these to help in building loyal and committed employees to achieve organizational success in a competitive environment.

TEXT BOOK

Snell, Bohlander and Vohra (2012), *Human Resource Management – A SouthAsian Perspective,* New Delhi: Cengage Learning.

REFERENCE BOOKS

1. Edwin B Flippo (2010), *Personnel Management*, New Delhi: TataMcGraw Hill Publishing.
2. Gary Dessler & BijuVarkkey (2011), *Human Resource Management,*

New Delhi: Pearson.

3. P Subbarao (2012), *Human Resource Management*, New Delhi:Himalaya Publishing House.
4. Seema Sanghi (2011), *Human Resource Management*, New Delhi:Macmillan publishers India Ltd.

JOURNALS

1. GITAM Journal of Management, GIM, GITAM (Deemed to beUniversity), Visakhapatnam
2. Harvard Business Review, Harvard Business School Publication Co.USA
3. Human Capital, HR Information Services, New Delhi
4. Vikalpa, Indian Institute of Management, Ahmedabad

BBA (BA) – III SEMESTER

MBG207: MARKETING MANAGEMENT

Marketing as a subject primarily caters to the consumerist instincts of an individual. The markets are driven by consumer behaviour, which has evolvedover time and is much more demanding these days. Consumer satisfaction takes primacy for a business to be successful. This calls for managers to adopt creative and unique marketing strategies to gain competitive advantage.Marketing Management equips managers with the required theoretical knowledge and practical skills to gain insights into the dynamic nature of the markets and then devise ways and means to effectively manage them.

Course Objectives

- To explain the principles of marketing
- To analyse real-world marketing issues
- To apply concepts of marketing to address problems and opportunitiesin the new marketing environment

Unit I: Introduction to Marketing – Definition, Nature, Scope, and Importanceof Marketing – Core Concepts -Need, Want, Desire, Demand, Value, Exchange; philosophies of Marketing- Product – Production - Sales – Marketing – Societal – Relational marketing Concept of Marketing Myopia. Product Vs service

Unit II: Buyers behavior -Factors influencing buyer behavior –five-step buyers decision process - Segmenting, Targeting and Positioning - Conceptof Market Segmentation, Bases for Segmenting Consumer Markets, Targeting(T), Positioning (P) Value Proposition and USP

Unit III: Marketing mix: Elements of the marketing Mix – four P's, extendedthree Ps of services. Product Decisions: Product Concept -Classification of Products – Product Life Cycle Stages, New Product Development

Unit IV: Pricing and Channels of Distribution: Pricing Objectives – Factors Influencing the Pricing Policy – Pricing Methods, Channels of Distribution:

Definition – Nature – Types-Functions and levels of distribution channels

Unit V: Promotion Mix – Importance of Promotion – Managing Advertising –Sales Promotion – Personal Selling and Direct Marketing– Publicity and Public Relations. Integrated Marketing Communication (IMC), Social Marketing

Course Outcomes

- Describe the various concepts of Marketing.
- Examine the importance of Marketing in customer-oriented strategies
- Applying marketing concepts to real-time marketing problems

Learning and teaching activities

Case Analysis Situation Analysis Brainstorming Group Discussion Research Project Chalk and Talk Student Presentations

Teaching and learning resources

1. Philip Kotler, Gary Armstrong and Prafulla Agnihotri, Principles of Marketing, Pearson India, 17th Edition. New Delhi: 2018
2. Philip Kotler and Gary Armstrong, Principles of Marketing, Pearson India, Global Edition, 17th

Edition. New Delhi: 2017

3. Rajan Saxena, Marketing Management, Tata-McGraw Hill, Fifth Edition New Delhi :2015
4. Ramaswamy and Namakumari -Marketing Management- IndianContext with Global Perspective McGraw Hill Education; India, Fifth Edition, 2017
5. Ramaswamy and Namakumari -Marketing Management- Indian Context -Global Perspective, Sage Publications India Pvt Ltd; Sixth Edition 2018
6. C. B. Gupta and Dr. N. Rajan Nair, Marketing Management: Text andCases 15th Edition, S. Chand and Sons 2012
7. N Rajan Nair and Sanjith R Nair, Marketing – Revised Edition, SultanChand & Sons – Tb, 2017
8. Indian Journal of Marketing
9. GITAM Journal of Management, GIM, GITAM University,Visakhapatnam
10. Vikalpa, IIM, Ahmedabad
11. Management Review, IIM, Bangalore

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Course Code:MAN203	**Course Title**: **STATISTICAL METHODS**	
Semester: III	**Course Type: Core**	**Credits: 4**
Home Programme(s):BBA(BA)	**Batch/AcademicYear**:2020-23	
Course Leader:		

Business Statistics is important, for future managers, to have a firm understanding of the basics of statistics and its application to analyze and create an edge for the business. Student will be able to understand the measurement systems variability, control processes (as in statistical process control or SPC). The student should summarizing data, and to make data-driven decisions

Course Objectives

- Enable the students to develop basic knowledge in Statistics
- Provide understanding in some basic statistical techniques which are used for solving business problems.
- Understand the basic concepts of Probability and Statistics
- Apply the analytical techniques in business transactions that would help in making effective business decisions

UNIT I: (10 sessions) (CO1,CO2,CO3,CO4,CO5,L1,L2,L3,L4,L5,L6)

Measures of Central Tendency: Introduction, Arithmetic mean, geometric mean, harmonic mean, median, mode. Measures of Dispersion: Introduction, Range, Quartile deviation, Mean deviation, Standard deviation, combined mean and combined standard deviation.

UNIT II: (10 sessions) (CO1,CO2,CO3,CO4,CO5,L1,L2,L3,L4,L5,L6) **Correlation Analysis:** Introduction, types of correlation, Methods of Correlation analysis, Scatter diagram method, Karl Pearson's correlation coefficient, Coefficient of determination, Spearman's rank correlation coefficient. **Regression Analysis**: Introduction, Types of regression models, Significance of Regression Analysis, Methods of finding Regression Equations, Least Squares and Using Regression Coefficient methods, Prediction using the Regression Equations.

UNIT III:(10 sessions) (CO1,CO2,CO3,CO4,CO5,L1,L2,L3,L4,L5,L6) **Probability** – Definitions of various terms, Types of probability, Bayes' Theorem. Random variable and Probability Distribution – Definition, Probability distribution of discrete and continuous random variable, Mean and Variance.

Discrete distribution – Introduction, Binomial distribution, Poisson distribution, Mean and Variance. **Continuous distribution**– Normal distribution, Properties of Normal distribution, Area under Standard Normal Probability Curve and Importance of Normal Distribution.UNIT IV:(10 sessions) (CO1,CO2,CO3,CO4,CO5,L1,L2,L3,L4,L5,L6)

Index numbers, Introduction, Characteristics and Uses of index numbers, Types of Index Numbers, Laspyre, Paasche's, Fisher's, Marshall-Edgeworth, Dorbish and Bowley, Limitations of index numbers.

UNIT V: (10 sessions) (CO1, CO2,CO3,CO4,CO5,L1,L2,L3,L4,L5,L6) Time series analysis – Introduction, Components of a time series – Secular trend, Short term, Random or Irregular variations, Measurement of trend – Free hand method, Method of linear Curve fitting by the principle of least squares, Method of Semi - Averages and Moving average.

Note: Proofs of theorems and derivations of problems and distributions are excluded.

Course Outcomes

- Understand the measurement systems variability
- Apply basic statistical techniques to measure relative changes in price, production or any such quantities of economic interest
- Use statistical techniques to analyse business problems
- Evaluate business problems
- Perform Time series analysis and measure different trends in data series and examine relationship between two quantitative variables

TEXT BOOK

Sharma, J. K. (2013), Business statistics, New Delhi: Pearson Education.

REFERENCE BOOKS

1. Gupta, S.C. & Gupta, I. (2012), Business Statistics, Mumbai: Himalaya Publishing House.
2. Levine, D.M., Berenson, M. L. & Stephan, D. (2012), Statistics for managers using Microsoft Excel, New Delhi: Prentice Hall India Pvt.
3. Aczel, A. D. &Sounderpandian, J. (2011), Complete Business Statistics, New Delhi: Tata McGraw Hill.
4. Anderson, D., Sweeney, D., Williams, T., Camm, J., & Cochran, J. (2013), Statistics for Business and Economics, New Delhi: CengageLearning.
5. Davis, G., &Pecar, B. (2014), Business Statistics using Excel, New Delhi: Oxford University Press.

JOURNALS

1. American Statistician, American Statistical Association, USA.
2. Journal of the American Statistical Association, American Statistical Association, USA
3. Journal of Mathematics and Statistics, Science Publications, USA
4. Annals of the Institute of Statistical Mathematics, Springer Netherlands, Netherlands

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Course Code: MAN 225	**Course Title**: **DATA VISUALIZATION WITHTABLEAU**	
Semester: III	**Course Type: Core**	**Credits**: 2
Home Programme (s):**BBA (BUSINESS ANALYTICS)**	Batch: 2020 – 2023	
Course Leader:		

Data Visualization is the presentation of data in a pictorial or graphical format. Today analysts are required to deal with large amount of data. Visualization helps in presenting the data in pictorial or graphical format. Such visual representation will help in providing better insights to the decision maker. Tableau is popular visualization tool to create visual data.

Course Objectives

- To understand the concept and benefits of visualization
- Understand the usage of different visual encoding
- Provide hands on working with Tableau tool

UNIT–I: Introduction to Visualization: Concept and importance of data visualization, Choosing appropriate visual encodings – ordering of items, number of distinct values, structure of visualization, Positioning - Placement and Proximity, Graphs and Layouts, Colors, Size, Text and Typography, Shape, Lines.

UNIT–II: Working with Tableau Data Source and Basic Charts: Introduction to Tableau, connecting to Data Source: Text Files, Excel, Access, other databases, merging multiple data sources, Univariate Charts – Creating tables, bar graphs, pie charts, histograms, line charts, stacked bar graphs, box plots, Showing aggregate measures, Bivariate Charts – Creating tables, scatterplots, swapping rows and columns, adding trend lines, selecting color palettes, using dates

UNIT III: Fields, Hierarchies &Filters: Using predefined fields, calculating percentages, applying if-then logic, applying logical functions, showing totals and percentages, discretizing data, manipulating text, aggregate data. Grouping and creating hierarchies in Tableau. Creating and using Filters in Tableau.

UNIT–IV: Multivariate Charts and Maps: Facets, area charts, bullet graphs, dual axes charts, Gnatt charts, heat maps, Maps – Setting geographical roles, placing marks on map, overlaying demographic data, choropleth maps, polygon shapes, customizing maps

UNIT–V: Dashboards in Tableau: Adding title and caption, font size and colors, adding various marks, adding reference lines, using presentation mode, adding annotation, adding drop-down selectors, search box selectors, slider selectors, creating dashboards, creating animated visualizations. Connecting and using Tableau Public Server.

Course Outcomes

- Understand and design data visuals with different visual encodings
- Understand the usage of different visual encoding
- Work with User defined fields
- Customize the presentation with different elements in Tableau

Learning and teaching activities

Classroom Lectures, Application cases, Demonstration, Lab Sessions

Teaching and learning resources

Computer Lab, Tableau, Textbooks, Ebooks, Reference Materials, Webresources

Reference Books:

- The Visual Display of Quantitative Information by Edward Tufte
- Envisioning Information by Edward
- Tufte Visualizing Data by Ben Fry

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Course Code: MAN227	**Course Title**: **DATA ANALYSIS WITH R**	
Semester: III	**Course Type: Core**	**Credits**: 3
Home Programme(s): **BBA (BUSINESS ANALYTICS)**		Batch: 2020 - 2023
Course Leader:		

R is an open source programming language for statistical computing and graphics. Being open source, it has found huge acceptance among data scientists and is one of the popular tool for data science and machine learning.

Course Objectives

- Understand the programming concepts of R
- Gain hands on experience in working with R

UNIT–I: Introduction to R: Concept of R, Installing R, IDE of R, getting help from R, Mathematical Operators and Vectors, Assigning Variables, Special Numbers, Logical Vectors, Classes, Different types of numbers, Changing classes, Examining Variables, The workplace, Vectors – Sequences, Lengths, Names, Indexing Vectors, Vector Recycling and Repetition, Matricesand Arrays – Creating Arrays and Matrices, Rows, Columns, Dimensions, Indexing Arrays, Combining Matrices, Array Arithmetic,

UNIT–II: Lists, Functions, Strings and Factors: Lists – Creating lists, Automatic and recursive variables, List dimensions and arithmetic, indexing lists, Conversion between vectors and lists, combining lists, NULL, Pairlists, Data Frames – Creating Data Frames, Indexing Data Frames, Basic Data Frame Manipulation, Environments, Functions – Creating and Calling Functions,Passing functions, variable scope, Strings – Constructing and printing strings, Formatting numbers, Special characters, Changing case, Extracting Substrings,Splitting Strings, File paths, Factors – Creating, factor levels, ordered factors,conversion of variables

UNIT–III: Flow Controls: Conditional – if and else, Vectorized if, Multiple Selection, Loops – repeat loops, while loops, for loops, Advanced looping – replication, looping over lists, looping over arrays, Multiple – Input Apply, Instant vectorization, Split-Apply-Combine

UNIT–IV: Statistics with R: Summarizing data, Calculating relative frequencies, Tabulating Factors and creating contingency tables, Testing categorical variables for independence, Calculating Quantiles of a dataset, Converting data into z-scores, t-test, testing sample proportions, testing normality, comparing means of two samples, testing correlation for significance, Linear regression in R, Logistic Regression in R Clustering with R

UNIT–V: Packages and Visualization: Loading packages, search path, libraries and installed packages, installing packages, maintaining packages, Visualization – The three plotting systems, Scatterplots – base graphics,lattice graphics, ggplots, Line Plots, Histograms, Box Plots, Bar Charts, Otherplotting packages and systems

Course Outcomes

- Understand the elements of R programming
- Write basic programs in R language
- Write programs in R using control structures
- Perform data visualization with R
- Perform statistical analysis in R language

Assessment methods

Task	Task type	Task mode	Weightage (%)
A1	Quiz	Individual	10
A2	Assignments / Lab Tasks / Written Test/Coursera Groups* or Individual	Individual / Group	20
A3	Record Work	Individual	10
A4	Lab Exam	Individual	60

Evaluation pattern

A1: Quiz (10 marks; 10 minutes duration): Comprehensive Quiz comprising all the five units. Consisting of 20 questions with each question carrying ½ mark.

A2: Assignments / Lab Tasks / Written Test/Coursera (20 marks)***:*** An assignment, project or lab tasks to apply the skills gained through the course.

A3. Record Work (10 marks)**:** Lab tasks involving usage of different techniques are to be done regularly in the lab and recorded in record book. Therecord should show the inputs, procedure and output produced with necessaryinterpretation.

A4: Lab Examination (30 x 2 = 60 marks)**:** Two lab examinations, one at the mid semester and another at the end semester where a problem is given whichneed to be analyzed and solved using the tool.

Reference Books

- Sandip Rakshit, R Programming for Beginners, McGraw Hill Education (India)
- Seema Acharya, Data Analytics using R, McGrawHill Education (India)
- Andrie de Vries, Joris Meys, R for Dummies A Wiley Brand, 2nd Edition, John Wiley and Sons, Inc

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SEMESTER – IV

S. No.	Course Code	Level of Course	Title of the Course	Sessions			Marks			Credits
				Theory	Prac.	Total	CA	SEE	Total	
1	MBG202	Foundation compulsory	Environmental Science	3	-	3	40	60	100	3
2	MAN210	Core	Business Re-search Meth-odology	3	-	3	40	60	100	3
3	MAN206	Core	Predictive Analytics and Decision Making	4	-	4	40	60	100	4
4	MAN224*	Core	Data Analysis with Python	2	2	4	100	-	100	3
5	MBG206	Core	Financial Management	4	-	4	40	60	100	4
6	MAN208	Core	Artificial In-telligence	3	-	3	40	60	100	3
7	MAN292	Core skill building	Semester end Viva Voce	-	-		50		50	1
	Total			**19**	**2**	**21**	**350**	**300**	**650**	**21**

Note: *100% Internal evaluation

PROFESSIONAL COMPETENCY DEVELOPMENT COURSES

S. No.	Course Code	Level of Course	Title of the Course	Sessions			Marks			Credit
				Theory	Prac.	Total	CA	SEE	Total	
1	MBG348	Founda-tion Elective Skill Based	Public Speaking		2	2	50	-	50	1
2	MBG354	Founda-tion Elective Skill Based	Soft Skills		2	2	50	-	50	1
	Total				**4**	**4**	**100**	**-**	**100**	**2**

Note: Professional Competency Development course credits will be added in the 6th Semester

Prac:Practicals,CA: Continuous Assessment, SEE: semester End Examination

*Note: The Student has to do a Summer Project for a period of 6 weeks during summer at end of 2 year , carrying 1 credit which will be shown in V semester.

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Course Code: MBG 202	**Course Title**: Environmental Science	
Semester: IV	**Course Type: Core**	**Credits: 3**
Home Programme(s): BBA (BA)	**Batch/AcademicYear**: 2020 -2023	
Course Leader:		

The importance of environmental science and environmental studies cannotbe disputed. The need for sustainable development is a key to the future of mankind. Continuing problems of pollution, loss of forests, solid waste disposal, degradation of environment, issues like economic productivity and national security, Global warming, the depletion of ozone layer and loss of biodiversity have made everyone aware of environmental issues. It is clear that no citizen of the earth can afford to be ignorant of environment issues. Environmental management has captured the attention of health care managers. Managing environmental hazards has become very important.

Course Objectives

- To sensitize students to environmental issues
- To mobilize them to adopt environment conservation strategies asmanagement professionals.

SYLLABUSUNIT-I:

Multidisciplinary nature of environmental studies

Definition, Scope and importance, need for public awareness

UNIT–II:

Natural resources and associated problems

a) *Forest resources*: Use and over-exploitation, deforestation, case studies. Timber extraction, mining, dams and their effects on forest and tribal people.

b) *Water resources*: Use and over-utilization of surface and ground water, floods, drought, conflicts over water, dams-benefits and problems.

c) *Mineral resources*: Use and exploitation, environmental effects ofextracting and using mineral resources, case studies.

d) *Food resources*: World food problems, changes caused by agriculture and over-grazing, effects of modern agriculture, fertilizer-pesticideproblems, water logging, salinity, case studies.

e) *Energy resources*: Growing energy needs, renewable and non renewableenergy sources, use of alternate energy sources. Case studies.

f) *Land resources*: Land as a resource, land degradation, man induced landslides, soil erosion and desertification.

Role of an individual in conservation of natural resourcesEquitable use of resources

for sustainable lifestyles

UNIT-III:

Ecosystems

Concept of an ecosystem, Structure and function of an ecosystem, Producers, consumers and decomposers, Energy flow in the ecosystem, Ecological succession, Food chains, food webs and ecological pyramids.

Introduction, types, characteristic features, structure and function of the following eco systems :-

- Forest ecosystem

- Grassland ecosystem
- Desert ecosystem
- Aquatic ecosystems (ponds, streams, lakes, rivers, oceans, estuaries)

From Unsustainable to Sustainable development, Urban problems related to energy, Water conservation, rain water harvesting, watershed management, Resettlement and rehabilitation of people; its problems and concerns. *Environmental ethics*: Issues and possible solutions

Climate change, global warming, acid rain, ozone layer depletion, nuclear accidents and holocaust, Wasteland reclamation, Consumerism and waste products, Environment Protection Act, Air (Prevention and Control of Pollution) Act, Water (Prevention and control of Pollution) Act, Wildlife Protection Act, Forest Conservation Act, Issues involved in enforcement of environmental legislation, Public awareness

UNIT-IV:

Biodiversity and its conservation

Introduction – Definition: genetic, species and ecosystem diversity, Biogeographical classification of India

Value of biodiversity: consumptive use, productive use, social, ethical, aesthetic and option values, Biodiversity at global, National and local levels, India as a mega-diversity nation, Hot-sports of biodiversity.

Threats to biodiversity: habitat loss, poaching of wildlife, man-wildlife conflicts.

Endangered and endemic species of India

Conservation of biodiversity: In-situ and Ex-situ conservation of biodiversity.

UNIT-V:

Environmental Pollution

Definition, Cause, effects and control measures of :-

Air pollution, Water pollution, Soil pollution, Marine pollution, Noisepollution, Thermal pollution, nuclear hazards

Solid waste Management: Causes, effects and control measures of urban andindustrial wastes

Role of an individual in prevention of pollutionPollution case studies

Disaster management: floods, earthquake, cyclone and landslides.

Population growth, variation among nations, Population explosion – Family Welfare Program, Environment and human health, Human Rights, Value Education, Women and Child Welfare, Role of Information Technology in Environment and human health.

COURSE OUTCOMES

- Creating environmental consciousness among students
- Enabling them to identify potential environmental hazards and toprovide management solutions to such problems

FIELD WORK

1. Visit to a local area to document environmental assets river/forest/grassland /hill/mountain
2. Visit to a local polluted site-Urban/Rural/Industrial/Agricultural
3. Study of common plants, insects, birds.

4. Study of simple ecosystems-pond, river, hill slopes, etc.

TEXT BOOK

Erach Bharucha (2013), *Textbook of Environmental Studies for UndergraduateCourses* Second Edition, Hyderabad: Universities Press.

REFERENCE BOOKS

1. Townsend C.R., Begon, M & Harper J.L (2008), *Essentials of Ecology* Third Edition, United Kingdom, Oxford: Blackwell Publishing.
2. Jadhav H.V & Bhosale V.M (2006), *Environmental Protection & Laws*,Mumbai: Himalaya Publishing House.

*Latest Available editions

JOURNALS

1. GITAM Journal of Management, GITAM Univeristy, Visakhapatnam
2. The ICFAI Journal of environmental economics
3. The ICFAI Journal of Environmental Law
4. Indian Journal of Environmental Protection
5. Journal of Environmental Research and Development
6. Down to Earth magazine, Society for Environmental Communications,New Delhi

GITAM Institute of Management (GIM)
Gandhi Institute of Technology and Management (GITAM)(Declared as Deemed to be University u/s 3 of UGC Act. 1956) Visakhapatnam – 45.

CourseCode: MAN210	Course Title: Business Research Methodology	
Semester: IV	Type of Paper: Core & Theory	Credits: 3
Home Programme(s): BBA (BA)		
Course Leader:		

Research methodology is the systematic and scientific method of how to review and research a topic. It starts with identification of the problem and continues with sample design, data collection, analysis and report. It is extensively usedto find a solution to a problem and enhance knowledge. Continuous growth is one of the key challenges for business, which needs innovative ideas and solutions to stagnation in growth. Research is a valuable tool for businesses toidentify potential avenues for growth and solutions to problems. Understandingthe methodology to be adopted when researching is, therefore very crucial forbusinesses.

Course Objectives:

- To enable the students to get familiarize with the concepts of ResearchMethodology
- To acquaint the students with the techniques of Research Methodologywhich are applicable to business arena

UNIT-I:

Introduction - Meaning, Importance of Research, Types of research, Research Process-Problem of Identification-Formulation-Classification, Concept andConstruction of Hypothesis- Steps in Testing Hypothesis.

UNIT-II:

Research Design - Meaning, Purpose and Principles –Types of Research Design- Exploratory – Descriptive – Experimental; Sampling & Sampling Designs- Determination of Sample Size- Census Survey Vs Sample Survey- Advantages of Sampling.

UNIT-III:

Data Collection - Sources of Data - Methods of Data Collection, Scaling Techniques – Sampling Methods-Probability Sampling-Non Probability Sampling –questionnaire design, pilot study - Interview, Observation and Schedule; Sources of secondary data.

UNIT-IV:

Data Tabulation - Analysis and Interpretation: Editing, Decoding and Classification of Data-Preparation of Tables-Analysis of Data -Graphic and Diagrammatic Representation of Data, univariate analysis- frequency tables, mean, standard deviation, bi-variate analysis- cross tabulations, correlation and regression analysis.

UNIT-V:

Research Analysis and Report Writing: Univariate parametric and non- parametric tests, parametric tests-one sample-t test, z-test; Non-Parametric tests – Runs test, Kolmogorov Smirnov test, Chi-Square test, one sample signtest, Man Whitney U Test.Types of Reports- Contents of Report-Formats of Reports-Presentation of Reports.

Course Outcomes

- Able to identify the important concepts of businessresearch process
- Able to understand various types of research designand scaling methods

- Understand various types of data and methods forcollecting data
- Be able to define and formulate research problems and formulate hypotheses
- Get exposure to analyse the data using variousstatistical techniques

TEXT BOOK

Kothari, C.R. (2012), *Research Methodology – Methods and Techniques*, New Delhi: New Age International Publishers.

REFERENCE BOOKS

1. Boyd, H. W., Westfall, R. L., &Stasch, S. F. (2010), *MarketingResearch: text and cases*, New Delhi: All India Travel Book Sellers.
2. Bryman, A. (2010), *Social Research Methods*, New Delhi: OxfordUniversity Press.
3. Krishnaswami, O.R. (2011),*Methodology of Research in SocialSciences*, Mumbai: Himalaya Publishing House.

JOURNALS

1. Electronic Journal of Business Research Methods, Cass School ofBusiness, City University London, UK.
2. GITAM Journal of Management, GIM, GITAM University,Visakhapatnam
3. Journal of Management Research, Faculty of Management Studies,University of Delhi, New Delhi.

GITAM Institute of Management (GIM)
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Course Code:MAN206	**Course Title**: **PREDICTIVE ANALYTICS AND DECISION MAKING**	
Semester: IV	**Course Type: Core**	**Credits: 3**
Home Programme(s):BBA(BA)	**Batch/Academic Year**:2020-23	
Course Leader: **Mr. SrinuSetti**		

Predictive Analytics is a discipline that deals with the application of statistical and machine learning techniques on historical data to predict future outcomes. In this competitive age, predictive analytics not only helps in making informed decisions and solve business problems but also to have an edge over the competitors.

Course Objectives

- Understand the basic statistical techniques required for forecasting
- Understand the basic concepts of Probability and Statistics
- Provide understanding in some basic statistical techniques which are used for solving business problems.
- Apply these techniques constructively to make effective business decisions
- Apply the analytical techniques in business transactions that would help in making effective business decisions

UNIT I: (10 sessions) (CO1,CO2,CO3,CO4,CO5,L1,L2,L3,L4,L5,L6)

Hypothesis Testing: Introduction, Types of Hypothesis, Hypothesis Testing Procedure, One sample and Two sample Test for Mean (Students t-distribution and Z-test); Introduction to Chi-Square distribution, Chi-Square test for Goodness of fit and for Independence of Attributes.

UNIT II: (10 sessions) (CO1,CO2,CO3,CO4,CO5,L1,L2,L3,L4,L5,L6)

Analysis of Variance: Introduction, Testing equality of population means (One –Way Classification), Testing equality of population means (Two –Way Classification)

UNIT III:(10 sessions) (CO1,CO2,CO3,CO4,CO5,L1,L2,L3,L4,L5,L6)

Multiple Correlation Analysis:Introduction, Significance of multiple correlation, Multiple and partial correlation, Relation between multiple and partial correlation coefficients.

UNIT IV:(10 sessions) (CO1, CO2,CO3,CO4,CO5,L1,L2,L3,L4,L5,L6)

Multiple Regression Analysis: Introduction, Significance of Multiple Regression Analysis, Estimating the parameters of Multiple Regression by method of Least Squares and Using Regression Coefficient methods, Relation between partial regression coefficients and correlation coefficients, Standard Error of Estimates for Multiple regression.

UNIT V: (10 sessions) (CO1,CO2,CO3,CO4,CO5,L1,L2,L3,L4,L5,L6)

Forecasting Trend: Introduction, Linear trend model, Exponential trend, Measurement of Seasonal effects – Method of Simple Average, Ratio-to-Trend Method, Ratio-to-Moving Average Method, Link Relative Method.

Course Outcomes

- Understand the measurement systems variability
- Apply basic statistical techniques to measure relative changes in price, production or any such quantities of economic interest
- Use statistical techniques to analyse business problems
- Solve forecasting problems
- Make effective decisions using statistical techniques

Note: Proofs of theorems and derivations of problems and distributions are excluded.

Assessment methods

Task	Task type	Task mode	Weightage (%)
A1	Mid exam	Individual	20
A2	Class room presentation/Seminars and Case analysis/workshop/training/ Assignments/survey/ Project	Individual / Group	10
A3	Coursera	Individual	10
A4	End-term examination	Individual	60

Evaluation pattern

A1: Mid exam (20 marks; 1 hour duration): Syllabus Unit-1 & Unit-2, Blooms Levels-L1, L2, L3, L4; Section-A for 4 marks (2 marksfor 2 questionswith no choice & Section-B for 16 marks (8 marks questions 2 with internal choice from each unit)

A2: Assignment (10 marks): Assignments will be allotted after the course commencement and each individual would be expected to submit his /her reportafter 7 days of uploaded assignment questions online in xlearn/glearn. Marks will be allotted for analysingthe problems, solution writing, and presentation.

A3: Coursera Course/on line Course (10 marks):student need to complete respective subject wise Courseracourese / on line course listed by GIM throughonline and required to submit the c

urse completion certificate. Up on which student need to give presentation/ viva for awarding marks

***A4: End-term examination (60 marks; 3 hours duration)*:** Essay questions mainly based on the application of knowledge in the area of Business Statistics.The syllabus is from all five units

End-term question paper (60 marks; 3 hours duration) will contain:

- Section 1: 10 short questions compulsory. All questions carry equalmarks;10*2=20
- Section 2: 5 essay questions will be given from 5 units with internalchoice. All questions carry equal marks; 5*8=40

Mapping Cos – Blooms Levels – Assessment Tools

Knowledge Dimension / Cognitive Dimension	**L1. Remem-ber**	**L2. Under-stand**	**L3. Apply**	**L4. Analyze**	**L5. Evaluate**	**L6. Create**
Factual Knowledge		CO1 (A1, A2, A3, A4)				
Conceptual Knowledge			CO2 (A1, A3, A4)			
Procedural		CO1 (A1,	CO2 (A1,	CO3 (A1,	CO4 (A1,	

Knowledge		A3, A4)	A3, A4)	A3, A4)	A3, A4)	
Meta Cogni-tive Knowl-edge				CO3 (A1, A3, A4)	CO4 (A1, A3, A4)	CO5 (A1, A3, A4)

Learning and teaching activities

Classroom Teaching, Power Point Presentation, Application in real lifesituation, Problem Solving, Assignment etc.

Teaching and learning resources

E-Resources, E-Books, Websites, E-Library

TEXT BOOK

J. Joseph Frrancis (2015), Business *statistics*, New Delhi: Cengage Learning.

REFERENCES BOOKS

1) Bruce L. Bowerman, Richard T.O'Connell, Emily S. Murphree (2015), *Business Statistics in practice*, New Delhi: McGraw HillEducation (India) Private Ltd.

2) David M.Levine, david Stephan Timothy C.Krehbiel, Mark l Berenson (2015),*Statistics for managers using Microsoft Excel*, New Delhi:Prentice Hall India Pvt.

3) Amir D.Aczel, JayavelSounderpandian (2015), *Complete Business Statistics*, New Delhi:Tata McGraw Hill.

4) S.P. Gupta &M.P. Gupta (2015), *Business Statistics*, New Delhi: SultanChand & Sons.

JOURNALS

1) GITAM Journal of Management, GIM, GITAM (Deemed to beUniversity), Visakhapatnam

2) International Journal of Operations and Quantitative Management, College of Business, Prairie View A&M University, USA

3) Journal of Applied Statistics, Routledge, Taylor & Francis Group, UK

CO PO Mapping

This is to map the level of relevance of the Course Outcome (CO) withProgramme Outcome (PO).

0= No Relevance; 1= Low Relevance; 2= Medium Relevance; 3= HighRelevance

CO PO Mapping							
Internal	**PO1**	**PO2**	**PO3**	**PO4**	**PO5**	**PO6**	**Sum**
C01	**0**	**0**	**3**	**3**	**3**	**2**	**11**
C02	**3**	**2**	**2**	**3**	**3**	**3**	**16**
CO3	**3**	**2**	**2**	**3**	**3**	**2**	**15**
CO4	**2**	**2**	**2**	**3**	**3**	**2**	**14**
CO5	**3**	**2**	**2**	**3**	**3**	**2**	**15**
Target Level Max.	**11**	**8**	**11**	**15**	**15**	**11**	**71**

BBA(BA)-Programme Outcomes (POs)	
1.	Ability to understand the business problems with their knowledge in differentfunctional areas of management.
2.	Integrate with structured, semi – structured and unstructured data.
3.	Utilize the tools such as Microsoft Excel, SPSS, R, Weka and Tableau to solvebusiness analytics problems.
4.	**A**bility to apply analytics techniques to analyze and interpret the data.
5.	Incorporate the descriptive, predictive and prescriptive analytics.
6.	Evaluate the necessary skills and understanding to take up advanced topics in thearea of analytics and thus enhance their career prospects.

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Course Code: MAN224	**Course Title**: **DATA ANALYSIS WITH PYTHON**	
Semester: IV	**Course Type: Practical**	**Credits**: 3
Home Programme(s): **BBA (BUSINESS ANALYTICS)**	Batch: 2020 - 23	
Course Leader:		

Python is an open source high level interpreter based language. Python is interactive and object oriented language with wide range of applications. Python is commonly used in the area of data science and web based analytics.

Course Objectives

- Understand the analytics features of python
- Get hands on experience in build data applications with python

UNIT–I: Introduction: Features of Python, Setting up path, Variables and Data types, Operators in Python, Input – Output Statements, Control Structures: Conditional Statements, Looping Statements, Control Statements

UNIT–II: Data Structures of Python: Strings, Lists, Tuples, Dictionaries, Functions: Defining and calling a function, Types of Function; Modules: Importing Module, Packages, Composition, Exception Handling. **OOP Concepts and Regular Expressions**: OOP concepts in Python, Regular Expressions: Match Function, Search Function, Matching Vs Searching, Modifiers, Patterns, Working with Database.

UNIT–III: Python for Data Analysis - I: NumPy Basics: Arrays andVectorized Computation, Pandas Basics: Working with Series and DataFrame;Scipy Basics: Random Variables, Building specific distributions, Univariate analysis, Bivariate and multivariate analysis.

UNIT–IV:Python for Data Analysis– I: Pandas for Data Analysis: I/O tools; Series, Data frames, arrys, Indexing & selecting data, Merge, Join and Concatenate; Reshaping and Pivot tables; Working with missing data; Workingwith numerical and categorical data.

UNIT–V: Advanced Visualizations: Python packages for plotting and visualizations; Introduction to Matplotlib package; Subplots, axes and figures;Text, Labels and Annotations; Managing colors; Working with lines, dates andtext on plots; Scatter plots; Pie and Polar charts; Bar charts and Histograms; Plotting discrete distributions; Plotting categorical variables; Plotting images,contours and fields; Visualizations for statistics; Animations.

Course Outcomes

- Understand the language elements of Python
- Understand the OOP concepts in Python
- Write programs in python
- Use python for data analysis
- Use python for data visualization

Assessment methods

Task	Task type	Task mode	Weightage (%)
A1	Quiz	Individual	10
A2	Assignments / Lab Tasks / Written Test/Coursera Groups* or Individual	Individual / Group	20
A3	Record Work	Individual	10
A4	Lab Exam	Individual	60

Evaluation pattern

A1: Quiz (10 marks; 10 minutes duration): Comprehensive Quiz comprising all the five units. Consisting of 20 questions with each question carrying ½ mark.

A2: Assignments / Lab Tasks / Written Test/Coursera (20 marks)***:*** An assignment, project or lab tasks to apply the skills gained through the course.

A3. Record Work (10 marks)**:** Lab tasks involving usage of different techniques are to be done regularly in the lab and recorded in record book. Therecord should show the inputs, procedure and output produced with necessaryinterpretation.

A4: Lab Examination (30 x 2 = 60 marks)**:** Two lab examinations, one at themid semester and another at the end semester where a problem is given whichneed to be analyzed and solved using the tool.

Learning and teaching activities

Classroom Lectures, Application cases and exercises, Demonstration, LabSessions

Teaching and learning resources

Computer Lab, Python Software, Textbooks, Ebooks, Reference Materials,Web resources

Reference Books:

1. Starting Out with Python (2009) Pearson , Tonny Gaddis

2. Beginning Pyhton Wrox Publication Peter Norton, Alex Samuel

3. Python Algorithms Apress, Magnus Liet Hetland

4. Python Object Oriented Programming PACKT Press, Dusty Phillips

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BBA (BA) – IV SEMESTER

MBG206: FINANCIAL MANAGEMENT

Finance is the life blood of the business. Financial Management is one of the key areas of management. This Course helps in understanding of the fundamentals of financial management in terms of investment; financing and dividend policy. This course is designed to familiarize the students with the basic concepts and practices of Financial Management.

Couse Objectives

- To familiarize the students with the basic concepts of FinancialManagement.
- To give thorough understanding of the practices of basic FinancialManagement.

UNIT-I:

Financial Management: An Introduction

Meaning and Definition of financial Management, Goals of Financial Management, Finance Functions, Organisation of finance function, Interface between Finance and other business functions, Financial Planning, Steps in Financial Planning, Factors Affecting Financial Plans, Time Value of Money.

UNIT-II:

Investment Decisions

Introduction to Capital Budgeting, Importance of capital Budgeting, Capital Budgeting Process, Techniques of Capital Budgeting - Accounting Rate of Return, Pay Back Period, Net Present Value, Internal Rate of Return and Profitability Index.

UNIT-III:

Financing Decisions

Cost of Capital - Cost of Debt, Cost of Preference Shares, Cost of Equity Shares, Cost of Retained Earnings, Weighted Average Cost of Capital; Leverages – Introduction – Types of Leverages – Measurement of Operating Leverage, Financial Leverage and Combined Leverage ; Capital Structure – Introduction, Features of Ideal Capital Structure, Factors affecting Capital Structure, Theories of Capital Structure - Net Income Approach, Net Operating Income Approach, Modigliani and Miller Approach and Traditional Approach

UNIT-IV:

Working Capital Management - Introduction – Concepts of Working Capital,Objective of Working Capital Management, Need for Working Capital, Operating Cycle, Determinants of Working Capital, Estimation of Working Capital.

UNIT-V:

Dividend Decisions - Introduction, Forms of Dividends, Types of Dividend Policies, determinants of Dividend Policy -Theories of Dividend Policy - Walter Model, Gordon Model, Modigliani and Miller Model – Bonus Shares and Stock Split – Legal, procedural and Tax Aspects of Dividend Policy.

COURSE OUTCOMES

After completing this course the students should be able to –

- make optimum decisions pertaining to raising funds, makinginvestments and managing the assets of a corporation, big or small.

- Learn to manage finances with the ultimate goal of creating value.

TEXT BOOK

1. M.Y. Khan & P.K. Jain. (2013), *Financial Management.* New Delhi: TataMcGraw Hill.

REFERENCE BOOKS

1. I.M. Pandey (2010), *Financial Management*, New Delhi: VikasPublications.
2. R.K. Sharma & Shashi K. Gupta (2014), *Financial Management.*
3. Ludhiana: Kalyani Publications.

JOURNALS

1. Chartered Financial Analyst - ICFAI - Hyderabad.
2. GITAM Journal of Management, Visakhapatnam.
3. Journal of Financial Management and Analysis - Centre for FinancialManagement Research.

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Course Code: MAN208	**Course Title**: **Artificial Intelligence**	
Semester: IV	**Course Type: Theory**	**Credits**: 3
Home Programme(s): **BBA (BUSINESS ANALYTICS)**		Batch: 2020 -2023
Course Leader:		

Artificial Intelligence has its foundation in Boolean algebra. With the introduction of computers, AI has gained prominence, where attempts were made to make computers think and reason like humans. It has come a long way from playing games to intelligent robots. This course aims to introduce the basic concepts of AI, Expert Systems and Machine Learning.

Course Objectives

- To understand the strategies of state space.
- To understand AI Knowledge representation.
- To understand expert systems, machine learning and fuzzy logic.

Unit I (8 sessions) (CO1 & L3)

Introduction to the Propositional and Predicate Calculus, Inference Rules anduse for Predicate Calculus Expression

Unit II (8 sessions) (CO2 & L3, L5)

Graph Theory, Strategies for State Space Search and Control Strategies, Heuristic Search, Monotonicity and Informedness

Unit III (8 sessions) (CO3 & L4)

Recursion based search, Pattern-Directed search, AI Challenge Knowledge Representation, Problem reduction and game playing,

Unit IV (8 sessions) (CO4 & L4)

Logic Concepts and Logic Programming, Prolog Programming, Expert System and Applications, Uncertainty measurement: Probability Theory, Fuzzy Set and Fuzzy Logic

Unit V (8 sessions) (CO5 & L2, L4)

Machine Learning Paradigms, Artificial Neural Networks, Introduction to Intelligent Agents, Natural Language Processing.

Course Outcomes

- Understand the concept of Propositional and PredicateCalculus
- Apply state space search
- Apply Recursion based search
- Perform Logic programming using Prolog
- Understand Expert Systems and fundamentals of MachineLearning.

Assessment methods

Task	Task type	Task mode	Weightage (%)
A1	Mid exam	Individual	20
A2	Coursera	Individual	10
A3	Class room presentation/Seminars and Case analysis/workshop/training/Assignments/ survey/ Project	Individual / Group	10
A4	End-term examination	Individual	60

Evaluation pattern

A1:Mid exam (20 marks): Two mid examinations will be conducted for 20 marks each. **Best of two** will be considered for final 20 marks. If the studentis absent for one Mid exam, the marks secured in the other mid exam will be considered as final marks. **No** Re examinations will be conducted under any circumstances except exceptional cases as approved by the HOI.

A2: Coursera Course (10 marks): student need to complete respective subjectwise Coursera course/ on line course listed by GIM through online and requiredto submit the course completion certificate. Up on which student need to givepresentation/viva for awarding marks up to 10

A3: **Class room presentation/Seminars and Case analysis/workshop/ training/Assignments/survey/ Project *(10 marks):*** Individual or Group taskswould be given. Marks will be allotted for the quality of work, report writing,and presentation. In a group task, differential marks will be allotted to the individual based on performance in the presentations.

***A4. End-term examination (60 marks; 3 hours duration)*:** Short and Essay questions mainly based on the application of knowledge in the area of Decision and Support Systems. The syllabus is from all five units

Mapping Cos – Blooms Levels – Assessment Tools

Knowledge Dimension / Cognitive Dimension	**L1. Remem-ber**	**L2. Under-stand**	**L3. Apply**	**L4. Analyze**	**L5. Evaluate**	**L6. Create**
Factual Knowledge						
Conceptual Knowledge		**CO5 (A2)**	**CO1 (A1) CO2 (A1)**	**CO3 (A3) CO4 (A4) CO5 (A4)**	**CO2 (A4)**	
Procedural Knowledge						
Meta Cogni-tive Knowl- edge						

Learning and teaching activities

Classroom Lectures, Problem solving exercises, Demonstration, Lab Sessions

Teaching and learning resources

Textbooks, Ebooks, Reference Materials, Web resources, Computer Lab,Prolog Software

Reference Books:

1. Artificial Intelligent e: Elaine Rich, Kevin Knight, Mc-Graw Hill.

2. Introduction to AI & Expert System: Dan W. Patterson, PHI.

3. Artificial Intelligent by Luger (Pearson Education)

4. Russel & Norvig, Artificial Intelligent e: A Modern Approach, Pearson Education

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SEMESTER – V

S. No.	Course Code	Level of Course	Title of the Course	Sessions			Marks			Credits
				Theo-ry	Prac.	Total	CA	SEE	Total	
1	MBG301	Core	Production and Operations Management	3	-	3	40	60	100	3
2	MAN305	Core	Operations Research	4	-	4	40	60	100	4
3	MAN303	Core	Project Man-agement	3	-	3	40	60	100	3
4	MAN329*	Core	Database Management Systems	2	2	4	100	-	100	3
5	MAN327*	Core	Machine Learning	2	2	4	100	-	100	3
6	MAN307	Core	Innovation by Design	3	-	3	40	60	100	3
7	MAN391*	Core Skill Building	Summer Proj-ect	-	-	-	50		50	1
8	MAN393	Core Skill Building	Semester End Viva Voce	-	-	-	50		50	1
	Total			**17**	**4**	**21**	**460**	**240**	**700**	**21**

Note: *100% Internal evaluation

PROFESSIONAL COMPETENCY DEVELOPMENT COURSES

S. No.	Course Code	Level of Course	Title of the Course	Sessions			Marks			Credits
				Theory	Prac.	Total	CA	SEE	Total	
1	MAN346	Foundation Elective Value Based	Foundations of Psychology	2	-	2	50	-	50	1
	Total			**2**	**-**	**2**	**50**	**-**	**50**	**1**

Note: Professional Competency Development course credits will be added in the 6th Semester

Prac: Practicals, CA: Continuous Assessment, SEE: semester End Examination

BBA (BA) – V SEMESTER

MBG301: PRODUCTION AND OPERATIONS MANAGEMENT

The concept of production is the process through which goods and services are created. We can include both manufacturing and service organizations within the purview of production management. Thus the essential futures of the production function are to bring together people, machines and materials to provide goods or services thereby satisfying the wants of the people. The scopeof the production enables us to look at the problem of production managementin a much wider perspective. This paper indicate the general applications of thetechniques of management, machines and materials

Course Objectives

- To enable to the students to understand the basic principles of ProductionManagement
- To help them apply techniques of Production Management
- This course aids in understanding the role of operations in achievingvarious competitive capabilities.
- The students also learn how to help an organization in improvingproductivity and meeting customer's competitive capabilities.

UNIT-I:

Production and Operations Management - Production and Operation Functions -Manufacturing Systems –Differences Between Manufacturing and Service Operations - Functions of Production and Operations Manager.

UNIT-II:

Production Planning and Control: Steps in PPC - Techniques of Production Planning and Control

UNIT-III:

Plant Location and Layout Planning: Location of Service Facilities -Location Decision -Types of Layout – Factors Affecting Plant Location.

UNIT-IV:

Productivity: Factors Affecting Productivity -Job Design -Process Flow Charts -Methods Study -Work Measurement.

UNIT-V:

Materials Management: Costs Associated with Inventory - Economic Order Quantity - ABC Analysis – Just in-time Production. Quality Management: Acceptance Sampling -Control Charts –Quality Circle.

Course Outcomes

- This course aids in understanding the role of operations in achievingvarious competitive capabilities.
- The students also learn how to help an organization in improvingproductivity and meeting customer's competitive capabilities.

TEXT BOOK

Aswathapppa & Bhat (2013), *Production and Operations Management*, New Delhi: Himalaya Publishing House.

REFERENCE BOOKS

1. Everett E. Adam, Jr. and Ronals J. E. Ebert (2012), *Production and Operations Management: Concepts, Models and Behavior*, New Delhi:Prentice Hall of India.

2. S.N. Chary (2011), *Production and Operations Management*, New Delhi: Tata Mc-Graw Hill Publishing Co. Ltd.

JOURNALS

1. GITAM Journal of Management, Visakhapatnam.
2. Productivity.
3. LaghuUdyog.
4. Economic & Political Weekly, New Delhi.

BBA (BA) – V SEMESTER

MAN204: OPERATIONS RESEARCH

Operations Research is a widely accepted discipline that deals with the application of advanced analytical methods to help make better decisions. Thismethod helps to derive optimal or near-optimal solutions to complex decision-making problems. Gaining an insight into the structures and processes that Operations Research can offer and the practical utility of these techniques in Business would be an asset to the future managers.

Course Objectives

- To understand the mathematical models used in Operations Research
- To apply these techniques constructively to make effective businessdecisions

UNIT-I:

Introduction: Nature and meaning of Operations Research, Management applications of Operations Research, main characteristics of Operations Research, scope of Operations Research, role of Operations Research indecision making.

UNIT-II:

Linear Programming Problem: Introduction, mathematical formulation of LPP, general Linear Programming problem, Graphical Solution of LPP, Canonical and Standard Forms of LPP, solving LPP by Simplex Method.

UNIT-III:

Transportation & Assignment Problems: Introduction of transportation problems, procedures of finding basic feasible and optimal solution – NW corner rule, minimum cost method, Vogel's Approximation, MODI method, Assignment Problem - introduction, solving of Assignment problem by Hungarian Algorithm.

UNIT-IV:

Game Theory and Simulation: Game theory: Introduction, Two Person Zero Sum Games, Pure Strategies, Dominance Principle, Graphical; Simulation: introduction, types of simulation, generation of random numbers, Monte CarloSimulation, and waiting lines.

UNIT-V:

Network Scheduling by PERT / CPM: Introduction, network and basic components, logical sequencing, rules of network construction, Critical Path Analysis, probability considerations in PERT, distinction between PERT and CPM.

Course Outcomes

- Solve Linear programming problem
- Solve Transportation and Assignment Problems
- Understand the usage of game theory and simulation for solvingbusiness problem

TEXT BOOK

Sharma, J.K. (2010), *Operations Research Theory and Applications*, NewDelhi: Macmillan India limited.

REFERENCES BOOKS

1. Sharma, S.D. (2012), *Operations Research*, Meerut: Kedar Nath RamNath & Co.

2. Hillier. F.S., & Lieberman, G.L. (2014), *Introduction to OperationsResearch - Concepts and Cases*, New Delhi: Tata McGraw Hill.

JOURNALS

1. GITAM Journal of Management, GIM, GITAM (Deemed to beUniversity), Visakhapatnam
2. International Journal of Operations and Quantitative Management, College of Business, Prairie View A&M University, USA
3. Journal of Applied Statistics, Routledge, Taylor & Francis Group, UK

BBA (BA) – V SEMESTER

MAN303: PROJECT MANAGEMENT

Project Management refers to all the process and activities required to implement and meet the project requirement. Project management takes into consideration goals, resources and schedules of each project, while executing it. This enables in better management of chaos, risk, issues and changes, resulting in a well-defined, qualitative project.

Course Objectives

- To enable to the students to understand the basic concepts of projectmanagement
- To help them apply techniques of Project management and evaluation

UNIT-I:

Concepts of Project Management - project management concept, categories of projects, project lifecycle, tools and techniques of project management, roles and responsibilities of project manager.

UNIT-II:

Establishing the Project-feasibility report - financial aspects of project preparation, technical aspects, finalization of project implementation schedule,evaluation of project profitability.

UNIT-III:

Contracting - accountability in project execution, contracts, 3'R's of contracting, tendering and selection of contracts, team building.

UNIT-IV:

Project Implementation - project execution plan, project procedure manual, project control system, project scheduling and monitoring, monitoring contracts.

UNIT-V:

Project Evaluation, Reporting - project evaluation, project review meetings,project reporting, closing the contract, project extensions.

Course Outcomes

- Understand the project life cycle and different tools and techniques inproject management
- Evaluate the feasibility of a project
- Implement and evaluate a project

TEXT BOOK

Choudhury, S. (2010), Project Management, New Delhi: McGraw Hill India.

REFERENCE BOOKS

1. Nagarajan, K. (2015), Project Management, New Delhi: New AgeInternational (P) Ltd Publishers.
2. Khanna, R. B. (2012), Project Management, New Delhi: Prentice Hallof India.
3. Chandra, P (2014), Projects Planning, Analysis, Selection,Implementation and Review, New Delhi: McGraw Hill India.

GITAM Institute of Management (GIM)
Gandhi Institute of Technology and Management (GITAM)(Declared as Deemed to be University u/s 3 of UGC Act. 1956) Visakhapatnam – 45.

Course Code: MAN329	**Course Title**: DATABASE MANAGEMENT SYSTEMS	
SEMESTER: V	**Course Type: Practical**	**Credits**: 3
Home Programme(s):BBA (BUSINESS ANALYTICS)		Batch: 2020- 2023
Course Leader:		

Each and every organization maintains database related to their business suchas employees, customers, products, sales and so on. Database management system is collection of programs that enables to store, modify and extract information from a database. SQL is the *de facto* language for communicationwith the database and MS Access is a simple and a popular DBMS package from Microsoft which provides the database features in GUI format.

Course Objectives

- Knowledge of different concepts in database and database managementsystem
- Create database in MS Access and perform basic operations on it
- Create database in Oracle and perform basic operations in it

Course outline and indicative content

Unit - I: **(10 sessions, CO1, L2) Database approach:** Features of database approach, advantages and disadvantages, Components of DBMS, Data Models
- Hierarchical, Network, Relational, ER analysis, Attributes and Domains, Integrity Constraints and Keys, Normalization – INF, 2NF, 3NF,

Unit – II: (10 sessions, CO2, L3, L4, L5) Working with MS Access: Creating Tables, Data Types and Fields properties in MS Access, Creating Relationships, Designing Forms for Data Entry, Queries in MS Access – Simple queries, Cross-tab queries, Reports in MS Access – Simple reports, cross tab reports - using report wizard, using query design

Unit - III: (10 sessions, CO3, L3, L4, L5)Working with SQL: DDL statements - Create, Drop, Alter, DML statements, Insert, Select, Delete, Update, Oracle Functions, Join Condition, Set Operators, The Order By Clause

Unit - IV: (10 sessions, CO4, L3, L4, L5)Working with PL/SQL: Control Structures, PL/SQL Block, Cursors, Procedures, Functions, Triggers

Unit – V: (10 sessions, CO5, L3, L4, L5) Query Processing and Optimization: ACID properties, Transaction Processing and Concurrency Control - DatabaseRecovery.

Corse Outcomes

- Understand different concepts in DBMS
- Create database in MS Access
- Write queries in SQL
- Write programs in PL/SQL
- Understand the concept of transaction management in DBMS

Reference Books:

1. Abraham Silberschatz, Henry F Korth, Database System Concepts, McGraw Hill Education
2. Hoffer Jeffrey, V. Ramesh, Topi Heikki, Modern Database Management, Pearson
3. Andrew Couch, Microsoft Access Plain & Simple

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GITAM Institute of Management (GIM)
Gandhi Institute of Technology and Management (GITAM)(Declared as Deemed to be University u/s 3 of UGC Act. 1956) Visakhapatnam – 45.

Course Code: MAN327	**Course Title**: **Machine Learning**	
Semester: V	**Course Type: Core**	**Credits**: 3
Home Programme(s): **BBA (BUSINESS ANALYTICS)**		Batch: 2020 – 23
Course Leader:		

Course description and Course outcomes

Machine learning is an application of artificial intelligence (AI) that provides systems the ability to automatically learn and improve from experience withoutbeing explicitly programmed.

Course Objectives

- Understand different categories of Machine Learning
- Understand different algorithms in Machine Learning

Unit – I: (10 sessions) (CO1, L2) Introduction to Machine Learning: Basicsof Machine Learning, Categories of Machine Learning, Steps in Machine Learning, The Machine Learning process, Train and Test Data

Unit – II: (10 sessions) (CO2, L3, L4, L5) Supervised Learning: Linear Regression, Logistic Regression, Decision Trees, Naïve Bayes Algorithm, K Nearest Neighbour (KNN), Random Forest, Rule based learning: Apriori Algorithm

Unit – III: (10 sessions) (CO3, L3, L4, L5) Unsupervised Learning: Clustering K-Means Clustering, Anomaly Detection, Expectation – Maximization (EM)algorithm, Introduction to Semi Supervised and Reinforcement Learning

Unit – IV: (10 sessions) (CO4, L3, L4, L5) Introduction to Deep Learning : Concept, Artificial Neural Networks: Basic Structure of ANN, Types of ANN,Defining and Training of ANN

Unit – V: (10 sessions) (CO5, L3, L4, L5) Applications of Machine Learning: Sales and Marketing, Financial Services, Social Media Management, Self-Driving Cars, Fraud Detection

Course Outcomes

- Understand the concepts of Machine Learning
- Use a tool to implement Supervised Learning Algorithms
- Use a tool to implement Unsupervised Learning Algorithms
- Understand how ANN works
- Understand different applications of Machine Learning

Learning and teaching activities

Classroom Lectures, Problem solving exercises, Demonstration, Lab Sessions

Teaching and learning resources

Textbooks, Ebooks, Reference Materials, Web resources, Computer Lab, DataMining Tool

Reference

1. Saikat Dutt, Subramaniyam Chandramouli, Amit Kumar Das, Machine Learning, Pearson Education
2. Alpaydin Ethem, Introduction to Machine Learning, Prentice Hall of India

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GITAM Institute of Management (GIM)
Gandhi Institute of Technology and Management (GITAM)(Declared as Deemed to be University u/s 3 of UGC Act. 1956) Visakhapatnam – 45.

Course Code: MAN 307	**Course Title**: Innovation by Design	
Semester: V	**Course Type: Core**	**Credits:**
Home Programme(s): BBA (BA)	**Batch/AcademicYear**: 2020-23	
Course Leader:		

Creativity is not a myth that is the result of magic, madness or mystery. Instead, creativity can be influenced by variables one can control and affect. Increased creativity and problem solving skills will help to ensure that the desired outcome of all engagements and work is successfully completed ina timely and cost effective manner. In addition, the outcome(s) will tend to exceed customer expectations and will be more satisfying for the individual and the team on both personal and professional levels. This course is designedto develop creativity and innovation skills in students.

Course Objectives

- Understand the creative process and describe to develop ideas,strengthening reasoning power, working and unlocking creativity.
- Discuss how management can develop a creative environment andmanaging Internal Entrepreneurs. .
- Understand to nature and managing creative people in an organization
- Comprehend the Stimulating technological innovation and innovativesprit in an industrial setting.
- Appreciate the design thinging and its process

Unit I: Perspectives on the Creative process**:** How to develop- ideas – Strengthen your reasoning power – Working Creatively – Unlocking creativity.

Unit II: Creativity and Conformity**:** How management can develop and sustaina creative environment – Managing Internal Entrepreneurs.

Unit III: Recruiting and managing creativity: How to find and retain creative people – System for increasing inventiveness – Training people to solve problems creatively.Managing Creative People: Nurturing managerial creativity – Creative decision – Making and problem solving.

Unit IV: Innovation: Stimulating technological innovation – Nurturing the Innovator – The innovative spirit in an industrial setting.

Unit V: Design Thinking: Introduction to design thinking and designers- Examples -Design principles –Design thinking strategy and capability: structure-culture- skills-process. Ideate-generate ideas, shortlisting a workable solution-Perform feasibility and risk assessment-Practical case study and exercise-Create: Develop prototypes of a big idea-perform feasibility and riskassessment-Evolve: track success and scale the solution.

Course Outcomes

- Understand the creative process and describe to develop ideas, strengthening reasoning power, working creatively and unlocking creativity.
- Know the significance of conformity and the measures used by the management to develop and sustain a creativeenvironment and managing internal entrepreneurs.
- Appraise various techniques to nurture and managingcreative people in the organization
- Comprehend the ways to stimulating technological innovation nurturing the innovator, the innovative spiritin an industrial setting.

- Appreciate the design thinking and its process which includes design principles, strategy and capability, Ideate-generate ideas and feasibility assessment.

Assessment methods

Task	Task type	Task mode	Weightage (%)
A1	Mid exam	Individual	20
A2	Coursera	Individual	10
A3	Class room presentation/Seminars and Case analysis/workshop/training/ Assignments/survey/ Project	Individual / Group	10
A4	End-term examination	Individual	60

Evaluation pattern

A1:Mid exam (20 marks): Two mid examinations will be conducted for 20marks each. **Best of two** will be considered for final 20 marks. If the studentis absent for one Mid exam, the marks secured in the other mid exam will be considered as final marks. **No** Re-examinations will be conducted under any circumstances except exceptional cases as approved by the HOI.

A2: Coursera Course (10 marks): student need to complete respective subjectwise Coursera course/ on line course listed by GIM through online and requiredto submit the course completion certificate. Up on which student need to givepresentation/viva for awarding marks up to 10

A3: **Class room presentation/Seminars and Case analysis/workshop/ training/Assignments/survey/ Project** ***(10 marks):*** Individual or Group tasks would be given. Marks will be allotted for the quality of work, report writing,and presentation. In a group task, differential marks will be allotted to the individual based on performance in the presentations.

A4. End-term examination (60 marks; 3 hours duration)**:** Short and Essay questions mainly based on the application of knowledge in the area of Decisionand Support Systems. The syllabus is from all five units

Mapping Cos – Blooms Levels – Assessment Tools

Cognitive Dimension/ Knowledge Dimension	**L1 Remem-ber**	**L2 Under-standing**	**L3 Apply**	**L4 Analyze**	**L5 Evaluate**	**L6 Create**
Factual Knowledge	CO1 (A1, A2)	CO1, CO2 (A1, A2)	CO1, C03 (A1, A3)			
Conceptual Knowledge				CO2,CO5 (A2, A3)	CO2,- CO4, CO5 (A2, A3)	
Procedural Knowledge						
Meta-cogni-tive Knowl-edge						

Learning and teaching activities

Lectures, Presentations, Videos, Discussions

Teaching and learning resources

TEXT BOOK

A Dale Timpe (2014), *Creativity*, Mumbai: Jaico Publishing House.

REFERENCE BOOKS

1. Bill Bolton, John Thompson (2014), *Entrepreneurs: Talent,Temperament and Opportunity*, Routledge 3rd Ed.
2. Arya Kumar (2014), *Entrepreneurship: Creating and Leading anEntrepreneurial Organization,* New Delhi: Pearson Publications.
3. S.Anil Kumar & S.C Purnima (2014), *Entrepreneurship Development*, New Delhi: New Age Publishers.
4. Vasant Desai (2014), *Dynamics of Entreprenurial Development and Management*, New Delhi: Himalaya Publishing House.
5. MadhurimaLall and ShikhaSahai (2012) *Entrepreneurship*, NewDelhi: Excel Books.
6. Poornima M. Charantimath (2014), *Entrepreneurship Development – Small Business Enterprises*, New Delhi: Pearson.
7. Innovation by Design: How Any Organization Can Leverage Design Thinking to Produce Change, Drive New Ideas, and Deliver Meaningful Solutions, Thomas Lockwood and Edgar Papke, Career Press, 2018.
8. Creativity, Innovation, and Entrepreneurship Across Cultures: Theory and Practices, Igor N. Dubina and Elias G. Carayannis (Ed), Springer, 2016.
9. Design Thinking for Entrepreneurs and Small Businesses: Putting the Power of Design to Work, Beverly Rudkin Ingle, Apress Publications, 2013.

JOURNALS:

1. Harvard Business Review
2. International Journal of Entrepreneurial Behaviour and Research
3. International Journal of Small Business Management
4. International Journal of Entrepreneurship and Innovation Management
5. The Mint/ The Economic Times/Business Standard/Business Line dailynews papers

SEMESTER – VI

S. No.	Course Code	Level of Course	Title of the Course	Sessions			Marks			Credits
				Theo-ry	Prac.	Total	CA	SEE	Total	
1	MAN322*	Core	Big Data Ana-lytics	2	2	4	100	-	100	3
2	MBG304	Core	Ecommerce	3	-	3	40	60	100	3
3	MAN306	Core	Statistical Quality Con-trol and Six Sigma	4	-	4	40	60	100	4
4	MAN304	Core	Web Analytics	3	-	3	40	60	100	3
5	MBG302	Core	Entrepreneur-ship	3	-	3	40	60	100	3
6	MAN392	Core Skill Building	Semester End Viva Voce				50		50	1
	Total			**15**	**2**	**17**	**310**	**240**	**550**	**17**

LIST OF FOUNDATION ELECTIVE (PROFICIENCYDEVELOPMENT) COURSES

S. No.	Course Code	Title of the Course	Level of Course	Marks	Credits	Semester
1	**MBG356**	Coursera	Foundation ElectiveSkill Based	50	1	I
2	MBG344	Book Review	Foundation ElectiveSkill Based	50	1	II
3	MBG346	Introduction to Gandhian Thoughts	Foundation Elective Value Based	50	1	II
4	MBG348	Public Speaking	Foundation ElectiveSkill Based	50	1	IV
5	MBG350	Yoga and Meditation	Foundation Elective Value Based	50	1	III
6	MBG352	Business English Certificate(BEC)	Foundation ElectiveSkill Based	50	1	III
7	MBG354	Soft Skills	Foundation ElectiveSkill Based	50	1	IV
8	MAN342	Introductionto Sociology	Foundation Elective Value Based	50	1	I
9	MAN346	Foundations of Psychology	Foundation Elective Value Based	50	1	V
10	VDC111	Venture Discovery	Skill Based	100	2	II
	Total			**550**	**11**	

Note: The student has to secure 8 (Eight) credits out of total 11 credits

GITAM Institute of Management (GIM)
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Course Code: MAN322	**Course Title**: **BIG DATA ANALYTICS**	
Semester: VI	**Course Type: Core**	**Credits**: 3
Home Programme(s): **BBA (BA)**	Batch: 2020-23	
Course Leader:		

Big data is a term used to describe a massive amount of structured and unstructured data collected over the years from different sources. Analysis of such data may provide great insights for a business. However, traditional datamanagement functions are not capable for handling such data and requires specialized tool. Hadoop is a popular platform for carrying out big dataanalytics

Course Objectives

- To acquaint the students with the concepts of big data
- To provide hands on experience in working with Hadoop

UNIT–I: Introduction to Big Data: Concept, Features of big data, big data challenges, Hadoop and its features, Hadoop Ecosystem, Hadoop Components,Hadoop Architecture, Hadoop Cluster, Hadoop Storage: HDFS

UNIT–II: Hadoop Mapreduce: Concept, YARN components, YARN architecture, YARN mapreduce application execution flow, YARN workflow, Java for Mapreduce programming; Mapreduce examples; Mapreduce for data analytics: analyzing numerical and categorical data sets; Mapreduce for statistical analysis; Hadoop streaming.

UNIT–III: Apache PIG: PIG Components & Execution, PIG data types, Data models in PIG, Programming in PIG.

UNIT–IV: APACHE HIVE & HBase: Introduction, Architecture and components, data types and data models, HIVE partitioning and bucketing, HIVE tables, HIVE QL: joining tables, dynamic partitioning. Introduction, Architecture and components, Run modes, configuration, data models, HIVEdata loading techniques,

UNIT – V: Introduction to Apache Spark: Interactive analysis, RDD programming; Spark SQL, Data sets and Data Frames; Basics of MLib and GraphX.

Course Outcomes

- Understand the concept of big data and the process of bigdata analytics
- Write programs in Hadoop Mapreduce
- Write programs in APACHE PIG
- Work with APACHE Hive
- Understand the components in APACHE HBase

Reference Books

1. Mike Frampton, “Mastering Apache Spark”, Packt Publishing
2. TomWhite,“Hadoop:TheDefinitiveGuide”,O’Reilly,4thEdition
3. Nick Pentreath,Machine Learning with Spark,PacktPublishing
4. Mohammed Guller, Big Data Analytics with Spark, Apress
5. Donald Miner, Adam Shook, “Map Reduce Design Pattern”, O’Reilly

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GITAM Institute of Management (GIM)
Gandhi Institute of Technology and Management (GITAM)(Declared as Deemed to be University u/s 3 of UGC Act. 1956) Visakhapatnam – 45.

Course Code: MBG304	**Course Title**: **ECOMMERCE**	
Trimester: VI	**Course Type: Core**	**Credits**: 3
Home Programme(s):**BBA, BBA (BUSINESS ANALYTICS)**	Batch: 2020-23	
Course Leader:		

By the help of the flexibility offered by computer networks and the availabilityof the Internet, E-commerce develops on traditional commerce. E-commerce creates new opportunities for performing profitable activities online. It promotes easier cooperation between different groups: businesses sharinginformation to improve customer relations; companies working together to design and build new products/services; or multinational company sharing information for a major marketing campaign.

Course Objectives

- To make the students understand the various concepts related to Electronic Business
- To enable them to understand and exploit its role in providing strategicadvantage Course outline and indicative content

UNIT-I:(8 sessions) (CO1, L2) Introduction to E-Commerce – Definitions
- Types of E-commerce, Benefits of E-commerce - Limitations of E-commerce
- Impact of E-commerce – Electronic Market Structure – Business Models of E-Commerce, Electronic Marketplaces – Types of E-Marketplaces, Electronic stores and Malls, Electronic Catalogues, E-Shopping Cart, Online Auctioning

UNIT-II: (8 sessions) (CO2, L3) B2C and Advertising in Ecommerce – Retailing in E-Commerce – E-Tailing Business Models, Online Purchase Decision Aids, Online Consumer Behavior Model – Consumer Purchasing Decision Making Process– Internet Marketing Methods – Web Advertising - Advertisement Methods – Advertisement Strategies and Promotions

UNIT-III: (8 sessions) (CO3, L3) B2B E-Commerce - Characteristics of B2BEC – Models of B2B - Purchasing, Logistics and Support Activities, Electronic Data Interchange (EDI), Electronic Supply Chain Management

UNIT-IV: **(8 sessions) (CO4, L2) Electronic Payment Systems and Security**– Electronic Payment and Protocols – Electronic Credit Card system
– Electronic Fund Transfer and Debit Cards - Security schemes in Electronic Payment Systems, Fraud Protection

UNIT-V: (8 sessions) (CO5, L2) Mobile and Social Commerce: Attributes and Drivers of M-Commerce, Mobile Financial Applications, Mobile Marketing and Advertising, Mobile Entertainment, Web 2.0, Virtual Communities, OnlineSocial Networking, Business and Enterprise Social Networks, Advertising in Social Networks

Course Outcomes
- Understand the concept of E-Commerce and its significance
- Demonstrate various Business Models of E-Commerce
- Analyze how social Commerce is playing a vital role for thepromotion of a business
- Role of Security in Electronic Payment Systems
- Understand the concept and usage of M-Commerce

REFERENCE BOOKS

1. Efraim Turban, David King, Jae Lee, Dennis Viehland (2014), *Electronic Commerce: Managerial and Social Networks Perspective*, New Delhi: Pearson Education.
2. Hanson Ward (2012), *Internet Marketing and Ecommerce*, New Delhi: Cengage Learning .Elias M Awad (2012), *Electronic Commerce: From Vision to Fulfillment*, New Delhi: Prentice Hall of India.
3. P.T.S.J. Joseph (2012), *E-Commerce: An Indian Perspective*, New Delhi: Prentice Hall India.
4. Karabi Bandopadhyay (2012), *Mobile Commerce*, New Delhi: Prentice Hall India.

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STATISTICAL QUALITY CONTROL AND SIX SIGMA

Statistical quality control refers to the use of statistical methods in the monitoring and maintaining of the quality of products and services.SQC is used to analyze the quality problems and solve them. Six sigma measures the quality of business performance for processing a product. Business score card emphasize on the implementation of measurement system so that it can be used to write business performance.

Course Objectives

- To enable the students to understand and diagnose the levels or standards that depends on many factors and lack of quality while processing the end products.
- To enable them to evaluate various options in reaching financial
- decisions, whether personal or business- related.

UNIT-I:

Introduction to control charts, process and product control, control charts, 3 control limits, tools for statistical quality control, creating control charts for variable.

UNIT-II:

Construction of control charts for attributes, p-chart for fraction defective, d-chart for number of defective, interpretation of p-chart. Control charts for number of defects per unit:limits for c-chart, c-chart for variable sample size or u-chart, application c-chart and Natural tolerance limits and specification limits.

UNIT-III:

Acceptance sampling by attributes- acceptance quality level, lot tolerance proportion or percent defective, process average fraction defective, consumers risk, producers risk, rectifying inspection plans, average outgoing quality limit, O.C curve, single sampling plan, double sampling plan and sequential sampling plan.

UNIT-IV:

Six sigma- Basics of six sigma, traditional approach of six sigma, break through approach to six sigma-measure, variation, cost of quality, six sigma measurements, Analyze, improve control: challenges in implementing six sigma.

UNIT-V:

Elements of six sigma business score card: Leadership and profitability, Management and improvement, Employees and innovation, Purchasing and supplier management, Operational execution, Sales and distribution, Service and growth, Six sigma business score card and measurements, Business performance index,Corporate DPU and DPMO, Corporate sigma level.

Course Outcomes

- Create control charts for a given problem
- Understand the factors to look out for quality acceptance
- Understand the elements of six sigma business score card

Note

1. This paper is without a case study.

TEXT BOOKS

1. S.C.Gupta and V.K. Kapoor, Fundamentals of Applied Statistics, Sultan and Chand, New Delhi, 2017.
2. Praveen Gupta, Six Sigma Business Score card, Tata McGraw-Hill Publishing company limited, New Delhi, 2017

REFERENCE BOOKS

1. Gupta and Kapoor ,Fundamentals of applied statistics, Sultan and Chand,2017
2. Pathak and F. Resh ,Demographic Methods, Sultan and Chand,2017
3. G. Harver, Lean Six Sigma For Beginners, A Quick-Start Beginner's Guide To Lean Six Sigma, Kindle Edition.
4. Daniel J. Zrymiak , GovindarajanRamu , Roderick A. Munro, The Certified Six Sigma Green Belt Handbook, 2nd Edition (With 2 CD- ROMs) Hardcover – 2015
5. Thomas Pyzdek , Paul Keller, The Six Sigma Handbook Hardcover – 30 Aug 2010

JOURNALS

1. International journal of science and research
2. International journal of six sigma and competitive advantage
3. International Journal of Six Sigma and Competitive Advantage RG
4. International journal for quality and research
5. International Journal of Business AdministrationInsurance Watch, Gurgaon
6. Insurance Plus, Mumbai.

GITAM Institute of Management (GIM)
Gandhi Institute of Technology and Management (GITAM)(Declared as Deemed to be University u/s 3 of UGC Act. 1956) Visakhapatnam – 45.

Course Code: MAN 304	**Course Title**: **WEB ANALYTICS**	
Trimester: **VI**	**Course Type: Core**	**Credits**: 3
Home Programme(s): **BBA (BUSINESS ANALYTICS)**		Batch: 2020 – 23
Course Leader:		

The World Wide Web along with social media produces huge amount ofdata every day. This data may provide lot of insight on not only the user's usage behavior but his/her tastes, preferences and thoughts. Web Analytics is a field in data analytics that will help in understanding user's attitudes and characteristics and help a business in targeting the potential customer.

Course Objectives

- Understand the concept of web analytics
- Understand clickstream and emerging analytics like social, mobile andvideo
- Understand the application of web analytics metrics

Unit I: (8 sessions) (CO1, L2) Introduction to Web Analytics: Concept of web analytics, Importance and benefits of Web Analytics, Selecting a web analytic tool, Web Metrics – Visits and Visitors, Time on page and Time on site,Bounce Rate, Exit Rate, Conversion rate, Engagement, Attributes of metrics, Strategic elements related to web metrics – diagnosing root cause, leveraging customer reports, macro view of the site's performance

Unit II: (8 sessions) (CO2, L3) Clickstream Analysis and KPI's: Understanding the web metrics of a web site, producing web analytics report,Foundational Analytical strategies – Segmentation, Focus on Customer Behaviour, Different Clickstream Analysis, Web analytics challenges, Actionable outcome KPIs, understanding the conversion rates, measuringmacro and micro conversions, quantifying economic value, measuring successfor non – economic website

Unit III: (8 sessions) (CO3, L3) Leveraging Qualitative Data, Testing and Experimentation: Lab Usability Studies, Usability Alternatives, Surveys, Web-enabled emerging user research options, Testing – A/B Testing,Multivariate Testing, Actionable Testing ideas, Controlled Experiments, Creating and Nurturing a testing culture, Competitive Intelligent Analysis – CI data sources, types and secrets, web traffic analysis, search and keyword analysis

Unit IV: (8 sessions) (CO4, L3) Emerging Analytics: Social Analytics – Data challenge, content democracy evolution, twitter revolution, analyzing offline customer experiences, analyzing mobile customer experiences, Measuring thesuccess of blogs, Quantifying the impact of Twitter, Analysing performance of videos, Hidden web analytics traps – accuracy or precision, Dealing with data quality, Building action dashboard, Nonline marketing opportunity and multichannel measurement, Behaviour Targeting, Challenges in Online data mining and Predictive Analytics

Unit V: (8 sessions) (CO5, L2) Principles of an Analyst: Understandingthe context, Comparing KPIs over time, measuring latent conversions, understanding the search analytics, Multitouch Campaign Attribution Analysis, Multichannel Analytics.

Course Outcomes

- Understand the usage of different metrics for web analytics
- Perform clickstream analysis
- Perform web analytics
- Perform Social Analytics
- Understand the principles of an Analyst

Reference Books:

1. Clifton B., Advanced Web Metrics with Google Analytics, Wiley Publishing, Inc.2nd ed.
2. Kaushik A., Web Analytics 2.0, The Art of Online Accountability and Science of Customer Centricity, Wiley Publishing, Inc. 1st ed.
3. Sterne J., Web Metrics: Proven methods for measuring web site success, John Wiley and Sons

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BBA (BA) VI SEMESTER

MBG302: ENTREPRENEURSHIP

Entrepreneurship is an essential element for economic progress as it manifests its fundamental importance in different ways: a) by identifying, assessing andexploiting business opportunities; b) by creating new firms and/or renewing existing ones by making them more dynamic; and c) by driving the economy forward -through innovation, competence, job creation- and by generallyimproving the wellbeing of society.

Understanding the challenges and potential of entrepreneurship is significant and quite relevant in the context of the socio-economic structural changes. Entrepreneurship course is very important in management schools. This will help few to start their own ventures. But others will develop the qualities of entrepreneurship like passion and perseverance which will potentially create many corporate entrepreneurs. This course also aims to provide entrepreneurial abilities because business conditions have changed significantly since the advent of new technologies and business started demanding from both CEOs and managers entrepreneurial abilities which are in line with latest and contemporary business models in the era of globalization and disruption.This course aims to provide various perspectives on contemporary business practices and models which are useful for millennial entrepreneurs to meet therequirements of millennial consumers. This course includes a description of various concepts like evolution of entrepreneurship, opportunity identification,business plan, family business and social entrepreneurship.

Course Objectives

- To introduce the concept and process of Entrepreneurship and its role inthe society
- To know about sources of ideas and opportunity identification
- To provide knowledge about contemporary business model
- To understand the importance and contents of a business plans
- To know the significance of Family Business and Social Entrepreneurship

UNIT-I: Entrepreneurship-Introduction, evolution of entrepreneurship; Theories of Entrepreneurship, Traits of entrepreneurship, entrepreneurial mindset, Entrepreneurial motivation, Types of Entrepreneurship, entrepreneurship and economic development, Corporate Entrepreneurship.

UNIT – II

Venture Creation: Sources for innovative ideas, Methods of generating ideas, creative problem solving, opportunity identification, setting-up of new ventures, Incubation, acquiring existing business, franchising, legal aspects ofbusiness.

UNIT – III

Business Model : Introduction -Freemium Business Model – Analytics and Freemium Product Development – Freemium Metrics – Lifetime Customer Value – Freemium Monetization – Virality and Growth and contemporary business models.

UNIT - IV

The Business Plan: Marketing Plan, Operational Plan, Organizational Plan, Financial Plan and growth plans, Sources of Finance- Financial Institutions- Angel Investors-Venture Capitalist-Institutional Support-DIC, Industrial Estate, MSME, SFC and EDI.

UNIT - V

Family Business and Social Entrepreneurship*:* *Family business*
- Importance, types and responsibilities, Challenges and problems of family business in India, succession planning. Social Entrepreneurship- Need for social entrepreneurship, Types and significance of social entrepreneurs, Scaling, Measures of success in a social enterprise and live examples of socialentrepreneurs.

Case Analysis (not exceeding 200 words)

Course Outcomes

On successful completion of this course, students will be able to

- Understand the concept and process of Entrepreneurship in the
- Know about starting the venture and sources of ideas.
- Develop a business model by using practical and instructive approach.
- Prepare business plan with the required contents.
- Develop clarity about the importance and contribution of family business and Social Entrepreneurship in the

References:

1. Poornima M. Charantimath, "Entrepreneurship Development - SmallBusiness Enterprises", Pearson, New Delhi, 2018.
2. Robert Hisrich,M.J.Manimala ,M.P.Peters and D.A.Shepherd "Entrepreneurship"MC Graw Hill Education ,2014/Latest .
3. Dr.S.S.Khanka "Entrepreneurship Development ",S.Chand and ComapanyLimited,New Delhi,2017.
5. Disruption by Design: How to Create Products that Disrupt and thenDominate Markets, Paul Paetz, Apress Publications, 2014.
6. The Ways to New: 15 Paths to Disruptive Innovation, Jean-Marie Dru,John Wiley and Sons, 2015.
7. Creative Destruction and the Sharing Economy: Uber as DisruptiveInnovation, Henrique Schneider, Edward Elgar Publishing, 2017.

BBA (BA) II SEMESTER
BOOK REVIEW

Reading make a full man; conference a ready man; and writing an exact man
– Francis Bacon.

Communication is the basis of our lives and we would in this day and age, be handicapped without it. Communication is a vital element for successful career in the corporate world. Effective Communication is significant for managers in the organizations so as to perform the basic functions of management. Communication is one of the activities that managers devote a great part of their time. Communication can be improved through extensive reading and writing.

Despite the deep penetrating reach of the visual media, books have a definite edge over other mediums of communication and entertainment. Reading is anactivity that is both fun and enlightening. It can help us be more knowledgeableand successful. Reading as a habit has always nurtured a wholesome sense of well-being. Avid readers tend to have a better grasp on realities and are knownto be better judges of people. However, it has been seen that, with the advent oftechnology, reading is an activity that many people don't engage in very much.A national survey in USA revealed that 50% of the population hasn't read a book in the last six months!

Reviewing a book after reading enhances the analytical writing which hones the critical thinking. It assesses the ability to articulate and support complex ideas, construct and evaluate arguments, and sustain a focused and coherent discussion. Written Communication involves expressing oneself clearly, usinglanguage with precision; constructing a logical argument; note taking, editing and summarizing and writing reports.

Course Objectives

- Experience the pleasure and inculcate the habit of reading
- Enhance the critical thinking ability of the students
- Develop clarity in evaluating, assessing and arguing a thought
- Master the art of communicating using good writing skills

ACTIVITY STRUCTURE

A general /management book would be given to the student to read. The student is expected to critically analyse, present his/her arguments leading to aconclusion of the writings through this review.

The assessment would be for a total of 50 marks.

BBA (BA) – II SEMESTER

MBG346: INTRODUCTION TO GANDHIAN THOUGHTSINTRODUCTION

Mahatma Gandhi was a greatest leader in India's freedom struggle. He employed non-violent means to attain independence for India. His ideology and thoughts provides lots of inspiration and learning which can be used eventoday.

Course Objectives

- To acquaint the students with the different phases in Gandhi's life
- To acquaint the students with Gandhian ideologies

UNIT-I:

M K Gandhi, Formative Years (1869-1893): Early childhood - study in England - Indian influences, early Western influences

UNIT-II:

Gandhi in South Africa (1893-1914): South African Experiences - civil rightmovements in South Africa - invention of Satyagraha - Phoenix settlement- Tolstoy Farm - experiments in *sarvodaya*, education, and sustainable livelihood

UNIT-III:

Gandhi and Indian National Movement (1915-1947): Introduction of Satyagraha in Indian soil - non-cooperation movement - call for women's participation - social boycott - Quit-India movement - fighting against un- touchability - Partition of India- independence

UNIT-IV:

Application of basic philosophy of Gandhi in daily life: eleven vows – constructive program – sarvadharma samabhava- sarvodaya

UNIT-V:

Gandhi and Modern day society: Political, moral and environmental challenges today- application of Gandhian ideologies to resolve these challenges.

Course Outcomes

At the end of the course, the student will

- Get a clear picture of the evolution of M K Gandhi to the "Mahatma".
- Understand the prominent role played by Gandhi in our freedom movement and how his methodologies are significant even today.

REFERENCE BOOKS

1. Gandhi, M K., *An Autobiography or The Story of My Experiments withTruth*. Ahmadabad: Navjivan Publishing House.
2. Gandhi, M K., *Satyagraha in South Africa*. Ahmadabad: NavjivanPublishing House.
3. Gandhi, M K., *Constructive Programs*. Ahmadabad: NavjivanPublishing House.

JOURNALS

1. Gandhimarg, A journal of Gandhian studies from Gandhi PeaceFoundation
2. *GITAM Journal of Gandhian studies*

GITAM Institute of Management (GIM)
Gandhi Institute of Technology and Management (GITAM)(Declared as Deemed to be University u/s 3 of UGC Act. 1956) Visakhapatnam – 45.

Course Code: VDC111	**Course Title**: Venture Discovery	
Semester: II	**Course Type:** Internal	**Credits**: 2
Program BBA (BA)		
Course Leader: Venture Discovery Centre		

Course description and Course outcomes

India as part of its Make in India initiative has been focusing on creating incubation centers within educational institutions, with an aim to generate successful start-ups. These start-ups will become employment creators than employment seekers, which is the need of the hour for our country.

This common course for all the disciplines is a foundation on venture development. It is an experiential course that lets students venture and find outwhat is a business, financial and operating models of a business are. How to design and prototype a solutions that meets their customers' needs and generate revenue for the business.

Course Objectives

- Discover who you are – Values, Skills, and Contribution to Society.
- Gain experience in actually going through the innovation process.
- Conduct field research to test or validate innovation concepts with
- target customers.
- Understand innovation outcomes: issues around business models, financing for start-ups, intellectual property, technology licensing, corporate ventures, and product line or service extensions.

Course outline and indicative contentUnit I (6 sessions)

Personal Values: Defining your personal values, Excite & Excel, Build a Team, Define purpose for a venture. Four stages: Personal Discovery, Solution Discovery, Business Model Discovery, Discovery Integration.

Unit II (6 sessions)

Solution Discovery: Craft and mission statement, Experience design, Gaininguser insight, Concept design and positioning, Product line strategy, Ideation &Impact.

Unit III (6 sessions)

Business Model Discovery: Prototyping solutions, Reality Checks, Understand your industry, Types of business models, Define Revenue Models, Define Operating Models

Unit IV (6 sessions)

Discovery Integration: Illustrate business models, Validate business models,
Define company impact

Unit V (6 sessions)

Tell a Story: Can you make money, Tell your venture story.

Course Outcomes

- Understand conceptual framework of the foundation of a venture
- Understand the concept of purpose, mission and value-addservice offered by a venture
- Analyze design and positioning of the product

- Demonstrate prototyping
- Analyze business, revenue and operating models

Assessment methods

Task	Task type	Task mode	Weightage (%)
A1. Assignments	Individual	Report/Presentation	20
A2. Case / Project/ Assignment	Groups* or Individual	Presentations/ Report/Assignment	40
A3. Project	Individual/ Group	Report/Pitch	40

Transferrable and Employability Skills

	Outcomes	Assessment
1	Know how to use online learning resources: G-Learn, onlinejournals, etc.	A1 & A2
2	Communicate effectively using a range of media	A1& A2
3	Apply teamwork and leadership skills	A2
4	Find, evaluate, synthesize & use information	A1 & A2
5	Analyze real world situation critically	A3
6	Reflect on their own professional development	A3
7	Demonstrate professionalism & ethical awareness	A2
8	Apply multidisciplinary approach to the context	A2

Learning and teaching activities

Mixed pedagogy approach is adopted throughout the course. Classroom basedface to face teaching, directed study, independent study via G-Learn, case studies, projects and practical activities (individual & group)

Teaching and learning resources

Soft copies of teaching notes/cases etc. will be uploaded onto the G-learn. Wherever necessary, printouts, handouts etc. will be distributed in the class. Prescribed text book will be provided to all. However, you should not limit yourself to this book and should explore other sources on your own. You needto read different books and journal papers to master certain relevant concepts to analyze cases and evaluate projects. Some of these reference books given below will be available in our library.

***Prescribed Modules*:**

Access to NU-IDEA online modules will be provided.

***Referential text books and journal papers*:**

Personal Discovery Through Entrereneurship, Marc H. Meyer and ChaewonLee, The Institute of Enterprise Growth, LLC Boston, MA.

Suggested journals:

Vikalpa, Indian Institute of Management, Ahmedabad

Journal of General Management, Mercury House Business Publications, Limited

Harvard Business Review, Harvard Business School Publishing Co. USA

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BBA (BA) – III SEMESTER

MBG352: BUSINESS ENGLISH CERTIFICATE

INTRODUCTION

The world may be getting smaller, but people still speak different languages. International trade and business needs a common language and as all are aware, that place has been taken by English language. However, the words of business are different from everyday use so it's not really something every one picks up intuitively.

Business English Certificate (BEC) programme is one of the value added programme offered by GITAM Institute of Management in collaborationwith University of Cambridge and British Council. BEC is used by hundreds of employers, either as part of their staff development programme or as a qualification that they look for when recruiting staff. BEC is a globally recognized qualification and it enhances the job prospects and adds value to the CV of the student. BEC gives the opportunity to learn practical workplaceEnglish skills. Preparing for BEC improves one's confidence in using Business English, particularly speaking. Many Universities internationally recognize BEC for business courses.

Course Objectives

- To understand the nuances of Business English
- To enhance the student's English speaking skills
- To clearly understand the difference between business English andcolloquial English
- To achieve maximum proficiency in business English

ACTIVITY STRUCTURE

- BEC is offered at three levels namely, BEC Preliminary, BEC Vantage and BEC Higher, based on four skills
- Reading, Writing, Listening and Speaking.
- BEC Preliminary is a lower intermediate level and is meant for candidates having limited confidence in their usage of English.
- BEC Vantage is at intermediate level and is suitable for candidates who have fluency in English.
- BEC Higher is an advanced level certificate and is for candidateswho can use English very confidently in both professional and social situations.

The students would be evaluated based on their performance in various tests conducted. The tests include:

1. Diagnostic test
2. Speaking test
3. Mock test conducted by the Institute
4. Test conducted by British Council.

Performance in BEC would be evaluated for 50 marks each. A certificate would be awarded to those students who clear the test conducted by the BritishCouncil

BBA (BA) – III SEMESTER

MBG350: YOGA AND MEDITATION

INTRODUCTION

Stress management is the need of the hour. A recent survey showed that 70- 90% of us feel stressed at work and outside. Today's fast paced lifestyle is taking its toll on everyone. Stress, either quick or constant, can induce risky body-mind disorders.

The corporate world is a new syndrome that man has coined for himself which brings with it a whole new lifestyle and existence. Odd working hours, irregular food habits and difficult work situations and inadequate coping resources are a part of the corporate world. To survive in the world of work and reach one's greatest potential, all the energy blockers in the body and mind need to be cleared so that one can function at one's highest level.

Yoga and meditation does more than just offer exercises for relaxation. Virtually everyone can see physical benefits from yoga, and its practice can also give psychological benefits, such as stress reduction and a sense of well-being. As yoga and meditation combines several techniques used for stress reduction, it can be said to provide the combined benefits of breathing exercises, stretching exercises, fitness programs, meditation practice, etc.

Course Objectives

- To master the technique of yoga and meditation
- To create stress relief among the students
- To enable the student to appreciate the physical and psychological relief it creates

ACTIVITY STRUCTURE

Practical and theory classes on Yoga and meditation will be conducted by a Yoga Master. 20 sessions will be scheduled. At the end of the Course the student would be evaluated both on his/her understanding of theoretical concepts, as well as the practical approach.

The assessment would be for 50 marks.

BBA (BA) IV SEMESTER

MBG 348: PUBLIC SPEAKING

Communication skills are indispensable to success in the corporate world. In the actual practice of business, one spends much more time in talking rather than inwriting. Oral business communication skills are therefore crucial for studentsof commerce and management. Oral business communication may be formal or informal. Formal communication involves meetings, presentations andspeeches etc., whereas informal communication covers all aspects of informaltalking and listening. Public speaking is a vital skill which encompasses all the above aspects of oral business communication. The training imparted in public speaking ensures that the student is groomed into a successful businessprofessional.

Course Objectives

The objectives of this course are :

1. Select and organize a subject for effective formal presentation to a
2. specific audience
3. Understand how personal aspects and audience analysis contribute toformal presentations
4. Learn how to use verbal content with information based, linguistic andstylistic aspects
5. Learn how to use non-verbal content, visuals, graphics, voice qualityand body language
6. Work effectively with a team for team presentations
7. Plan and deliver effective public speeches, virtual presentations and oral reports

SYLLABUS

UNIT–I:

Basics of Business Communication – Definition, Types and Aspects, Basics of Communicating in the Workplace.

UNIT–II:

Informal Oral business communication - talking, meetings, using the phone, using speech recognition, listening, role of nonverbal communication – Practical Exercises

UNIT–III:

Formal Oral business communication – Making formal speeches – selection ofthe topic, preparation of the presentation – determination of the presentation method – consideration of personal aspects – audience analysis – Study of Great Speakers and Speeches - Practical Exercises

UNIT-IV:

Verbal and Non-Verbal Aspects – matter and linguistic style - appearance andphysical actions - use of voice – use of visuals and graphics – Study of Great Speakers and Speeches - Practical Exercises

UNIT-V:

Team or Collaborative Presentations – Virtual presentations – Oral reports – Practical Exercises

TEXTBOOK

Lesikar Raymond V., et al (2010), *Business Communication – Making Connections in a Digital World,* New Delhi : Tata McGraw Hill.

REFERENCE BOOKS

1. Carnegie Dale(2014), *The Art of Public Speaking,* New Delhi : TataMcGraw Hill.

2. Express Series (2014), *English for Presentations,* New Delhi : Oxford University Press.

3. Express Series (2014), *English for Meetings*, New Delhi : Oxford University Press, 2014.

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BBA (BA) IV SEMESTER

MBG 354: SOFT SKILLS

Management involves utilising the human capital of an enterprise to contributeto the success of the enterprise. Management is the act of coordinatingthe efforts of people to accomplish desired goals using available resources efficiently and effectively.

Today's workforce comes from varied social and cultural backgrounds, with differing standards of behaviour. These may not always be in sync with the norms of the organization. The ability to deal with differences, multiculturalismand diversity is needed more than ever. It is important, for students who wouldbe entering the corporate world for the first time, to inculcate behaviour thatis appropriate for the workplace. The importance of personal grooming, business etiquette, verbal and non-verbal communication, telephone etiquette and general professional conduct, can never be undermined.

Soft Skills is now recognised as key to making businesses more profitableand better places to work. Increasingly, companies aren't just assessing their current staff and future recruits on their business skills. They are now assessingthem on a whole host of soft skill competencies around how well they relate and communicate to others.

It has been found that soft skills can be developed and honed on an on-going basis through good training, insightful reading, observation, and of course, practice, practice, practice.

Students can focus on areas of self-improvement to help improve their behaviour, transform their professional image and create a positive impact in their careers. Greater awareness of grooming and etiquette will help one to develop poise and confidence. This will significantly impact the image that one has in any formal, professional and social situations

Course Objectives

1. To understand and enhance social skills
2. To help build greater confidence when interacting with people
3. To build on the ability to make a positive first impression
4. To help improve the overall appearance

ACTIVITY STRUCTURE

Students would be focusing on the following major activities under this

Course:

a) Grooming and etiquette

b) Introspection, self awareness and self introduction

c) CV writing

d) Facing interviews

Guidance on the above issues would be given by an Expert and Faculty wouldbe guiding them through one-to-one interaction. Assessing them on their performance would be done by the Faculty.

The assessment would be for 50 marks.

MAN 342: INTRODUCTION TO SOCIOLOGY

The objective of this course is to make the student understand the society andto understand the sociological structure

UNIT I: Introduction to Sociology - Definition, origin and development: Nature and Scope – Its relationship with other social sciences.

UNIT II: Human Society - Its nature, characteristic and Functions – Differencebetween human and animal society. Individual and Society, Social Contract.

UNIT III: Socialization - Meaning, process and agencies, Social Groups: Meaning and definition, characteristics & Classification of groups.

UNIT IV: Social Agencies - Role, Status, Normal, Values, power authority, communities; Associations and Institutions. Social Disorganisation: Definition and causes.

UNIT V: Heredity - Meaning influence on individual, Environment: Meaning, influence on individual and society. Heredity vs Environment- Social Differentiation – social stratification, caste, and class.

Text Book

Vidya Bhushan., **An Introduction to Sociology.** Kitab Mahal.Allahabad:2005.

Reference Books

1. Francis Abraham**., Modern Sociological Theory and Introduction.** Oxford: 2000.
2. Francis Abraham.**, an Introduction to Concepts and Theories**. Oxford:2002.
3. Inkeles Alex**., What is Sociology? –An Introduction to Disciplineand Profession**. Prentice Hall of India: 2007.
4. Mehta**., Elements of Sociology**. Cybertech Publication.

Journals

1. Business World, ABP Pvt Ltd, New Delhi.
2. Business World, The India Today Group, New Delhi.
3. GITAM Journal of Management, Gitam Institute of Management,Visakhapatnam.
4. Outlook, Outlook Publishing (India) Pvt Ltd, New Delhi.

MAN 346: FOUNDATIONS OF PSYCHOLOGY

INTRODUCTION

Effective management predominantly involves managing people. People are at the forefront of all realms of management and human performance is determined by behavioral factors.

Course Objectives

1. The objective of this course is to enable the student to understand thefundamental concepts of human behavior.
2. The objective is to develop a student to know his psychologicalbehaviour and others

Conditioning; Observational Learning; Human Memory; Memory Distortion and Construction.

UNIT-III: Thinking and Language: Problem-Solving - Functional Fixedness;Language: its basic nature and acquisition.

UNIT-IV: Intelligence: Nature; Measuring Intelligence – Meaning andmeasurement of IQ – The Wechsler Scales.

UNIT-V: Personality: Nature; Approaches – Freud's Psychoanalytic Approach – Humanistic Theories – Roger's Self Theory – Maslow's Hierarchy of Needs - Trait and Type Approaches; Measuring Personality.

Course Outcomes

The course on Introduction to Psychology enables the student to:

- Identify psychological phenomena in day-to-day functioning
- Develop an insight into the behavior and the causes of behavior of theself

TEXTBOOK

Susan, N. H. (2014),*Atkinson&Hilgard's Introduction to Psychology*, NewDelhi: Cengage Learning.

REFERENCE BOOKS

1. Morgan, C.T., King, R.A., Weisz, J.R. &Schopler, J. (1993),*IntroductiontoPsychology*,7th Edition, New Delhi: Tata McGraw-Hill.
2. Parameswaran, E.G. &Beena, C. (2002),*An Invitation to Psychology*,New Delhi: Neelkamal.

JOURNALS

1. Psychological Studies
2. Journal of Indian Academy of Applied Psychology