Curriculum Framework under Choice Based Credit System (CBCS)

and Syllabus for Outcome Based Education (OBE) in

BACHELOR OF COMPUTER APPLICATIONS (BCA) Degree Programme

For the students admitted from the academic year 2023 – 24

SREE SARASWATHI THYAGARAJA COLLEGE

An Autonomous,NAAC Re–Accredited with 'A' Grade, ISO21001:2018 Certified Institution, Affiliated to Bharathiar University, Coimbatore, Approved by AICTE for MBA/MCA and by UGC for 2(f) & 12(B) status

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SREE SARASWATHI THYAGARAJA COLLEGE [AUTONOMOUS]
POLLACHI

BCA Degree Programme PEO, PO and PSO

PROGRAMME EDUCATIONAL OBJECTIVES (PEO)

Within a few years of obtaining UG degree in BCA, the student will be able to

PEO1: Analyze social and environmental aspects with professional values, ethics and equity to transform the knowledge, skills and expertise to the community.

PEO2: Demonstrate analytical and design skills including the ability to identify the customer requirements, generate creative solutions, and foster team-oriented professionalism through effective communication.

PEO3: Design solutions to critical software problems by using technological tools in a multidisciplinary environment through lifelong learning in a changing world to maintain their competency

PROGRAMME OUTCOMES (PO)

The students at the completion of the programme will be able to

PO1: Identify, formulate, analyze and apply knowledge of science to provide solutions for complex domain specific applications.

PO2: Design innovative solutions for solving business application problems and address research and development issues with a passion for quality, competency and holistic approach.

PO3: Demonstrate professionally with social, cultural and ethical responsibility as an individual as well as in a multifaceted team with positive attitude.

PO4: Communicate effectively the concepts delivered through applications using reports, design documentation and effective presentation by adapting appropriate resources and modern tools.

PO5: Apply the technical knowledge to manage projects in a multidisciplinary environment by continually upgrading the skills towards independent and lifelong learning.

PROGRAMME SPECIFIC OUTCOMES (PSO)

At the completion of the programme, the students will be able to

PSO1: Apply the knowledge gained in the areas of problem solving, analysis, design and development of software and hardware to choose a career option in high degree of employability/entrepreneurship/higher education**.**

PSO2: Demonstrate themselves as globally competent computer professionals possessing leadership skills and domain knowledge for creating innovative solutions in multi disciplinary domains.

PSO3: Apply the knowledge of ethical and management principles required to work in a team with stewardship of the society.

Mapping the Pos with PEO

POs/PEOs	PEO1	PEO2	PEO3
PO1	S	M	M
PO2	M	S	M
PO3	L	M	S
PO4	M	M	M
PO5	L	M	S

Mapping the PSOs with PEO

PSOs/PEOs	PEO1	PEO2	PEO3
PSO1	M	S	M
PSO2	S	M	M
PSO3	M	S	S

S-Strong;L-Low;M-Medium

Sree Saraswathi Thyagaraja College (Autonomous)

Regulations 2023

Choice-Based Credit System for the Academic Programmes with effect from 2023-2024

The following Regulations shall be effective for the courses of study leading to the Bachelor Degree which shall be of three years duration comprising of six semesters and Master Degree which shall be of two years duration comprising of four semesters. The Regulations shall come into effect from the Academic Session, 2023-2024.

STC College follows the UGC, TANSCHE and Bharathiar University guidelines of CBCS pattern in framing Course Scheme and scheme of examinations for the students admitted in various UG and PG Programmes from the Academic year 2023-24 and onwards.

1. Definitions and codification:

a) **CBCS**: CBCS means Choice Based Credit System. Choice Based Credit System is a flexible system of learning. This system permits students to,
- learn at their own pace
- choose electives from a wide range of Elective Courses offered for the programme
- undergo additional courses and acquire more than the required number of credits
- adopt an inter-disciplinary approach in learning
- make the best use of the expertise of the available faculty.

b) **Programme**: The term 'programme' is used to mean the whole learning experience or combination of courses in a particular field of study

c) **Curriculum**: The term "Curriculum" indicates the various components of the programme and branch of study. The UG Curriculum under the CBCS consists of five parts and the medium of instruction is English. The PG Curriculum under the CBCS consists of only part III and the medium of instruction is English. Part four offers additional credits. Part V deals with extension activities for UG & PG.

d) **Course**: A Programme is divided into a number of courses. A course is a unit of instruction or segment of subject area under any programme. The traditional concept 'paper' is replaced by 'course'.

e) **Scheme of examination**: It denotes the programme outline during the period of study or the components of the particular Programme of study.

f) **Syllabus**: The subject contents of each course is referred to as "Syllabus".

g) **Academic Year**: An academic year means a period of twelve months consisting of two semesters.

h) **Semester**: The word "semester" is used to mean a half-yearly term or term of studies including examinations, vacations and semester breaks.

i) **Semester Duration**: A semester normally extends over a period of 15 class weeks [90 Days]. Each week has 30 hours of instruction spread over the week.

j) **CIA**: The word "CIA" is used to refer to the continuous internal assessment within the half-yearly term.

k) **End-semester**: The word "end-semester" is used to refer to the terminal processes of examinations and evaluations at the end but within the half-yearly term.

l) **Credit**: 'Credit' defines the quantum of contents/ syllabus prescribed for a course and determines the number of hours of instruction required per week. Thus, normally in each of the course, credits will be assigned on the basis of the number of lectures/ tutorials/ laboratory work and other forms of learning required to complete the course contents in a 14-15 week schedule:

i) 1 Lecture = 1 Hour duration =1 Credit
ii) 1Tutorial = 1 Hour duration =1 Credit
iii) 1 Practical = 2 Hours duration =1 Credit

Note: The lecture sessions and tutorials shall not be substituted with any other activities like seminars, group discussions etc..

m) **Grade point**: Grade point is the numerical weightage given to the particular course of study

2.1 Admission

The eligibility conditions and the guidelines issued by the Bharathiar University for admitting students are followed for all UG and PG Programmes offered at STC.

2.2 Semester Duration:

i) Odd Semesters: June –November

(including end-semester examinations and semester breaks)

ii) Even Semester: December -May

(including end-semester examinations and semester breaks)

Any change in the Academic Calendar/Schedule may be made by the college whenever necessary.

2.3 Academic Schedule:

The Academic Schedule of all degree programmes under the CBCS shall be administered as per the Academic Calendar of the college published for every academic session.

3. Course Structure:

The Course Structure of the Academic Programmes under the CBCS shall be as per the Course Structure given below**.** The nature of the Courses for all Academic programmes shall be as below:UG programmes are conducted with a minimum total of 140 credits

Summary of UG Courses Pattern and Credit Distribution in Choice Based Credit System as given under

Part	Curriculum Structure	No. of Courses	Credits to be earned
I	Languages	04	12
II	English	04	12
III	Core Courses [CC]	15	60
	Generic Elective Courses [GEC]	04	12
	Discipline Specific Elective Courses [DSEC]	04	12
IV	Skill Enhancement Courses [SEC]	09	17
	Ability Enhancement Compulsory Course [AECC]	04	08
	Internship / Industrial Activity	01	02
	Value Based Courses [EVS & VE]	02	04
V	Extension Activities	-	01
Extra Credit Courses [MOOC]		02	04*
Total [47+2* courses]			**140+4***

PG Programmes [Except MBA & MCA] are conducted with a minimum total of 91 credits

Part	Curriculum Structure	No. of Courses	Credits to be earned
III	Core Courses [CC]	14	54
	Discipline – Centric Elective Courses [DCE]	06	18
	Internship / Industrial Activity	01	02
	Skill Enhancement Courses [SEC]	04	08
	Ability Enhancement Compulsory Course [AECC]	04	08
V	Extension Activities	-	01
Extra Credit Courses: MOOC IDC		 02 02	 04* 06*
Total [29+4* Courses]			**91+10***

MBA & MCA Programme

MBA

Part	Curriculum Structure	No. of Courses	Credits to be earned
III	Core Courses [CC]	14	60
	Electives	07	21
	Extra Disciplinary Courses	03	09
	Summer Internship	01	04
	Soft Skills	04	08
Extra Credit Courses: MOOC IDC		 04 02	 08* 06*
Total [29+6* Courses]			**102+14***

MCA:

Part	Curriculum Structure	No. of Courses	Credits to be earned
III	Core Courses [CC]	19	78
	Elective Courses	04	16
	Professional Skills	03	06
Extra Credit Courses: MOOC IDC		 02 02	 04* 06*
Total [26+4* Courses]			**100+10***

3.1 Part I: Language I : Tamil or any one of the Indian or foreign languages i.e. Malayalam, French, Hindi, Telugu and Kannada.

It is mandatory for all the UG students to study a language under part I. A student can select and study any one of the languages offered under part I. The syllabus drafted would enable the students to communicate with ease and effectiveness in that language. It is offered in the **first four semesters** with one examination at the end of each semester.

3.2. Part II: Language II: English : The study of English is made compulsory for all UG students under part II. The subject offered during the first four semesterswith one examination at the end of each semester.

3.3 Part III: A set of major courses that include Core Courses, Generic Electives, Discipline Specific Electives, Discipline Centric Electives in the major field of study selected by the student. Core courses are mandatory.

3.4 Part IV:

a) Basic Tamil/ Advanced Tamil/ NME:

- **i.** Students who have not studied Tamil up to XII STD and have taken any Language other than Tamil in Part I shall take Basic Tamil comprising of two courses in the first and second semesters.
- **ii.** Students who have studied Tamil up to XII STD and have taken any Language other than Tamil in Part I shall take Advanced Tamil comprising of two Courses in the first and second semesters.
- **iii.** Students who have studied Tamil up to XII STD and also have taken Tamil in Part-I shall take Non-Major Elective comprising of two Courses of NME in the first and second semesters. A set of non – major elective courses are offered as choices to the students, outside their major discipline by all departments. The courses other than the core and allied shall be opted by the students as Non – Major Electives.

b) **Skill Enhancement Courses& Ability Enhancement Compulsory Course:** The courses offered as skill - based courses of the programme is aimed at imparting Advanced Skills of the progrmme. This comprises of nine courses inclusive of 2 NME courses. Ability Enhancement Compulsory Course focus on soft skills components – it shall have 4 courses in total. Students are also encouraged to go for **internships** under Part IV; For PG these courses are included in Part III;

c) **Value Based Courses :**Courses of cross-cutting issues relevant to the current pressing concerns both nationally and internationally such as gender, environment and sustainability, human values and professional ethics, development of creative and divergent competencies.

d) Massive Open Online Courses (MOOC): According to the guidelines of UGC, the students are encouraged to avail this option of enriching by enrolling themselves in the MOOC provided by various portals such as SWAYAM, NPTEL, and Spoken Tutorial etc. As per University Grants Commission (UGC) notification, Two Massive Open Online Course (MOOC) through any online platform is compulsory as extra credit paper. The institute is transferring the equivalent credit earned on receipt of MOOCs completion certificate and it shall incorporate these marks/credits in the overall consolidated statement of marks of the student.

3.5 Part V: Extension Activities:

All the Students shall have to enroll compulsorily for NSS/NCC/Sports activities. The extension activities are must for each student to take part in at-least in any one of these activities for the fulfillment of the degree

The mark sheet shall carry the gradation relevant to the marks awarded to the candidates. The grades will be awarded at the end of the Fifth Semester. This grading shall be incorporated in the mark sheet to be issued at the end of the semester.

4 Attendance Eligibility to appear for the End Semester Examinations

A student will be allowed to appear for the end semester examinations only if:

1. He/She procures atleast 75% of attendance.
2. He/She should show satisfactory progress in studies, in all the tests and examinations conducted by the college / department during the semester and secure at least reasonable minimum marks in them.
3. His/Her conduct in the college during the semester is satisfactory.

Shortage of Attendance

The following regulations will be followed for condonation and detention as well:

1. Candidates who earn 75% of attendance and above in the current semester are eligible to write the examinations, both arrears and regular subjects.
2. Candidates who earn attendance between 65% and 74% (both included) in the current semester are eligible to appear for the examination if the shortage of attendance is condoned by the Principal after the payment of the condonation fee prescribed by the Bharathiyar University.
3. Candidates who earn attendance between 50% and 64% (both included) in the current semester are not eligible to write examinations in the current semester subjects but are permitted to continue their studies in the next semester provided it is the first time that the candidates have earned attendance between 50% and 64% or else the candidates have to discontinue the course and rejoin in the same semester during next year with the proper approval of the Registrar, Bharathiyar University. However, these candidates are eligible to write the arrears if they have any.
4. Candidates who earn attendance below 50% are not eligible to write examinations in the current semester subjects and also have to discontinue the course and rejoin in the same semester in the next year with proper approval of the Registrar, Bharathiyar University. However, these candidates are eligible to write the arrears subjects, if any.
5. Candidates who earn attendance between 50% and 64% in the previous semester and have earned combined attendance of 75% or more by taking the average of the attendance earned in the current and the previous semesters are eligible to write semester subjects along with the current semester subjects.

5. Restrictions to appear for the examinations

a) Any candidate having arrears paper(s) shall have to appear in all arrears paper along with the regular semester papers.

b) "Candidates who fail in any of the course of UG degree examinations shall complete the course **within 5 years** from the date of admission and "Candidates who fail in any of the course of PG degree examinations shall complete the course **within 4 years** from the date of admission and should they fail to do so, they shall take the examination in the texts/ revised syllabus prescribed for the immediate next batch of candidates. If

there is no change in the texts/syllabus they shall appear for the examination in that course with the syllabus in vogue until there is a change in the texts or syllabus. In the event of removal of the course consequent to change of regulation and / or curriculum after 4/5 years period, the candidates shall have to take up an equivalent course in the revised syllabus as suggested by the Chairman of the board of studies concerned and fulfill the requirements as per the regulation of curriculum for the award of the degree.

6. Examination and Evaluation:

a) Examination and evaluation shall be done on a continuous basis, at least three times during each semester.

b) There shall be 25% marks for internal assessment and 75% marks for End-semester examinations in each course during every semester.

c) ***Internal Assessment****:*

In internal assessment, different tools such as objective tests, written tests, assignments, paper presentation, laboratory work, etc. suitable to the courses may be employed.

d) ***End Semester Examinations:***

- There shall be one End semester examination carrying 75% Marks in each course of a Semester covering the entire syllabus prescribed for the Course. The End semester examination is normally a written/ laboratory-based examination/Project Work/Dissertation.
- The Controller of Examinations shall make necessary arrangements for notifying the dates of the End semester examinations and other procedures as per rules (at least 20 days in advance) and the Academic Calendar notified by the College.
- Normally, the End-semester examinations for each course shall be of three hours duration.

e) The Procedure for Internal Assessment and End Semester Examination is prescribed in ***Annexure I.***

f) The pattern of Question paper both the CIA and ESE is prescribed in **Annexure II**

g) Confidential Works: Setting the question papers, scrutinizing of question papers, evaluating the answer scripts, tabulation of marks, etc. and announcement of results, shall be governed by the Controller of Examinations.

h) The mode of conduct of the end-semester examinations of the practical/ dissertation courses shall be partially external as below:

- The end-semester examinations of all practical/ dissertation courses shall be conducted by a Board of Examiners consisting of the internal examiner (the concerned course teacher) and an external examiner appointed by the Controller of Examinations.

i) The mode of end-semester examination and evaluation of the Course shall be specified in the detailed syllabus of the Course concerned.

j) End-semester Practical examinations shall normally be held before the theory examinations.

7. Malpractices in Examinations

The students, who indulge in any malpractice, while writing examination, will be directed to report to the Chief Superintendent. The chief superintendent will review and forward the case to Controller of Examinations and the COE in turn will submit the details to Malpractice Committee for the initiation of appropriate disciplinary proceedings.

8. Improvement of Marks in the subjects already passed: Candidates wanting of improving the marks awarded in a passed subject in their first attempt shall reappear in the subsequent semester only. The improved marks shall be considered for classification but not for ranking. When there is no improvement, there shall not be any change in the original marks already awarded.

9. Re-Valuation

i) Photocopy of valued answer scripts: If the candidates intend to apply for the Xerox copy of their answer scripts, they have to annex the Xerox copy of their Identity Cards attested by their respective Heads of Departments, along with their application.
After receiving the photocopy, the student can verify the copy to find out whether there is any discrepancy in the total marks or omission of marking in the valuation process. If any discrepancy is noticed the same may be bought to the notice of the Controller of Examinations for remedial action.

ii) Revaluation after getting photocopy of valued answer scripts: Those candidates, who have obtained the photocopy of the answer scripts, may apply for revaluation. The valuation of the photocopy of the answer script can be verified by the course teacher and if the course teacher is convinced that the script deserves higher marks than what is awarded, he/she can recommend for applying revaluation by the subject teacher and the Head of the department. Provision available for revaluation is for theory examinations only.

10. Supplementary Exam: Candidates, who are having one course as arrears / absent after their final semester results, shall be permitted to appear for special supplementary examinations **(There is no provision for revaluation or re-totalling after supplementary examinations)**.

11. ***Results and Progression:***

a) A candidate shall be declared as have passed a course, provided he/ she secures-
   (i) in each Course at least

   UG: 40% of marks in the ESE and total marks of End Semester Examinations.

   PG: 50% of marks in the ESE and total marks of End Semester Examinations.
   (ii) UG: at least 'C' grade in the 10 point scale combining both the in-semester and End Semester Examination performance in all the Courses separately.

   PG: at least 'B' grade in the 10 point scale combining both the in-semester and End Semester Examination performance in all the Courses separately.

   (iii) There shall be no separate pass mark for Internal Assessment.

b) There may be moderation of Internal Assessment marks /End Semester marks as and when necessary.

c) The marks of CIA examinations obtained by the candidate shall be carried over for declaring any result.

d) A candidate who fails or does not appear in one or more courses of any end semester examinations up to Sixth Semester shall be provisionally promoted to the next higher semester with the failed course as carry over course(s). Such candidates will be eligible to appear in the carry over course in the next regular examinations of those courses.

e) The Controller of Examinations shall declare the results of the Examinations and issue Grade-sheets.

f) The first rank holder of a programme shall be decided on the basis of the CGPA. However, the Overall Weighted Percentage of Marks (OWPM) of a candidate shall be considered in case of tie in CGPA.

12. Grading System

The absolute grading system shall be applied in evaluating the performance of the students. The following scale of grading system shall be applied to indicate the performances of students in terms of letter grade and grade points as given below:

Conversion of Marks to Grade Points & Letter Grade :(Performance in a course/paper)

RANGE OF MARKS (In percent)	GRADE POINTS	GRADE	DESCRIPTION
90 - 100	9.0 - 10.0	O	OUTSTANDING
80 - 89	8.0 - 8.9	D+	EXCELLENT
75 - 79	7.5 - 7.9	D	DISTINCTION
70 – 74	7.0 - 7.4	A+	VERY GOOD
60 – 69	6.0 - 6.9	A	GOOD
50 – 59	5.0 - 5.9	B	AVERAGE
40 – 49	4.0 - 4.9	C#	SATISFACTORY
00 – 39	0.0	U	RE-APPEAR
ABSENT	0.0	U	ABSENT

Reappearance is necessary for those who score below 50% Marks in PG **;
Reappearance is necessary for those who score below 40% Marks in UG*;
 # only applicable for UG programs

Grade Point Average (GPA):

Grade point average (GPA) is calculated for each part taking into account of all the courses studied under each part. Calculation of grade point average semester -wise and part -wise is as follows:

$$GPA = \frac{\text{Sum of the multiplication of grade points by the credits of the courses}}{\text{Sum of the credits of the courses in a semester}}$$

$$\textbf{GPA} = \frac{\sum(C_i G_i)}{\sum C_i}$$

Where C_i = Credit earned for course i in any semester.
Gi=Grade points obtained for course i in any semester.
n = the semester in which such courses were credited

Classification of Successful Candidates (Overall):

CGPA	GRADE	CLASSIFICATION OF FINAL RESULT
9.5 to 10.0	O+	First Class - Exemplary *
9.0 and above but below 9.5	O	
8.5 and above but below 9.0	D++	First Class with Distinction *
8.0 and above but below 8.5	D+	
7.5 and above but below 8.0	D	
7.0 and above but below 7.5	A++	First Class
6.5 and above but below 7.0	A+	
6.0 and above but below 6.5	A	
5.5 and above but below 6.0	B+	Second Class
5.0 and above but below 5.5	B	
4.5 and above but below 5.0	C+ #	Third Class
4.0 and above but below 4.5	C #	
0.0 and above but below 4.0	U	Re-appear

"*" The candidates who have passed in the first appearance and within the prescribed semester of the Programme (Major, Allied, Inter Departmental and Elective Course alone) are eligible.

"#" Only applicable to U.G. Programme

Cumulative Grade Point Average (CGPA) : For the entire program CGPA is calculated in the following manner:

$$CGPA = \frac{\text{Sum of the multiplication of grade points by the credits of the courses of entire programme}}{\text{Sum of the Credits of the Courses of the entire programme}}$$

$$CGPA = \frac{\sum_n \sum_i C_{ni} G_{ni}}{\sum_n \sum_i C_{ni}}$$

In order to get through the examination, each student has to earn the minimum marks prescribed in the internal (wherever applicable) and external examinations in each of the

theory course, practical course and project viva.

Normally, the ratio between internal and external marks is 25:75. There is no passing minimum for internal. The following are the minimum percentage and marks for passing of each course, at UG and PG levels for external and aggregate is as follows:

S. No.	Program	Passing Minimum in Percent	
		External (75)	Aggregate (100)
1	UG Degree	40 % (30)	40 % (40)
2	PG Degree	50 % (38)	50 % (50)

13. Ranking: Rank holders of a programme shall be decided on the basis of the CGPA. A candidate who qualifies the UG degree course passing all the examinations in the first attempt within the minimum period of prescribed for the course of study from the date of admission to the course and secures I or II class shall be eligible for ranking and such ranking shall be confined to 10 % of the total number of candidates qualified in that particular branch of study, subject to a maximum of 10 ranks. Results of the candidates appeared in the improvement or Arrears Examinations shall not be counted for the award of Prizes/Medals, Rank or Distinction.

14. Rules for Admission on Transfer from other Colleges:

(a) Under Bharathiyar University guidelines, the admission on transfer of students from other institutions shall be allowed. However, such transfer shall be permissible provided that-

i. there is a vacancy in the respective program of study in the Institution where the transfer is requested
ii. both the institutions conduct the same degree programmes under the CBCS.
iii. the course structure along with the nomenclature of the courses are similar between the two institutions,

(b) In fulfillment of the conditions as laid down in clause 13(a), a candidate may be allowed to get admission on transfer from other college on the production of transfer certificate from Bharathiyar University, Previous semester markstatements, , etc. not later than 1 (one) month from the commencement of the classes of the semester concerned.

i. The marks obtained in the courses will be converted and grades will be assigned as per the STC norms.
ii. The transfer students are eligible for classification.

iii. The transfer students are not eligible for Ranking, Prizes and Medals

15. Conferment of the Degree: No candidate shall be eligible for conferment of the Degree unless he / she

i. has undergone the prescribed course of study for a period of not less than six semesters and has passed the examinations as have been prescribed therefore.
ii. has completed all the components prescribed under Parts I to Part V in the CBCS pattern to earn 140 credits.
iii. has successfully completed the prescribed Field Work/ Institutional Training (if any) as evidenced by certificate issued by the authorities concerned.

REGULATIONS ON MOOC

PREAMBLE

National Programme on Technology Enhanced Learning(NPTEL)is a joint venture of the IITs and IISc, funded by the Ministry of Education (MoE)Government of India, and was launched in 2003. Initially started as a project to take quality education to all corners of the country, NPTEL now offers courses for certification every semester in almost all the disciplines. NPTEL is a National Coordinator for Engineering courses (UG and PG) under SWAYAM, the National MOOCs portal. NPTEL also offers courses in Humanities and Management subjects as the NPTEL partner institutes do have these departments. It offers the courses in online mode which Is instructor-lead and self-paced learning environment.

Study Webs of Active-Learning for Young Aspiring Minds(SWAYAM)has emerged as one of the World's biggest Massive Open Online Courses (MOOCs) integrated platform of online courses, covering subjects from high school to higher education including Skill-based courses to ensure that every student benefits from learning material through ICT.There are a total number of 7,041 online courses on SWAYAM platform out of which 6,296courses are credit courses and the remaining 745 courses are non-credit courses. University Grants Commission (UGC) vide Gazette Notification dated 25th March, 2021 has notified in the UGC(Credit Framework for online Learning courses through SWAYAM)Regulations,2021which facilitates an Institution to allow up to 40% of the total courses being offered by any higher education institution in a particular programme in any semester through online learning courses offered on SWAYAM platform. With this, the students studying inconventional Institutes /colleges can transfer the credits earned through the SWAYAM Courses into their academicrecords.

Sree Saraswathi Thyagaraja College, Pollachi is continuously taking part in promotingquality education as a higher education institution. The faculty members of the institution arealso encouraged to complete the course in SWAYAM portal. With reference to the UGCnotification, it has framed the regulations for credit transfer in order to encourage the studentstoundergoandlearnthecoursesthroughNPTEL–SWAYAMportal.

The following MOOCs regulations would come into the force for the students admittedintheyear2023-24andonwards.

- All Under Graduate (UG) and Post Graduate (PG) students are encouraged to complete**two MOOCs** [SWAYAM/NPTEL/NSDC] in their UG before completing the fifthsemesterandlikewise**twoMOOCs**[SWAYAM/NPTEL/NSDC]inPGbeforecompletingthethirdsemester.
- Theinstituteistransferringtheequivalentcreditearnedthrough[SWAYAM/NPTEL/NSDC]tothestudentsonreceiptofMOOCscompletioncertificate and these marks/credits shall be incorporatedunder extra credit course inthe overallconsolidated statement of marksofthestudent.
- The institution will allot a Single Point of Contact (SPoC) who will provide the list ofcoursesofferedintheNPTEL/SWAYAM/NSDC platformintheFirst/Second/Third/ Fourth / Fifthsemester for UG and similarly the listof courses offered in theNPTEL/SWAYAM/NSDCplatformintheFirst/Second / ThirdsemesterforPG.
- A mentor will be allotted based on the domain areas of the students to guide, assist andtrackthestatusofprogress.
- As per the guidelines provided by the Academic Council, an 8 weeks course can be consideredfor2

creditcourseand a 12 weekscoursecanbeconsideredfor3creditcourse.

- Based on this, the student should complete 2 MOOCs [each of 8 weeks duration] andearnin a total of 4credits [2creditsperMOOC].
- The actual marks scored by the student will be taken as it is, in order to incorporate thescore in the consolidated mark statement, if he/she successfully obtained the certification throughMOOC.
- The following table describes the certification grade, equivalent marks and the furtherstep(s)requiredforthestudent:

AssignmentStatus	CertificationStatus	EquivalentMark	FurtherStep
Submitted	Elite+Gold	ActualScorebyNPTEL	Notrequired
Submitted	Elite+Silver	ActualScorebyNPTEL	Notrequired
Submitted	Elite	ActualScorebyNPTEL	Notrequired
Submitted	Completed	ActualScorebyNPTEL	Notrequired
Submitted	NotCompleted	50% of the assignmentScore+50%of thescorefromthetest conductedbytheInstitute	Thestudentshould attendthe test in theinstitute
NotCompleted	Notobtained	The actual score securedin the test conducted bythe institute	Thestudentshould attendthetestin the institute

- If a student has successfully completed the course in NPTEL/SWAYAM/NSDC, thenthe marks obtained and the appropriate credits will be informed by the SPoC to theOffice of the Controllerof Examinations (CoE).Themarks anditscorrespondinggrade may change as per the CBCS guidelines and regulations of the correspondingprogramme.
- If any student opts for more than the required number of MOOC, it will be consideredasadditionalcredit,anditwillnotbeconsideredforcalculating theCGPA.
- If the student fails in the MOOC examination, there is an **alternative option** for the student to complete theMOOCthroughtheexaminationconductedbythecollegesimilartothatofMOOC Examination;
- In such case, the student needs to pay the MOOC exam fee at the college and he will be allowed to take up a 100 MCQ test [course with the same title as seen in MOOC] at the college lab; the results of thisonlinetestwillbe takenupbythe COE section for the completion of MOOC.

Summary of Courses Pattern and Credit Distribution in Choice Based Credit System

(BCA Programme – 2023 - 2024)

Part	Curriculum Structure	No. of Courses	Credits to be earned
I	Language	04	12
II	English	04	12
III	Core Courses [CC]	16	64
	Generic Elective Courses [GE]	02	06
	Discipline Specific Elective Courses [DSE]	08	24
IV	Skilled Enhancement Courses [SEC] Inclusive of 2 NME, 2 Skill Enhancement Course 1 Professional Competency Skill	05	09
	Ability Enhancement Compulsory Course [AECC]	04	08
	Value Based Courses [EVS & VE]	02	04
	Extension Activity	-	01
	Total	**45**	**140**
IV	*Extra Credit Courses(2 MOOC)	**02***	**04***
	Grand Total	**45+2***	**140+04***

Sree Saraswathi Thyagaraja College (Autonomous)

School of Computing Science

Department of BCA

Scheme for 2023-24 admitted students

Part	Domain	Type	Course Code	Course Name	L	P	T	I.H.	CIA	ESE	Total	Credits
SEMESTER I												
I	LAN I	Theory	23LAN1T10/ 1H10/ 1M10/ 1F10	Language – I	4	-	-	4	25	75	100	3
II	ENG I	Theory	23LAN1E10	English I	4	-	-	4	25	75	100	3
III	CORE I	Theory	23BCA1C10	Programming in C	5	-	-	5	25	75	100	4
III	CORE II	Practical	23BCA1C20	Programming in C Lab	-	5	-	5	40	60	100	4
III	DSE I	Theory	23BCA1E10/ 23BCA1E20/ 23BCA1E30	Multimedia systems/Biometrics/E-Commerce	4	-	-	4	25	75	100	3
III	GEI	Theory	23BMA1G10/ 23BMA1G20	Allied Mathematics – I/Statistical Methods and its Application - I	4	-	-	4	25	75	100	3
IV	SEC I NME	Practical	23BCA1N10	NME-I	-	2	-	2	40	60	100	2
IV	AECC SS I	Theory	23AECSS10	Soft Skills I	2	-	0	2	50	50	100	2
				TOTAL	23	7	-	30	255	545	800	24
SEMESTER II												
Part	**Domain**	**Type**	**Course Code**	**Course Name**	**L**	**P**	**T**	**I.H.**	**CIA**	**ESE**	**Total**	**Credits**
I	LAN II	Theory	23LAN2T10/ 2H10/ 2M10/ 2F10	Language – II	4	-	-	4	25	75	100	3
II	ENG II	Theory	23LAN2E10	English II	4	-	-	4	25	75	100	3
III	CORE III	Theory	23BCA2C10	Python Programming	5	-	-	5	25	75	100	4
III	CORE IV	Practical	23BCA2C20	Python Programming Lab	-	5	-	5	40	60	100	4
III	DSE II	Theory	23BCA2E10/ 23BCA2E20/ 23BCA2E30	Cyber Forensics/Information Security/Human Computer Interaction	4	-	-	4	25	75	100	3
III	GE II	Theory	23BMA2G10/ 23BMA2G20	Allied Mathematics – II/Statistical Methods and its Application - II	4	-	-	4	25	75	100	3
IV	SEC II NME	Practical	23BCA2N10	NME-II		2	-	2	40	60	100	2
IV	AECC SS II	Theory	23AECSS20	Soft Skills II	2	-	-	2	50	50	100	2
				TOTAL	23	07	-	30	255	545	800	24
SEMESTER III												
Part	**Domain**	**Type**	**Course Code**	**Course Name**	**L**	**P**	**T**	**I.H.**	**CIA**	**ESE**	**Total**	**Credits**
I	LAN III	Theory	23LAN3T10/	Language III	4	-	-	4	25	75	100	3

			3H10/ 3M10/ 3F10									
II	ENG III	Theory	23LAN3E10	English III	4	-	-	4	25	75	100	3
III	CORE V	Theory	23BCA3C10	Data Structures and Algorithms	6	-		6	25	75	100	4
III	CORE VI	Practical	23BCA3C20	Data Structures and Algorithms Lab		6	-	6	40	60	100	4
III	DSE III	Theory	23BCA3E10/ 23BCA3E20/ 23BCA3E30	Fuzzy Logic / ERP / Artificial Intelligence	4	-	-	4	25	75	100	3
IV	SEC III	Practical	23BCA3S10	Advanced Excel	-	4	-	4	40	60	100	2
IV	AECC SS III	Theory	23AECSS30	Soft Skills III	2	-	-	2	50	50	100	2
IV	EVS	-	-	Environmental Studies	-	-	-	-	-	-	-	-
				TOTAL	20	10		30	230	470	700	21

SEMESTER IV

Part	Domain	Type	Course Code	Course Name	L	P	T	I.H.	CIA	ESE	Total	Credits
I	LAN IV	Theory	23LAN4T10/ 4H10/ 4M10/ 4F10	Language IV	4	-	-	4	25	75	100	3
II	ENG IV	Theory	23LAN4E10	English IV	4	-	-	4	25	75	100	3
III	CORE VII	Theory	23BCA4C10	.Net Programming	6	-		6	50	50	100	4
III	CORE VIII	Practical	23BCA4C20	.Net Programming Lab	-	6		6	40	60	100	4
III	DSE IV	Theory	23BCA4E10/ 23BCA4E20/ 23BCA4E30	Software Testing/Image Processing/Big Data Analytics	4	-	-	4	25	75	100	3
IV	SEC IV	Practical	23BCA4S10	Web programming Lab		2	-	2	40	60	100	2
IV	AECC SS IV	Theory	23AECSS40	Soft Skills IV	2	-	-	2	50	50	100	2
IV	EVS	-	23VACES10	Environmental Studies	2	-	-	2	50	-	50	2
				TOTAL	22	8		30	305	445	750	23

SEMESTER V

Part	Domain	Type	Course Code	Course Name	L	P	T	I.H.	CIA	ESE	Total	Credits
III	CORE IX	Theory	23BCA5C10	Operating System	5	-	-	5	25	75	100	4
III	CORE X	Theory	23BCA5C20	Java Programming	5	-	-	5	25	75	100	4
III	CORE XI	Theory	23BCA5C30	Database Management System	5	-	-	5	25	75	100	4
III	CORE XII	Practical	23BCA5C40	Java Programming Lab	-	5	-	5	40	60	100	4
III	DSE V	Theory	23BCA5E10/ 23BCA5E20/ 23BCA5E30/2 3BCA5E40	Artificial Neural Network/Pattern Recognition/ Introduction to Data Science/ Operation Research	4	-	-	4	25	75	100	3
III	DSE VI	Theory	23BCA5E50/ 23BCA5E60	Cloud Computing/ Agile Project Management	4	-	-	4	25	75	100	3

IV	VE		23VACVE10	Value Education	2	-	-	2	50	-	50	2
				TOTAL	25	05	-	30	215	435	650	24
SEMESTER VI												
Part	**Domain**	**Type**	**Course Code**	**Course Name**	**L**	**P**	**T**	**I.H.**	**CIA**	**ESE**	**Total**	**Credits**
III	CORE XIII	Theory	23BCA6C10	R Programming	5	-	-	5	25	75	100	4
III	CORE XIV	Theory	23BCA6C20	Open Source Software Technologies/ Computer Networks / Mini Project	5	-	-	5	25	75	100	4
III	CORE XV	Practical	23BCA6C30	R Programming Lab	-	5	-	5	40	60	100	4
III	CORE XVI	Practical	23BCA6C40	Open Source Software Technologies/ Internet of Things / Big Data Analytics	-	5	-	5	40	60	100	4
III	DSE VII	Theory	23BCA6E10/ 23BCA6E20/ 23BCA6E30	Data Mining and Warehousing / Network Security / Robotics	4	-	-	4	25	75	100	3
III	DSE VIII	Theory	23BCA6E40/ 23BCA6E50/ 23BCA6E60	Mobile Adhoc Network / Computational Intelligence / Grid Computing	4	-	-	4	25	75	100	3
III	PCS		23BCA6S10	Professional Competency Skill	2	-	-	2	25	75	100	1
III	EXTN	-	23ETN6X10	Extension Activity	-	-	-	-	-	-	-	1
				TOTAL	20	10	-	30	205	495	700	24
				GRAND TOTAL				180	1465	2935	4400	140

Extra Credit Course 1: Two MOOCs to be completed – one in Third Semester & one in Fourth Semester;

LIST OF NON MAJOR ELECTIVVE COURSES TO BE OFFERED FOR THE ACADEMIC YEAR 2023 – 2024

SNO	COURSE CODE	NAME OF COURSE	OFFERING DEPARTMENT
1	**23BCS1N10**	Office Automation	**BSC CS**
2	**23BCS2N10**	Multimedia Systems Lab	**BSC CS**
3	**23BCA1N10**	Digital Publishing Tools I	**BCA**
4	**23BCA2N10**	Digital Publishing Tools II	**BCA**
5	**23BIT1N10**	Office Automation for Documentation Lab	**BSC IT**
6	**23BIT2N10**	Office Automation for Presentation	**BSC IT**
7	**23BFS1N10**	Principles of Computer Security	**BSC DCFS**
8	**23BFS2N10**	Cyber Forensics	**BSC DCFS**
9	**23BAM1N10**	Basic Python Programming Lab	**BSC AIML**
10	**23BAM2N10**	Advance Python Programming Lab	**BSC AIML**
11	**23BDA1N10**	Data Visualization using Tableau I	**BSC DSA**
12	**23BDA2N10**	Data Visualization using Tableau II	**BSC DSA**
13	**23BCM1N10**	Practical Banking	**BCOM**
14	**23BCM2N10**	Entrepreneurship	**BCOM**
15	**23BBC1N10**	Accounting Software I	**BCOM CA**
16	**23BBC2N10**	Accounting Software II	**BCOM CA**
17	**23BPA1N10**	Personal Finance	**BCOM PA**
18	**23BPA2N10**	Basics of Stock Market	**BCOM PA**
19	**23BAB1N10**	Agricultural Marketing	**BCOM ABA**
20	**23BAB2N10**	Digital Marketing	**BCOM ABA**

21	**23BAS1N10**	Information Security	**BCOM BA**
22	**23BAS2N10**	Office Administration	**BCOM BA**
23	**23BBI1N10**	Digital Banking	**BCOM B&I**
24	**23BBI2N10**	Elements of Insurance	**BCOM B&I**
25	**23TAM1N10**	Basic Tamil I	**TAMIL**
26	**23TAM2N10**	Basic Tamil II	**TAMIL**
27	**23TAM1N20**	Advance Tamil I	**TAMIL**
28	**23TAM2N20**	Advance Tamil II	**TAMIL**
29	**23BBA1N10**	Basics of Event Management	**BBA**
30	**23BBA2N10**	Managerial Skill Development	**BBA**
31	**23BMA1N10**	Numerical Ability I	**BSC MATHS**
32	**23BMA2N10**	Numerical Ability II	**BSC MATHS**
33	**23BEN1N10**	Writing Skills for Media	**BA ENG**
34	**23BEN2N10**	Professional and Technical Writing	**BA ENG**
35	**23BPY1N10**	Psychological Wellbeing	**BSC PSY**
36	**23BPY2N10**	Psychological Self Management	**BSC PSY**
37	**23BCH1N10**	Food Chemistry	**BSC CHE**
38	**23BCH2N10**	Dairy Chemistry	**BSC CHE**

SEMESTER – I

பொதுத்தமிழ்

Course Code	Type	Course Name	Category	Lecture [L]	Tutorial [P]	Practical [P]	Credit
23LAN1T10	**Theory**	**பொதுத்தமிழ -1**	Part I	**45**	**-**	**-**	**3**

Learning Objectives

The Main Objectives of this Course are to:

- முதலாமாண்டுப் பட்டவகுப்புமாணவர்களுக்குத் தமிழ் மொழி இலக்கியங்களைஅறிமுகம் செய்தல்.
- தற்கால இலக்கியப் போக்குகளையும் இலக்கணங்களையும் மாணவர்அறியுமாறுசெய்துஅவர்களின் படைப்பாற்றலைத் தூண்டுதல்.
- தமிழ் இலக்கியம் சார்ந்தபோட்டித் தேர்வுகளுக்குஏற்பகற்பித்தல் நடைமுறைகளைமேற்கொள்ளுதல்.

Prerequisite:பன்னிரெண்டாம் வகுப்பில் தமிழைஒருபாடமாகப் பயின்றிருக்கவேண்டும்.

UNIT	COURSE CONTENT	No. of Sessions
I	**அலகுஐ மரபுக் கவிதை** 1. பெ. சுந்தரனார் - தமிழ் தெய்வவணக்கம் 2. பாரதிதாசன் - சிறுத்தையேவெளியல் வா 3. கவிமணி - புத்தரும் சிறுவனும் 4. முடியரசன் - மொழிஉணர்ச்சி 5. கண்ணதாசன் - ஆட்டனத்தி ஆதிமந்தி - ஆதிமந்தி புலம்பல் 6. சுரதா - துறைமுகம் - வினாத்தாள் 7. தமிழ் ஒளி - கடல்	10
II	**1. அலகுII புதுக்கவிதை** 1. அப்துல் ரகுமான் - வீட்டுக்கொருமரம் வளர்ப்போம் 2. ஈரோடுதமிழன்பன் - சென்ரியூ கவிதைகள் 3. வைரமுத்து - பிற்சேர்க்கை 4. மு. மேத்தா - வாழைமரம் 5. அறிவுமதி - வள்ளுவம் பத்து 6. நா. முத்துக்குமார் - ஆனந்தயாழைமீட்டுகிறாய் 7. சுகிர்தராணி - சபிக்கப்பட்டமுத்தம் 8. இளம்பிறை - நீஎழுதமறுக்கும் எனதுஅழகு	10
III	**அலகுIII சிறுகதைகள்** 1. வாய்ச்சொற்கள் - ஜெயகாந்தன் (மாலைமயக்கம் தொகுப்பு)	12

	2. கடிதம் - புதுமைப்பித்தன் 3. கரு - உமாமகேஸ்வரி 4. முள்முடி - தி. ஜானகிராமன் 5. சிதறல்கள் - விழி. பா. இதயவேந்தன் 6. காகிதஉறவு - சு. சமுத்திரம் 7. வீட்டின் மூலையில் சமையல் அறை - அம்பை 8. ஆண்டன் செக்காவ் (மொழிபெயர்ப்புக் கதை) - நாய்க்காரச் சீமாட்டி,சந்தியாபதிப்பகம்	
IV	**அலகுIV பாடம் சார்ந்த இலக்கியவரலாறு** 1. மரபுக் கவிதையின் தோற்றமும் வளர்ச்சியும் 2. புதுக்கவிதையின் தோற்றமும் வளர்ச்சியும் 3. சிறுகதையின் தோற்றமும் வளர்ச்சியும்	6
V	**அலகுஏமொழித்திறன் போட்டித்தேர்வு** 1. பொருள் பொதிந்தசொற்றொடர்அமைத்தல் 2. ஓர் எழுத்துஒருமொழி 3. வேற்றுமைஉருபுகள் 4. திணை,பால்,எண், இடம் 5. கலைச்சொல்லாக்கம்,மொழிபெயர்ப்பு குறிப்பு: அலகு 4,5 ஆகியனபோட்டித் தேர்வுநோக்கில் நடத்தப்படவேண்டும்)	7
	TOTAL	45

Recommended Textbooks: -

Suggested Reference Textbooks:

1. தமிழ் இலக்கியவரலாறு - சிற்பிபாலசுப்பிரமணியன்
2. புதியநோக்கில் தமிழ் இலக்கியவரலாறு - தமிழண்ணல்
3. வகைமைநோக்கில் தமிழ் இலக்கியவரலாறு - எ.ஃப். பாக்கியமேரி
4. தமிழ் இலக்கியவரலாறு - மு.வ.

Focus of Course: Employability / **Skill Development** / Entrepreneurship

Level of Curriculum Relevance: **Local / Regional /National** / International Needs

E Course / E Content URL:

- Tamil Heritage Foundation- www.tamilheritage.org <http://www.tamilheritage.org>
- Tamil virtual University Library- www.tamilvu.org/ library http://www.virtualvu.org/library
- Project Madurai - www.projectmadurai.org.
- Chennai Library- www.chennailibrary.com <http://www.chennailibrary.com>.

- Tamil Universal Digital Library- www.ulib.prg <http://www.ulib.prg>.
- Tamil E-Books Downloads- tamalebooksdownloads. blogspot.com
- Tamil Books on line- books.tamil cube.com
- Catalogue of the Tamil books in the Library of British Congress archive.org
- Tamil novels on line - books.tamilcube.com

Course Designer: TANSCHE

Chennai BOS Chairman – Tamil, STC

Course Outcomes (COs): On Successful completion of this course the students will able to:

Cos	Course Outcome (CO) Statement	Bloom's Taxonomy Knowledge Level
CO1	பாரதியார்காலந்தொட்டுத் தற்காலப் புதுக்கவிதைகள் வரைகவிதை இலக்கியம் அறிமுகப்படுத்தப்படுவதால் படைப்பாற்றல் திறன்பெறுதல்.	**K1**
CO2	புதுக்கவிதைவரலாற்றினைஅறிந்துகொள்வர்.	**K2**
CO3	இக்கால இலக்கியவகையினைக் கற்பதன் மூலம் படைப்பாக்கத் திறனைப் பெறுவர்.	**K3**
CO4	மொழியறிவோடுசிந்தனைத்திறன் அதிகரித்தல்.	**K4**
CO5	தமிழ்மொழியைப் பிழையின்றிஎழுதவும்,புதியகலைச்சொற்களைஉருவாக்கவும் அறிந்துகொள்ளுதல்.	**K5**

K1 - Remember; K2 - Understand; K3 - Apply; K4 - Analyze; K5 Evaluate; K6 - Create

MappingCourseOutcomeswithProgrammeOutcomesandProgrammeSpecificOutcomes:

COs/POs/ PSOs	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3
CO1	S	M	S	S	S	S	M	S
CO2	S	S	M	M	M	M	M	M
CO3	S	M	S	S	M	S	M	S
CO4	S	S	S	M	M	S	S	S
CO5	S	S	M	M	M	S	S	S

Course Code	Type	Course Name	Category	Lecture [L]	Tutorial [P]	Practical [P]	Credit
23LAN1H10	Theory	Hindi - 1	Part I	45	-	-	3

COURSEOBJECTIVE:

- Improvesgrammaticalknowledge
- Willcontinuetoread andlearnaboutarticles andthinkaboutthem
- It is possible to read and understand short stories and understand the thoughts and lifeofthe people ofthis state.
- Translation knowledge and the ability to read and analyze a message are alsoavailable.

UnitNo.	Course Content	Instructional hours
I	**PROSE: NUTHANGADYASANGRAH** Lesson1 – BharathiyaSanskurthi - Dr.RajendraPrsad Lesson3 –Razia -RamavikshaBenipuri Lesson4 –Makreal -Yespal Lesson5 – BahthaPani Nirmala -'AGEYA' Lesson6–RashtrapithaMahathmaGandhi -Mukthibodh Lesson9–NindaRas -HarishankarParsayi.	**15**
II	**NON-DETAILED TEXTSHORTSTORIES:KAHANIKUNJ** 1. Pareksha –Premchand 2. Mamtha -JayashankarPrasad 3. Apnaparaya -Jaynendrakumar 4. Admika bachcha -Yespal 5. Bolaramkajeev -HarishankarParsayi 6. Vapasi -MannuBhandari	**10**
III	**GRAMMAR:SHABDHAVICHARONLY** (NOUN,PRONOUN,ADJECTIVE, VERB,TENSE, CASE ENDINGS)Theoretical &Applied.	**7**
IV	**TRANSLATION:English–Hindionly.** ANUVADHABHYAS –III(1-15lessonsonly)	**7**

V	**COMPREHENSION**: 1Passagefrom ANUVADHABHYAS–III(16-30)	**6**
	TOTAL	**45**

TextBooks:

1. Nuthangadyasangrah,2009, editor:Jayaprakash,publisher: Sumitraprakashansumitravas,16/4, hastings road, Allahabad – 211001.
2. Kahani kunj, 2011, Editor: V.P. Amithab, Publisher: Govind PrakashanSadharBagaar, Mathura, UttarPradesh, –281 001

ReferenceBooks:

NAVEEN HINDI Vyakaran, 2002,DakshinBharatHindiPrachar Sabha,Chennai–600017

Teachingmethods:

Lecturing**,**Assignment,GroupDiscussion,Quiz, GroupActivity.PowerPointProjectionthrough LCD

WebLink:

https://hi.wikipedia.org/wiki/

https://en.wikipedia.org/wiki/Premchand

http://hindigrammar.in/

MappingCourseOutcomeswithProgrammeOutcomesandProgrammeSpecificOutcomes:

COs/POs/ PSOs	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3
CO1	S	S	S	S	S	S	S	S
CO2	M	S	S	M	S	M	S	S
CO3	S	M	M	M	M	S	S	M
CO4	L	S	L	S	L	S	L	M
CO5	S	S	M	M	S	M	L	L

Course Code	Type	Course Name	Category	Lecture [L]	Tutorial [P]	Practical [P]	Credit
23LAN1M10	Theory	Malayalam - 1	Part I	45	-	-	3

COURSEOBJECTIVE:

- Improvesgrammaticalknowledge
- Willcontinue toread andlearn aboutarticles andthink aboutthem
- It is possible to read and understand short stories and understand the thoughts andlifeof thepeople of this state
- Translation knowledge and the ability to read and analyze a message are alsoavailable
- Translation knowledge and the ability to read and analyze a message are also

Unit	Course Content	Instructional hours
I	Novel-PathummayudeAadu-VaikamMuhammed Basheerr	**15**
II	Novel--PathummayudeAadu -VaikamMuhammedBasheerr	**10**
III	ShortStory-EntePriyappetaKadhakal –Akbar Kakkattil)	**7**
IV	ShortStory-EntePriyappetaKadhakal –Akbar Kakkattil)	**7**
V	Composition&Translation (EnglishtoMalayalam)	**6**
TOTAL		**45**

Teachingmethods:

Lecturing**,** Assignment, Group Discussion, Quiz, Group Activity. PowerPoint ProjectionthroughLCD

TextBooks:

1.Novel-PathummayudeAadu-VaikamMuhammedBasheer(D.C.Books,Kottayam,Kerala)

2. Short Story -EntePriyappetaKadhakal – Akbar Kakkattil)(D.C.Books, Kottayam,Kerala)

3.Expansionofideas,General Eassayand Translation.(Asimplepassage)

ReferenceBooks:

1.MalayalaNovelSahithya Charitram - K.M.Tharakan(N.B.S.Kottayam)

2.Cherukatha Innale Innu-M.Achuyuthan (D.C Books, Kottayam)

3.SahithyaCharitramPrasthanangalilude-Dr.K.MGeorge,(D.C.BooksKottayam)

4.MalayalaSahithyavimarsam-SukumarAzheekode(D.C.books)

Course Outcomes (COs)		
On successful completion of this course the students will be able to:		
CO Number	**Course Outcome (CO) Statement**	**Blooms Taxonomy Knowledge Level**
CO1	Understandthetextstylesandgrammaticalelements	K1
CO2	Discussthe content ofareadingpassage	K1
CO3	Developaninterest intheappreciation ofshortstories	K2
CO4	Comprehendthe grammaticalstructuresandsentencemaking	K3
CO5	UnderstandthelanguageanddevelopingEnglishtoMalayalamtranslationskill	K4

MappingCourseOutcomeswithProgrammeOutcomesandProgrammeSpecificoutcomes:

COs/POs/ PSOs	**PO1**	**PO2**	**PO3**	**PO4**	**PO5**	**PSO1**	**PSO2**	**PSO3**
CO1	S	S	S	S	S	S	S	S
CO2	M	S	S	M	S	M	S	S
CO3	S	M	M	M	M	S	S	M
CO4	L	S	L	S	L	S	L	M
CO5	S	S	M	M	S	M	L	L

Course Code	Type	Course Name	Category	Lecture [L]	Tutorial [P]	Practical [P]	Credit
23LAN1F10	Theory	French - 1	Part I	45	-	-	3

COURSEOBJECTIVE:

To understand,speak,readandwritesimple,standardspeechwhichisveryslowandis carefully articulated and can recognize familiar words and very basic phrasesconcerning themselves, their family and immediate concrete surroundings whenpeoplespeakslowlyandclearly.

UnitNo.	Topics	Instructional hours
1	Etape0	15
	Etape 1(Lecons 1 -3)	
2	Etape 2(Lecons 1 -3)	10
3	Etape3 -Leçons 1 –2	7
4	Etape3 –Leçon3	7
	Etape4 –Leçon1	
5	Etape4 –Leçons 2 –3	6
	Total	45

Etapes 0to4,Pages 11to62

TextBookPrescribed:

Adomania1–Methodedefrancais Authors:Céline Himber,CorinaBrillant,Sophie Erlich

Publisher: HACHETTEFLE

Availableat:GOYALPublishersandDistributorsPvtLtd,NewDelhi(9810322459)

Reference:Latitudes1

Author: YvesLoiseau,RégineMerieuxPublisher:FrenchandEuropeanPublicationsInc

Availableat:GOYALpublishersanddistributorsPvtLtd,NewDelhi(9810322459)

SWAYAM:https://swayam.gov.in/nd2_cec19_lg04/preview

byProf.NirupamaRastogi(Retd)EnglishandForeignLanguagesUniversity,Hyderabad.

Course Code	Type	Course Name	Category	Lecture [L]	Tutorial [T]	Practical [P]	Credit
23LAN1E10	Theory	English - 1	Part II	45	-	-	3

Learning Objectives		
LO1	To enable learners to acquire the linguistic competence necessarily required in various life situations.	
LO2	To help them understand the written text and able to use skimming, scanning skills	
LO3	To assist them in creative thinking abilities	
LO4	To enable them become better readers and writers	
LO5	To assist them in developing correct reading habits, silently, extensively and intensively	
Unit No.	**Unit Title & Text**	**No. of Periods for the Unit**
I	**Poetry** 1.1 A Patch of Land - Subramania Bharati 1.2 The Sparrow - Paul Laurence Dunbar 1.3 A Nation's Strength – Ralph Waldo Emerson 1.4 Love Cycle - Chinua Achebe	9
II	**Prose** 2.1 JRD - Harish Bhat 2.2 Us and Them - David Sedaris From Dress Your Family in Corduroy and Denim 2.3 UnclePodger Hangs a Picture - Jerome K Jerome	9
III	**Short Stories** 3.1 The Faltering Pendulum- Bhabani Bhattacharya 3.2 How I Taught my Grandmother to Read- Sudha Murthy 3.3 The Gold Frame- R.K. Laxman	9
IV	**Language Competency** 4.1 Vocabulary : Synonyms, Antonyms, Word Formation 4.2 Appropriate use of Articles and Parts of Speech 4.3 Error correction	9

V	**English for Workplace** 5.1 Self - introduction, Greetings 5.2 Introducing others 5.3 Listening for General and Specific Information 5.4 Listening to and Giving Instructions / Directions	9

Text books (Latest Editions)

1	Steel Hawk and other stories by Bhattacharya, Bhabani, New Delhi: Sahitya Akademi, 1967
2	How I taught my Grandmother to Read and other Stories, Murthy, Sudha, Penguin Books, India, 2004

WebResources

1	A patch of land by Subramania Bharati translated by Usha Rajagoplan : https://books.google.co.in/books?id=iSHvOmXuvLMC&printsec=frontcover&dq=subramania+bharati+poems&hl=en&newbks=1&newbks_redir=0&source=gb_mobile_search&sa=X&redir_esc=y#v=onepage&q=subramania%20bharati%20poems&f=false
2	The Sparrow by Paul Laurence Dunbar https://poets.org/poem/sparrow-0
3	A Nation's Strength by Emerson: https://poets.org/poem/nations-strength
4	Love cycle by Chinua Achebe : https://www.best-poems.net/chinua-achebe/love-cycle.html
5	JRD by Harish Bhat https://www.tata.com/newsroom/heritage/coffee-tea-jrd-tata-stories
6	Us and Them by David Sedaris From Dress Your Family in Corduroy and Denim https://legacy.npr.org/programs/morning/features/2004/jun/sedaris/usandthem.html
7	Uncle Podger Hangs a Picture: http://rosyhunt.blogspot.com/2013/01/uncle-podger-hangs-picture.html
8	The Gold Frame: https://fybaenglish.blogspot.com/2018/12/the-gold-frame-r-k-laxman.html

Reference Books (Latest Editions, and the style given must be strictly adhered to)

1.	English in use - A textbook for College Students (English, Paper back, - T.Vijay Kumar, K Durga Bhavani, YL Srinivas
2.	Practical English Usage - 4th Edition By Michael Swan
3.	**The Art of Civilized Conversation: A Guide to Expressing Yourself with Style and Grace** -Margaret Shepherd,Penny Carter, (Illustrator), Sharon Hogan, 2005.

Course Outcomes(COs)		
On successful completion of this course the students will be able to:		
CO Number	**CourseOutcome(CO)Statement**	**Bloom's Taxonomy Knowledge Level**
CO1	Develop and integrate the use of the four language skills i.e. Reading, Listening, Speaking and Writing	K1
CO2	Understand the total content and underlying meaning in the context.	K2
CO3	Form the habit of reading for pleasure and for information	K3
CO4	Comprehend material other than the prescribed text	K3
CO5	Develop the linguistic competence that enables them, in the future, to present the culture and civilization of their nation.	K4

MappingCourseOutcomeswithProgrammeOutcomesandProgrammeSpecificOutcomes:

COs/POs/ PSOs	**PO1**	**PO2**	**PO3**	**PO4**	**PO5**	**PSO1**	**PSO2**	**PSO3**
CO1	S	S	S	S	S	S	S	S
CO2	M	S	S	S	M	S	S	S
CO3	S	S	S	M	S	S	S	S
CO4	S	S	S	S	S	S	S	S
CO5	S	M	S	S	S	S	S	S

Course Code	**Type**	**Course Name**	**Category**	**Lecture (L)**	**Tutorial (T)**	**Practical (P)**	**Credit**
23BCA1C10	**Theory**	Programming in C	Core 1	**60**	**-**	**-**	**4**

Course Objective	
C1	Describe the structure and fundamental concept of C programming.
C2	Understand the concept of functions and statement used in C.
C3	Describe the arrays and function such as recursive function, string standard function.

C4	Apply the concept of pointers, structure and unions.	
C5	Describe the types of files and command line arguments	
UNIT	**Details**	**No. of Hours**
I	**Introduction to C:** Structure of a C Program- Programming Rules-The C Character Set - The C Keywords - Identifiers – Constants. **Variables:** Rules for Defining Variables - Declaring Variables - Data Types - Type Conversion - Arithmetic Operators - Relational Operators - Logical Operators - Bitwise Operators - Command Conditional Operator.	12
II	**Input and Output in C:** Formatted Functions-Unformatted Functions. **Decision Statements:**If Statements – The Break Statement – The Continue Statement – The GOTO Statement - The Switch Statement. **Looping Statements:** For Loops - The While Loop - The Do-While Loop.	12
III	**Arrays:** Array Initialization - Definition of Array - Characteristic of Array - Two-Dimensional Array - Three or Multi-Dimensional Arrays. **Functions:** Basics of a function – Function Definition – The return statement - Types of Functions - Call by Value - Call by Reference - Recursion. **Strings:** Introduction - String Standard Functions.	12
IV	**Pointers:** Introduction - Features of Pointers – Pointer and Address - Pointer Declaration -Array of Pointers - Pointers to Pointers. **Structure and Union:** Introduction - Features of Structures - Declaration & Initialization of Structures - Array of Structures - Pointer to Structures - Union – Type def.	12
V	**Files:** Introduction - Streams & File Types - Steps for File Operations - File I/O - Structures Read & Write - Other File Functions-Command Line Arguments – Application of Command Line Arguments - Environment Variables - I/O Redirection.	12
	Total	**60**

Text Book

1	Ashok N. Kamthane, Amit Ashok Kamthane,"**Programming in C",** Pearson India Education Services Pvt Ltd, Third Edition, 2019.

Reference Books

1.	Yaeshwant Kanitkar, **"Let Us C"**, BPB publications, NewDelhi, 16th Edition, 2018.

2.	E. Balagurusamy, **"Programmingin ANSIC",** TMH Publishing Pvt., Ltd., 6th Edition, 2013.
3.	Byron S. Gottfried, **"Programming with C",** TMH Publishing Pvt.,Ltd., 3rd Edition,2013.
4.	Paul Deitel, Harvey Deitel, "**C How to Program",** Pearson India Education Services Pvt Ltd, 6th Edition, 2010.
Web Resources	
1.	https://nptel.ac.in/courses/106104128
2.	https://www.udemy.com/c-programming-for-beginners
FocusofCourse: Employability	

Course Designer: Ms. B. Iswarya
AssistantProfessor,
Dept. Of BCA,STC

Mrs. D. Geetha
HOD,CS
BoS Chairman

CourseOutcomes(COs)

Onsuccessfulcompletion ofthiscoursethestudentswillbeableto:

CO Number	CourseOutcome(CO)Statement	BloomsTaxonomy Knowledge Level
CO1	Recall the structure and fundamental concept of C program with its syntax and semantics	K1
CO2	To understand the concept of functions, branching and looping statement in C programming.	K2
CO3	Understand the arrays and function such as recursive function, string standard function used in C.	K2
CO4	Analyse the concept of pointers, structure and unions used in C programming.	K3
CO5	To demonstrate the types of files, command line arguments. I/O redirection in C Programming.	K3

MappingCourseOutcomeswithProgrammeOutcomesandProgrammeSpecificOutcomes:

COs/POs/ PSOs	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3
CO1	L	M	M	S	M	M	L	S
CO2	L	M	M	M	M	M	L	M

CO3	M	M	M	S	M	S	M	S
CO4	M	M	S	M	M	S	M	S
CO5	M	M	M	S	M	S	M	S

CourseCode	**Type**	**CourseName**	**Category**	**Lecture (L)**	**Tutorial (T)**	**Practical (P)**	**Credit**
23BCA1C20	**Practical**	Programming in C Lab	Core 2	**-**	**-**	**60**	**4**

Course Objective	
C1	Apply the fundamental concepts of C programming & Data Structures
C2	Implement various control statements

C3	Develop C programs to implement arrays, functions, structures, pointers	
C4	Solve analytical problems using Data Structure programming paradigm	
C5	Construct Program using File operations.	
S.NO.	**Details**	**No. of Hours**
1	Develop a C Program to find the sum and average of N marks of a student.	5
2	Develop a C program to find the Fibonacci series for a given limit.	5
3	Develop a C program to find the largest/smallest of 3 numbers	5
4	Develop a C program to illustrate recursive function.	5
5	Develop a C program to find the number of palindromes in a given sentence.	5
6	Develop a C program to manipulate strings using string functions.	5
7	Develop a C program to swap the values of two variables without using third variable.	5
8	Develop a C program to add two matrices using pointers.	5
9	Develop a C program to generate alary slip of employees using the structures.	5
10	Develop a C program using Array of Structures.	5
11	Develop a C program to calculate electricity bill using files.	5
12	Develop a C program to copy the contents of one file to another file using Command Line Arguments.	5
	Total	**60**
Text Book		
1	Ashok N. Kamthane , Amit Ashok Kamthane ," **Programming in C",** Pearson India Education Services Pvt Ltd, Third Edition, 2019.	
Reference Books		
1.	Yaeshwant Kanitkar, **"Let Us C"**,BPB publications, New Delhi, 16th Edition, 2018.	
2.	E. Balagurusamy, **" Programmingin ANSIC",** TMH Publishing Pvt., Ltd., 6th Edition, 2013.	
3.	Byron S. Gottfried, **"Programming with C",** TMH Publishing Pvt., Ltd., 3rdEdition,2013.	
4.	Paul Deitel, Harvey Deitel, "**C How to Program",** Pearson India Education Services Pvt Ltd, 6th Edition, 2010.	
Web Resources		
1.	https://nptel.ac.in/courses/106104128	

2.	https://www.udemy.com/c-programming-for-beginners

Recommended
Toolstobeused: C Editor

FocusofCourse: Employability

CourseDesigner:Ms. B. Iswarya **Mrs. D. Geetha**

AssistantProfessor, HOD,CS

Dept. ofBCA,STC **BoS,Chairman**

CourseOutcomes(COs)

Onsuccessfulcompletion ofthiscoursethestudentswillbeableto:

CO Number	CourseOutcome(CO)Statement	BloomsTaxonomy Knowledge Level
CO1	Understand the fundamental concepts of C programming & Data Structures	K2
CO2	Applying the concept of decision making and control statements in C Programming.	K3
CO3	Develop the C programs to implement arrays, functions, structures, pointers	K3
CO4	Solving the analytical problems using Data Structure programming paradigm using C	K4
CO5	Construction of program using different File operations.	K4

MappingCourseOutcomeswithProgrammeOutcomesandProgrammeSpecificOutcomes:

COs/POs/ PSOs	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3
CO1	L	M	M	S	M	M	M	M
CO2	L	M	M	M	M	M	M	M

CO3	M	M	S	S	S	S	M	S
CO4	M	M	S	S	M	S	M	S
CO5	M	M	S	S	S	S	M	S

CourseCode	**Type**	**CourseName**	**Category**	**Lecture (L)**	**Tutorial (T)**	**Practical (P)**	**Credit**
23BCA1E10	**Theory**	Multimedia Systems	DSE	**45**	**-**	**-**	**3**
Course Objective							

C1	Understand the definition of Multimedia	
C2	To study about the Image File Formats, Sounds Audio File Formats	
C3	Understand the concepts of Animation and DigitalVideoContainers	
C4	To study about the Stage of Multimedia Project	
C5	Understand the concept of OwnershipofContentCreatedforProjectAcquiringTalent	
UNIT	**Details**	**No. of Hours**
I	**Multimedia**: Definition-Use of Multimedia-Delivering Multimedia. **Text:**About Fonts and Faces - Using Text in Multimedia -Computers and Text Font Editing and DesignTools – HypermediaandHypertext.	9
II	**Images:** Plan Approach - Organize Tools - Configure Computer Workspace -Making Still Images - Color - Image File Formats. **Sound:** The Power of Sound -DigitalAudio – MidiAudio – MidivsDigitalAudio – MultimediaSystemSounds Audio File Formats - Vaughan's Law of Multimedia Minimums - Adding SoundtoMultimediaProject	9
III	**Animation:**The Power of Motion-Principles of Animation-Animation by Computer - Making Animations that Work. **Video:** Using Video - Working with Video and Displays-DigitalVideoContainers-ObtainingVideoClips -ShootingandEditingVideo	9
IV	**Making Multimedia:** The Stage of Multimedia Project - The Intangible Needs -The Hardware Needs - The Software Needs - An Authoring System's Needs-MultimediaProductionTeam.	9
V	**Planning and Costing:**TheProcessofMakingMultimedia-Scheduling-Estimating - RFPs and Bid Proposals. Designing and Producing - Content andTalent:AcquiringContent-OwnershipofContentCreatedforProject-AcquiringTalent	9
	Total	**45**
Text Book		
1	TayVaughan,"Multimedia:MakingItWork",8thEdition,Osborne/McGraw-Hill,2001.	
Reference Books		
1.	RalfSteinmetz&KlaraNahrstedt, "MultimediaComputing,Communication&Applications",PearsonEducation,2012.	
2.	Introduction to Multimedia Systems (Communications, Networking and Multimedia) 1st Edition by Sugata Mitra, Gaurav Bhatnagar	
3	Handbook of Internet and Multimedia Systems and Applications: 6 (Internet and Communications) Hardcover – Import, 29 December 1998, by Borko Furht	

Web Resources	
1	https://www.geeksforgeeks.org/multimedia-systems-with-features-or-characteristics/
2	https://www.tutorialspoint.com/multimedia/multimedia_introduction.htm
3	https://mu.ac.in/wp-content/uploads/2021/04/Multimedia.pdf

CourseOutcomes(COs)		
Onsuccessfulcompletion ofthiscoursethestudentswillbeableto:		
CO Number	**CourseOutcome(CO)Statement**	**BloomsTaxonomy Knowledge Level**
CO1	To understand the concepts, importance, application and the process of developing multimedia	K2
CO2	To have basic knowledge and understanding about image related processing	K2
CO3	To understand the framework of frames and bit images to animations	K3
CO4	Speaks about the multimedia projects and stages of requirement in phases of project.	K3
CO5	Understanding the concept of cost involved in multimedia planning, designing, and producing	K3

MappingCourseOutcomeswithProgrammeOutcomesandProgrammeSpecificOutcomes:

COs/POs/ PSOs	**PO 1**	**PO 2**	**PO 3**	**PO 4**	**PO 5**	**PSO1**	**PSO2**	**PSO**
CO 1	S	M	L	M	M	L	L	L
CO 2	M	S	L	L	L	L	L	L
CO 3	S	M	L	S	M	S	L	L
CO 4	S	M	L	S	S	M	M	L
CO 5	S	M	S	L	M	L	M	S

Course Code	**Type**	**Course Name**	**Category**	**Lecture (L)**	**Tutorial (T)**	**Practical (P)**	**Credit**
23BCA1E20	**Theory**	Biometrics	DSE	**45**	**-**	**-**	**3**
Course Objectives							

C1	Identify the various biometric technologies.	
C2	Design of biometric recognition.	
C3	Develop simple applications for privacy	
C4	Understand the need of biometric in the society	
C5	Understand the scope of biometric techniques	
UNIT	**Details**	**No. of Hours**
I	**Introduction**: What is Biometrics, History, Types of biometric Traits, General architecture of biometric systems, Basic working of biometric matching, Biometric system error and performance measures, Design of biometric system, Applications of biometrics, Biometrics versus traditional authentication methods. **Face Biometrics:** Introduction, Background of Face Recognition, Design of Face Recognition System, Neural Network for Face Recognition, Face Detection in Video Sequences, Challenges in Face Biometrics, .7 Face Recognition Methods, Advantages and Disadvantages.	9
II	**Retina and Iris Biometrics:** Introduction, Performance of Biometrics, Design of Retina Biometrics, Design of Iris Recognition System, Iris Segmentation Method, Determination of Iris Region, Determination of Iris Region, Applications of Iris Biometrics, Advantages and Disadvantages **Vein and Fingerprint Biometrics:** Introduction, Biometrics Using Vein Pattern of Palm, Fingerprint Biometrics, Fingerprint Recognition System, Minutiae Extraction, Fingerprint Indexing, Experimental Results, Advantages and Disadvantages.	9
III	**Privacy Enhancement Using Biometrics:** Introduction, Privacy Concerns Associated with Biometric Deployments, Identity and Privacy, Privacy Concerns, Biometrics with Privacy Enhancement, Comparison of Various Biometrics in Terms of Privacy, Soft Biometrics. **Multimodal Biometrics:** Introduction to Multimodal Biometrics, Basic Architecture of Multimodal Biometrics, Multimodal Biometrics Using Face and Ear, Characteristics and Advantages of Multimodal Biometrics, Characteristics and Advantages of Multimodal Biometrics.	9
IV	**Watermarking Techniques:** Introduction, Data Hiding Methods, Basic Framework of Watermarking, Classification of Watermarking, Applications of Watermarking, Attacks on Watermarks, Performance Evaluation, Characteristics of Watermarks, General Watermarking Process, Image Watermarking Techniques, Watermarking Algorithm, Experimental Results, Effect of Attacks on Watermarking Techniques, Attacks on Spatial Domain Watermarking.	9
V	**Scope and Future:** Scope and Future Market of Biometrics, Biometric Technologies, Applications of Biometrics, Biometrics and Information Technology Infrastructure, Role of Biometrics in Enterprise Security, Role of	9

	Biometrics in Border Security, Smart Card Technology and Biometrics, Radio Frequency Identification (RFID) Biometrics, DNA Biometrics, Comparative Study of Various Biometric Techniques. **Biometric Standards:** Introduction, Standard Development Organizations, Application Programming Interface (API), Information Security and Biometric Standards, Biometric Template Interoperability.	
	Total	**45**
Recommended Text		
1.	Biometrics: Concepts and Applications by G.R Sinha and SandeepB.Patil , Wiley, 2013	
References Books		
1.	Guide to Biometrics by Ruud M. Bolle, SharathPankanti, Nalinik.Ratha, Andrew W.Senior, Jonathan H. Connell , Springer 2009	
2.	Introduction to Biometrics by Anil k. Jain, Arun A. Ross, KarthikNandakumar	
3.	Hand book of Biometrics by Anil K. Jain, Patrick Flynn, ArunA.Ross.	
Web Resources		
1.	https://www.tutorialspoint.com/biometrics/index.htm	
2.	https://www.javatpoint.com/biometrics-tutorial	
3.	https://www.thalesgroup.com/en/markets/digital-identity-and-security/government/inspired/biometrics	

Course Outcomes(COs)		
On successful completion of this course the students will be able to:		
CO Number	**Course Outcome(CO)Statement**	**Blooms Taxonomy Knowledge Level**
CO1	To understand the basic concepts and the functionality of the Biometrics, Face Biometrics, Types, Architecture and Applications.	K2
CO2	To know the concepts Retina and Iris Biometrics and Vein and Fingerprint Biometrics.	K2
CO3	To analyse the Privacy Enhancement and Multimodal	K3

	Biometrics.	
CO4	To get analytical idea on Watermarking Techniques	K3
CO5	To Gain knowledge on Future scope of Biometrics, and Study of various Biometric Techniques.	K3

MappingCourseOutcomeswithProgrammeOutcomesandProgrammeSpecificOutcomes:

COs/POs/ PSOs	PO 1	PO 2	PO 3	PO 4	PO 5	PSO1	PSO2	PSO
CO 1	S	M	L	M	M	L	L	L
CO 2	M	S	L	L	L	L	L	L
CO 3	S	M	L	S	M	S	L	L
CO 4	S	M	L	S	S	M	M	L
CO 5	S	M	S	L	M	L	M	S

Course Code	Type	Course Name	Category	Lecture (L)	Tutorial (T)	Practical (P)	Credit
23BCA1E20	Theory	E-commerce	DSE	-	-	45	3

Course Objectives		
C1	To Describe E-Commerce Framework.	
C2	To understand use World Wide Web, e-commerce advertising and marketing	
C3	To understand about E-Security and Ethical issues in E-Commerce	
C4	Understand the need of electronic system of payment.	
C5	Understand the scope of Information Systems and portals for E-Business.	
UNIT	**Details**	**No. of Hours**
I	**History of E-commerce and Indian Business Context**: E-Commerce – Emergence of the Internet –Emergence of the WWW – Advantages of E-Commerce – Transition to E-Commerce in India –The Internet and India – E-transition Challenges for Indian Corporate. **Business Models for E-commerce:** Business Model – E-business Models Based on the Relationship of Transaction Parties -E-business Models Based on the Relationship of Transaction Types.	9
II	**Enabling Technologies of the World Wide Web:** World Wide Web – Internet Client-Server Applications–Networks and Internets–Software Agents–Internet Standards and Specifications–ISP. **e-Marketing:**TraditionalMarketing–IdentifyingWebPresenceGoals–OnlineMarketing–E-advertising–E-branding	9
III	**E-Security:** Information system Security–Security on the Internet–E-business Risk Management Issues – Information Security Environment in India. **Legal and Ethical Issues:** Cyberstalking – Privacy is at Risk in the Internet Age– Phishing –Application Fraud –Skimming–Copyright–Internet Gambling–Threats to Children	9
IV	**e-Payment Systems:** Main Concerns in Internet Banking – Digital Payment Requirements –Digital Token-based e-payment Systems – Classification of New Payment Systems – Properties of Electronic Cash – Cheque Payment Systems on the Internet – Risk and e-Payment Systems – Designing e-payment Systems – Digital Signature – Online Financial Services in India – Online Stock Trading.	9

V	**InformationsystemsforMobileCommerce:**What is MobileCommerce?–WirelessApplications –Cellular Network – Wireless Spectrum – Technologies for Mobile Commerce –Wireless Technologies –Different Generations in Wireless Communication – Security IssuesPertainingtoCellularTechnology. **PortalsforE-Business:**Portals–HumanResourceManagement–VariousHRISModules.	9
	Total	**45**

Recommended Text	
1.	P.T.Joseph, S.J.,"E-Commerce-AnIndianPerspective", PHI 2012, 4thEdition.
References Books	
1.	DavidWhiteley,"E-CommerceStrategy,Technologies and Applications",Tata McGrawHill,2001.
2.	RaviKalakota,AndrewB.Whinston,"Frontiers of Electronic Commerce", Pearson 2006, 12th Impression.
3.	The complete E-commerce book design, build and maintain a successful web-based business, by Janice Reynolds, 2nd edition, CRC Press, Taylor & Francis Group,2017
Web Resources	
1.	https://www.tutorialspoint.com/e_commerce/index.htm
2.	https://www.javatpoint.com/online-marketing
3.	https://www.geeksforgeeks.org/e-commerce/

CourseOutcomes(COs)

Onsuccessfulcompletion ofthiscoursethestudentswillbeableto:

CO Number	CourseOutcome(CO)Statement	BloomsTaxonomy Knowledge Level
CO1	Understanding the basic electronic business management	K2
CO2	Analyze the technologies and marketing trends in Ecommerce	K2
CO3	Knowledge gain in E security, Legal and Ethical issues	K3
CO4	A clear evaluation of the e payment systems	K4
CO5	Improve the expertise in mobile commerce and apply	K4

	knowledge in development of E- Business portals	

MappingCourseOutcomeswithProgrammeOutcomesandProgrammeSpecificOutcomes:

COs/POs/ PSOs	PO 1	PO 2	PO 3	PO 4	PO 5	PSO1	PSO2	PSO3
CO 1	S	M	L	M	M	L	L	L
CO 2	M	S	L	L	L	L	L	L
CO 3	S	M	L	S	M	S	L	L
CO 4	S	M	L	S	S	M	M	L
CO 5	S	M	S	L	M	L	M	S

Course Code	Type	Course Name	Category	Lecture [L]	Tutorial [P]	Practical [P]	Credit
23BMA1G10	Theory	Statistics and its Applications I	Allied	3	1	--	3

Preamble:

- To give exposure to various measures of Central tendency and Dispersion and their applications.
- To train the students on the importance of correlation and regression analysis
- To teach the students the applications of Probability.

Pre-requisite: Knowledge of calculations Mean, Median, Mode, S.D to be recalled. 12th Standard Mathematics book.

UNIT	COURSE CONTENT	NO. OF SESSIONS
I	Measures of Averages: Mean – Median – Mode- Arithmetic Mean-Harmonic Mean-Geometric Mean-Merits and demerits-Simple Problems.	9
II	Measures of Dispersion: Definition-Various Measures-Quartile Deviation-Mean Deviation-Standard Deviation- Merits and demerits-Coefficient of variation - Measures of Skewness: Pearson's Coefficient of Skewness -Simple Problems.	9

III	Correlation: Definition - Types of Correlation – Coefficient of Correlation (statement only) - Scatter diagram - Properties of Correlation Coefficient – Problems- Rank Correlation Coefficient (statement only) – Definition - Pearson Coefficient of rank correlation - Problems with tie without tie - Simple Problems.	9
IV	Regression: Definition-Regression Coefficient-Equation of Regression lines (Statement only) - Properties of regression Coefficient- Uses of Regression lines - Simple Problems.	9
V	Probability: Definition-Types of events- Addition theorem (Statement only) – Multiplication theorem (statement only) – Simple Problems-Conditional Probability – Definition-Independent events-Baye's Theorem(Problems only).	9
TOTAL		**45**

Recommended Textbooks:

1. Business Mathematics and statistics " P.R.Vittal" Margham publications Chennai, 2006.

Suggested Reference Textbooks:

1.Fundamentals of mathematical statistics "S.C.Gupta, V.K.Kapoor", Sultan Chand & Sons, New Delhi, 2022.

2.Statistical methods, "S.P.Gupta" , Sultan Chand & Sons, New Delhi, 2014.

3.Buisness mathematics and statistics, "PA .Navanitham" , Jai Publishers, May 2014.

4.Business statistics, " S.C.Gupta, Indragupta."Himalaya publishing house, 2007.

Focus of Course: Skill Development

Level of Curriculum Relevance: National

E Course / E Content URL:https://nptel.ac.in

Course Designer: Prof. K.Sivasamy

Dean Mathematics , STC BoS Chairman

Course Outcomes(COs): On Successful completion of this course the students will able to:

Cos	**Course Outcome (CO) Statement**	**Bloom's Taxonomy Knowledge Level**
CO1	Identify the measures of averages.	K1
CO2	Classify the measures of dispersion, Coefficient of variation and Skewness.	K2
CO3	Compute the correlation and rank correlation.	K3
CO4	Analyze the regression coefficients.	K4
CO5	Explain the problems in probability, conditional probability.	K5

Mapping with Programme Outcomes and Programme Specific Outcomes:

CO/PO	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3
CO1	L	M	M	M	M	M	M	L
CO2	L	M	M	L	L	M	M	M
CO3	L	M	M	L	L	M	L	M
CO4	M	M	M	M	M	M	L	M
CO5	M	M	M	M	M	M	L	M
S – Strong; L – Low; M – Medium								

Course Code	**Type**	**CourseName**	**Category**	**Lecture (L)**	**Tutorial (T)**	**Practical(P)**	**Credit**
23BCS1N10	NME-1	**Office Automation**	Theory	25	5	-	2
Preamble: Thecourseisdesignedtoprovidetheapplicationsof officeautomation.Studentswillbeabletodevelopsimpleand effectivepresentation, documentation,databaseand excel sheet.							
Prerequisite: BasicskillsinComputeroperations.							

SYLLABUS:

Unit	**Courseconte nts**	**InstructionalHours**
I	**Introductoryconcepts:**Memoryunit–CPU-InputDevices:Keyboard,Mouseand Scanner.Outputdevices:Monitor,Printer.IntroductiontoOperatingsystems&its features:DOS–UNIX–Windows.IntroductiontoProgrammingLanguages.	6
II	**WordProcessing:**Open,Saveandcloseworddocument;Editingtext–tools, formatting,bullets;SpellChecker-Documentformatting– Paragraphalignment,indentation,headersandfooters,numbering;printing– Preview,options,merge.	6
III	**Spreadsheets:**Excel–opening,enteringtextanddata,formatting,navigating; Formulas–entering,handlingandcopying;Charts– creating,formattingandprinting,analysis tables,	6

	preparationoffinancialstatements,introductiontodataanalytics.	
IV	**DatabaseConcepts:**Theconceptofdatabasemanagementsystem;Datafield,records,andfiles,Sortingandindexingdata;Searchingrecords.Designingqueries,andreports;Linkingofdatafiles;UnderstandingProgrammingenvironmentinDBMS; Developingmenudriveapplications inquerylanguage(MS–Access).	6
V	**Powerpoint:**IntroductiontoPowerpoint-Features–Understandingslidetypecasting &viewingslides–creatingslideshows.Applyingspecialobject–includingobjects&pictures –Slide transition–Animationeffects,audioinclusion,timers.	6
Total		**30**

TextBook(s):

1. PeterNorton,"IntroductiontoComputers" –TataMcGraw-Hill.

Referencebook(s):

1.JenniferAckermanKettel,GuyHat-Davis,CurtSimmons,"Microsoft2003",TataMcGraw-Hill.

Webresources: WebcontentfromNDL/SWAYAMoropen sourcewebresources

FocusofCourse: Employability

e-Resource/e-ContentURL:
WebcontentfromNDL/SWAYAMoropensourcewebresources

CourseDesigner:TANSCHE

ChennaiHOD,CS
BoS,Chairman

CourseOutcomes(COs)

Onsuccessfulcompletion ofthis coursethestudents willbeableto:

CO Number	**CourseOutcome(CO)Statement**	**Blooms TaxonomyKnowledgeLevel**
CO1	Understandthe basicsofcomputersystemsanditscomponents.	K2
CO2	Understandandapplythebasicconceptsofawordprocessingpackage.	K2
CO3	Understandandapplythebasicconceptsofelectronicspreadsheetsoftware.	K2
CO4	Understandandapplythebasicconceptsofdatabasemanagementsystem.	K2
CO5	UnderstandandcreateapresentationusingPowerPointtool.	K2

Cos/Pos/PSOs	PO1	PO2	PO3	PSO1	PSO2	PSO3
CO1	M	L	L	M	S	L
CO2	S	M	L	S	S	M
CO3	S	M	L	S	M	S
CO4	S	M	L	S	M	S
CO5	L	S	S	L	M	S

S–Strong;**L** –Low;**M**–Medium

MappingCourseOutcomeswithProgrammeOutcomes&ProgrammeSpecificOutcomes:

Code	Type	Course Name	Category	Lecture (L)	Tutorial (T)	Practical (P)	Credit
23BCA3N20	Practical	Digital Publishing Tools-I	SBC1-NME	-	-	30	2

Preamble: The course provides hands on skills for designing.

Prerequisite: Basics of designing.

Ex. No	Course contents	Hours
1	Design and Edit master page and regular pages in Adobe Indesign.	2
2	Create a text frame and do resizing and formatting the text frame in Adobe Indesign.	2
3	Create layer panel and move object to a layer by using Adobe Indesign.	2
4	Publishing In design files for other formats and customizing print settings.	2
5	Create and managing layers in a document in Scribus.	2
6	Create and working with text in different styles by using Scribus.	3
7	Create and working with frames in Scribus.	3
8	Design and color an image in Scribus.	3
9	Create text effects-Overline to a text, Strikie a text, shading a text in Librewriter	4
10	Create a picture effects and Clip art in Librewriter	2
11	Create a page and Insert Header, Footer in Librewriter	3
12	Create a text and give hyperlink in Librewriter	2
Total		**30**

Tools to be used: Adobe Indesign, Scribus, Librewriter

Focus of Course: Employability

Course Designer: Ms. D. Manjula
Assistant Professor, Dept of BCA

Mrs. D. Geetha, HoD CS
BOS Chairman

Course Outcomes (COs)

On successful completion of this course the students will be able to:

CO Number	Course Outcome (CO) Statement	Blooms Taxonomy Knowledge Level
CO1	Apply the techniques to design Flyers	K3
CO2	Apply the techniques to design text with images	K3
CO3	Apply the techniques to design moving objects	K3
CO4	Designing a document with all features.	K3
CO5	Creating picture effects and working with frames	K3

MappingCourseOutcomeswithProgrammeOutcomesandProgrammeSpecificOutcomes:

COs/POs/ PSOs	PO 1	PO 2	PO 3	PO 4	PO 5	PSO1	PSO2	PSO3
CO 1	S	M	L	M	M	L	L	L
CO 2	M	S	L	L	L	L	L	L
CO 3	S	M	L	S	M	S	L	L
CO 4	S	M	L	S	S	M	M	L
CO 5	S	M	S	L	M	L	M	S

Course Code	Type	CourseName	Category	Lecture (L)	Tutorial (T)	Practical (P)	Credit
23BIT1N10	NME	OfficeAutomation forDocumentationLab	Practical	-		30	2

Preamble: Implement theOfficeAutomationSoftwarefeaturesforvariouspurpose

Prerequisite: BasicknowledgeonOfficeAutomationTools

SYLLABUS

Ex. No	Coursecontents	Hours
	WORDPROCESSING	
1	CreatingandFormattingadocumentwithbulletedandNumberedlist,addingHeaders, Footersand Pagenumbers)	2
2	Creatingandformattingadocumentwithchartsanddiagrams	2
3	CreatingaResume.	2
4	CreatingaNewspaperColumn withindexpage	2
5	Createamagazinedocument foryourdepartment	2
7	CreateaTableandusevariousformattingoptions	2
8	Prepareabirthdaygreetingusingtemplates	2
9	CreateaFlowcharts	2
	ELECTRONICSPREADSHEET(MSEXCEL)	
11	Formattingtheworksheets(Formattingthecell, rowsandcolumns)	2
12	Workingwithbasicfunctionsandformulae.	2
13	PresentingDatawithCharts	2
14	ConditionalFormatting(HighlightCellsRuleswithvariousoptionslikeGreaterThan,con tainedtext,lessthan	2
15	UseTop/BottomRulesinstudentmark sheet	2
16	WorkingwithSORT,FILTERforemployeedetails	2
17	Freezingrowsandcolumns	2
	Total	**30**

ReferenceBook:

1.PeterWeverka,“MicrosoftOffice2010AllinoneforDummies”,WileyIndia,20102.JohnWalkenbach,HerbTysonet.al,“Microsoftoffice2010Bible”, WileyIndia, 2010.

Recommended: Anyofficeautomationtool

Focus ofCourse: Employability

CourseDesigner:**Ms.P.Shobana**

AssistantProfessorinInformationTechnology

STC.

HOD,Dept.

BoS,Chairman.

CourseOutcomes(COs)		
Onsuccessfulcompletionofthiscoursethestudentswillbeableto:		
CONumber	**CourseOutcome(CO)Statement**	**BloomsTaxonomyKnowledge Level**
CO1	Demonstratethebasicmechanicsofcreatingworddocumentsfor Officeuse	**K2**
CO2	Createanddesignaspreadsheetforgeneralofficeuse	**K2**
CO3	Applythetoolsfordrawing	**K3**
CO4	Choosethetechniquesforanalyzingthedata	**K3**

MappingCourseOutcomeswithProgrammeOutcomes&ProgrammeSpecificOutcomes

COs/POs/ PSOs	**PO1**	**PO2**	**PO3**	**PO4**	**PO5**	**PSO1**	**PSO2**	**PSO3**	**PSO4**	**PSO5**
CO1	L	M	M	M	S	S	L	M	M	M
CO2	L	M	S	S	M	M	M	M	M	M
CO3	M	M	S	S	S	S	M	S	S	S
CO4	L	M	S	M	M	S	M	S	S	S

Course Code	CourseName	Type	Category	Lecture (L)	Tutorial (T)	Practical (P)	Credit
23BFS1N10	**Principles ofComputer Security**	**Theory**	**Concept**	**30**		**-**	**2**

SYLLABUS

Unit	Coursecontents	Hours
I	**INTRODUCTIONTOSECURITYTRENDS**:TheComputerSecurityProblem - Targets and Attacks - Ethics - Basic Security Terminology - SecurityModels	**6**
II	**Operational and Organizational Security**: Policies, Procedures, Standards,andGuidelines-TheSecurity Perimeter -PhysicalSecurity-Environmental Issues-Wireless-ElectromagneticEavesdropping -People—ASecurityProblem-People as aSecurity Tool	**6**
III	**Cryptography**: Cryptography in Practice - Historical Perspectives - Algorithms - Hashing Functions - Symmetric Encryption - AsymmetricEncryption-Quantum Cryptography-Cryptography Algorithm Us	**6**
IV	**Authentication and Remote Access**: User, Group, and Role Management - Password Policies - Single Sign-On - Security Controls and Permissions - Preventing Data Loss or Theft - The Remote Access Process - Remote AccessMethods	**6**
V	**Intrusion Detection Systems**: History of Intrusion Detection Systems - IDSOverview,IntrusionPreventionSystems-HoneypotsandHoneynets-Tools	**6**
Total		**30**

TextBook(s):

1. W.A.Coklin,G.White,PrinciplesofComputerSecurity:FourthEdition,McGrawHill,2016**Reference**

1. WilliamStallings,CryptographyandNetworkSecurityPrinciplesandPractices,Seventh Edition,Pearson
2. Achyut S. Godbole, Web Technologies: TCP/IP, Web/Java Programming, and CloudComputing,Tata McGraw-Hill Education, 2013

FocusofCourse:Employability

CourseDesigner :
Mr.Midhun S
AssistantProfessor, Dept.ofDCFS,

BoS Chairman
Prof.DGeetha
HOD,CS

CourseOutcomes(COs)		
Uponsuccessfulcompletionofthis coursethestudentswill beableto:		
CO Number	**CourseOutcome(CO) Statement**	**BloomsTaxonomyKnowledgeLevel**
CO1	Definethe fundamentalsofCybersecurity.	K1
CO2	Demonstratevarioustypesoforganizationalsecuritysystems.	K2
CO3	Outlinevariouscryptographicalgorithm	K3
CO4	Demonstratevarioussecuritymethods	K2
CO5	Implementvarious IDS	K3

MappingCourseOutcomeswithProgram OutcomesandProgram SpecificOutcomes:

COs/POs/ PSOs	**PO1**	**PO2**	**PO3**	**PO4**	**PO5**	**PSO1**	**PSO2**	**PSO3**	**PSO 4**	**PSO5**
CO1	M	M	M	S	M	M	M	S	M	M
CO2	M	M	M	S	S	S	M	M	S	S
CO3	M	M	S	S	S	S	M	S	M	M
CO4	M	M	S	S	S	S	M	S	S	S
CO5	M	S	M	M	S	S	M	M	S	S

Course Code	Type	CourseName	Category	Lecture (L)	Tutorial (T)	Practical (P)	Credit
23BAM1N10	NME	Basic PythonProgrammingLab	NME	2	-	-	2

Preamble: Basicknowledgeofanyprogramminglanguageconceptslikeconditionalstatements, iterativestatements,functions.

Prerequisite: Basicprogrammingskillsandlogicalthinking.

Syllabus:

Ex. No	Coursecontents	Hours
1	Computethe GCDoftwonumbers.	2
2	Findthesquareroot ofanumber	2
3	Exponentiation(powerofanumber)	2
4	Findthemaximum ofalist ofnumbers	2
5	Writeapythonprogramto checkwhetherthe given numberis a positive,negativeor Zero.	3
6	Writeapythonprogramto checkwhetherthe given numberis a primenumberornot.	3
7	Writeaprogram forvariousstringmethods	3
8	Writeaprogram forvarious list methods	3
9	Writeaprogram forvarious tuple methods	3
10	Writeaprogram forvarious dictionarymethods	3
11	Writeaprogram forvarious set methods	2
12	Writeaprogramforfactorialof anumber	2
Total		**30**

ReferenceBook:

1. Reema, Thareja, “Python Programming: Using Problems Solving Approach”, Oxford UniversityPress,2017.
2. Gowrishankar S, Veena, “Introduction to Python Programming”, CRC Press/Taylor & Francis,2019.

Focusof Course:-Employability

CourseDesigner:

Mr.G.Murugesan
HoD–CS

CONumber	CourseOutcome(CO)Statement	Blooms Taxonomy Knowledge
CO1	Describe the core and semantics of Python syntaxprogrammin glanguage.	K1
CO2	Infertheusageof various operators.	K2
CO3	Analysefundamentalofconditionaland loopingstatements	K3
CO4	Illustratetheprocessofstructuringthedatausinglists,dictionaries,tuples, strings and sets.	K3

MappingwithProgrammeOutcomesandProgrammeSpecificOutcomes:

COs/POs	PO1	PO2	PO3	PO4	PO5		PSO1	PSO2	PSO3	PSO4	PSO5
CO1	L	M	M	M	S		L	L	L	L	L
CO2	L	M	M	M	S		L	L	L	L	L
CO3	L	M	M	M	S		L	L	L	L	L
CO4	L	M	S	M	S		L	L	L	L	L

S– Strong; L –Low; M– Medium

Course Code	Type	CourseName	Category	Lecture (L)	Tutorial (T)	Practical (P)	Credit
23BDA1N10	NME	**Data Visualizationusing gTableau-I**	Theory	25	5	-	2
Preamble: ThiscourseenablethestudentstolearnbasicsofDataVisualizationusingTableauTool							

Unit	CourseContent	Number ofSessions
I	**A Brief Introduction to Tableau Desktop:** Starting with Tableau- Downloading theTableautrial-Installingthetrialsoftware-Lookingatthe Tableau Workspace-Viewing a sample workbook or data source- Analyzing Data- Looking back at dataanalysis- Connecting to your data in Tableau- Understanding Tableau worksheets-Startingto analyzedata.	6
II	**UnderstandingtheBasics**:TheCycleof Analytics-DataDiscovery–Datapreparation–DataAnalysis–DataStorytelling–Foundationsofbuildingvisualizations:measuresanddimensions–DiscreteandContinuousField-ChoosingChartTypes-Tableaufiletypes	6
III	**Understanding Data Connections:** Connecting to dataon a server – Connecting todata on a file – Connecting to data on a cloud-Managing data source metadata - workingwith extract instead of liveconnections	6
IV	**Visualizing Data:** Visualizing Consideration: Audience – Goal – Setting – Mode - Mood – Consistency. Chart Types Area charts- Box-and-whisker plot- Bullet graphs-Circleviews-Dualcombination-Duallines-Filledmaps-Gantt-Heatmaps-Histogram-Horizontal bars- Lines- Packed bubbles- Pie charts- Scatter plots- Stackedbars-Treemaps– Joins and Blends	6
V	**DataStory:**Keyconceptsofdashboard:Definition–Objectives–approaches.Designing dashboard: Objects. Designing for different displays and devices, Howactionswork:filteractions –highlightactions –URLactions–set actions.Stories	6
	Total	30

TextBook:

1. MollyMonsey,PaulSochan-"TableauForDummies"–2016,WileyBrandpublications.**(UnitI)**
2. JoshuaNMilligan,Tableau2019,3rdEdition-Packtpublications(UnitII –UnitV)

FocusofCourse:Employability

e-Resource/e-ContentURL:https://www.tutorialspoint.com/tableau/index.htm

COURSEDESIGNER&BOSCHAIRMAN
Dr.A.Samuel Chellathurai
HOD,Dept.ofDSA

CourseOutcomes(COs):

OnSuccessfulcompletionofthiscoursethestudentswillableto:

CO Number	CourseOutcome(CO)Statement	BloomsTaxonomyKnowledgeLevel
CO1	AnalyzedatausingTableauDesktop	K1
CO2	Useworksheetsandexplorethedata	K2
CO3	Creatingconnectionstodatasourcesandcreating calculations	K2
CO4	Implementvariousdata connectionand visualization	K3
CO5	DesignDashboardsandstoriesusingTableau	K4

MappingwithProgrammeOutcomesandProgrammeSpecificOutcomes

Cos/POs	PO1	PO2	PO3	PO4	PO5		PSO1	PSO2	PSO3	PSO4	PSO5
CO1	L	M	M	S	M		L	S	L	M	M
CO2	L	M	M	S	M		L	M	L	M	M
CO3	L	M	M	S	M		L	S	L	M	M
CO4	L	M	M	S	M		M	S	M	M	M
CO5	L	M	M	S	M		M	S	M	M	M

S–Strong;L–Low;M–Medium

COURSE CODE	Type	CourseName	Category	Lecture (L)	Tutorial (T)	Practical (P)	Credit
23BCM1N10	**SECI-** (NME)1	Practical Banking	Application	-	-	2	2
Preamble : It enables the students to gain knowledge on the organizational structure of aCompany,PANApplicationform,Form16,online transactionsandSocialnetworkingwebsites.							
Prerequisite: Nil							

Unit	CourseContents	Hours
	BankingProcedures a) Filltheapplication foropeningabankaccount b) Fillupforms: • Payin slipfordeposits • Withdrawalslip • Challanfortakingdemand draft • Fixeddeposits andRecurringdeposit forms. • Fillthejewel loanapplicationform • Fillthepersonal loanapplicationform **E-Banking** • Filltheapplication formforopeningonlineaccount • Significanceofdebit andcredit cards **Educationalloan** • Filluptheform forobtainingeducational loan **Preparationoffeasibilityreportandobtainingbankloan** Preparefeasibilityreporttoobtainaloanfromabankforstartingnewbusiness **Workingcapital financing:** • FilluptheapplicationformforgettingtheWorkingcapital finance **Stock Exchange:**Fillupthesharetransferapplicationform Fillupthesharetransferapplicationform **PANcard** -FillupthePANApplicationForm **FilingofIncome taxReturns** -Computation oftaxliabilityandFillingupof**Form16,**ITR-1to7 **OnlineShopping PurchasePayment** Visit the website relating to online reservation. Collectand present the informationrelatingto; -Onlinebusticketreservation	**30**

	- Onlineairwaysticketreservation - VisittheSocialnetworkingWebsitesandmakea purchaseorder	
Total		**30**

Note: TheSyllabus will have100%Practical

FocusofCourse:-Employability

e-Resources/e-ContentURL:

- NPTELVideo:http://nptel/index.php/search
- e-Pathshala:http://e-pathshala/index.php/search
- YouTube :http://youtube/index.php/search

CourseDesigner:	**BoS–Chairman**
Dr.P.SenthilKumar	Dr.I.Siddiq
AssociateProfessor,Dept. ofB.Com	Head,Dept.ofCommerce

CourseOutcomes(COs):

OnSuccessful completion ofthiscoursethestudentswill ableto:

CO Number	CourseOutcome(CO)Statement	Blooms TaxonomyKnowledgeLevel
CO1	Rememberthe organizational structureofacompany	**K1**
CO2	UnderstandthePANApplicationformandForm16	**K2**
CO3	Applicationofonlinetransactions	**K3**
CO4	AnalyzetheSocial networkingwebsites	**K4**

MappingwithProgrammeOutcomesandProgramme SpecificOutcomes:

CO/PO	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	S	S	S	M	M	S	S	S	M	S
CO2	S	S	M	S	M	L	S	S	S	S
CO3	S	S	M	M	S	M	S	L	S	M
CO4	S	M	M	M	M	L	M	M	M	S

S–Strong;L–Low;M–Medium

Course Code	Type	CourseName	Category	Lecture (L)	Tutorial (T)	Practical (P)	Credit
23BBC1N10	NME	**Accounting Software-I**	Theory	25	5	-	2

LearningObjectives	
LO1	ToImparttheKnowledgeofcreationofcompanyinaccounting software.
LO2	Tocreate thevariousledger and vouchersfor a company.
LO3	Topreparepurchase andsalesbook.
LO4	Tocreatedebitandcreditnote.
LO5	Topreparecash book.

Prerequisite:ShouldhavestudiedCommerceinXIIStd

Unit	Contents	No. ofHours
I	Companycreation	3
II	Ledgercreation	3
III	Vouchercreation	4
IV	Preparationofpurchase book	4
V	Preparationofpurchasereturnbook	4
VI	Preparationofsalesbook	4
VII	Preparationofsalesreturnbook	4
VIII	Preparationofcashbook	4
	TOTAL	**30**

CO	**CourseOutcomes**
CO1	Tolearnbasic accountingformatsinthecomputerized environments
CO2	Totranslatebasic accountingtransactionsinthesoftware
CO3	Tomaintainsubsidiarybooksinaccountingpackage.
CO4	Tofamiliarisethestatutoryfeaturesof computerisedaccountingpackage
CO5	Togeneratevariousstatements fordecisionmaking

Textbooks	
1	Ashok,K.Nadhani,**"TallyERP.9TrainingGuide",** BPBPublications,RevisedEdition, 2010.

ReferenceBooks	
1	Rajesh Chheda.U, Obaidmotiwala**, "Learn Tally.ERP.9",** Ane Book Pvt.Ltd**.,** Edition2013.

NOTE:LatestEditionofTextbooks MaybeUsed

WebResources	
1	https://www.youtube.com/watch?v=8A8BmxrY1dA
2	https://www.youtube.com/watch?v=v5S8-SdqlVc
3	https://www.youtube.com/watch?v=b4sMqQw-g9I

MappingWithProgrammeOutcomesandProgrammeSpecificOutcomes

	PO1	**PO2**	**PO3**	**PO4**	**PO5**	**PO6**	**PO7**	**PO8**	**PSO1**	**PSO2**	**PSO3**
CO1	3	2	3	2	2	2	3	2	3	3	2
CO2	3	2	3	2	3	2	3	2	3	3	2
CO3	3	2	3	2	3	2	3	2	3	3	2
CO4	3	2	3	2	2	2	3	2	3	3	2
CO5	3	2	3	2	2	2	3	2	3	3	2
TOTAL	15	10	15	10	12	10	15	10	15	15	10
AVERAGE	3	2	3	2	2.4	2	3	2	3	3	2

3-Strong, 2-Medium, 1-Low

CourseCode	Type	Course Name	Category	Lecture [L]	Tutorial [P]	Practical [P]	Credit
23BPA1N10	Theory	Personal Finance	SEC1	30			2

Preamble:Fundamental KnowledgeonPersonalFinance

UNIT	COURSECONTENT	NO. OFSESSIONS
I	**PersonalFinance:** Introductionandbasics–Microfactors–Financialplanningprocess – Careerplanning–Choicefactors.	6
II	**Money and credit management**:purpose – strategies – personalbudget – savings goals – techniques. Consumer credits – basics –usesandmisuses–advantages anddisadvantages–Measuring credit capacity.	6
III	**Insurance and tax planning:** Insurance – purpose – long term – disability–mediclaimpolicies–Schemeselection.Taxfundamentals–Taxsavingsthroughinvestments–electronictax filing.	6
IV	**Investmentplanning:**Investing–assetsallocation–factorsaffectingthechoiceofinvestments–investmentalternatives–sourcesofinvestmentinformation.	6
V	**Retirementandestateplanning:** purposeofretirementplanning–Retirementlivingexpenses – inflationeffect.Meaningofestateplanningpurpose – keylegal aspects	6
	TOTAL	30

RecommendedTextbooks:

1. KaniskNayan"Personal Finance–AnIndianPerspective",
2. Jack R Kapoor, Les R Dalabay, Robert J Hughes "Personal Finance" Tata McGraw-Hillpublications.Edition 2018.

SuggestedReferenceTextbooks:

1. HemaSiV.A.Avadhani, InvestmentandSecuritiesMarketin India,HimalayaPublishing House2018
2. SanjeevAgarwal,AGuideto IndianCapitalMarket,BharatPublishers.

FocusofCourse: Employability/SkillDevelopment/Entrepreneurship

LevelofCurriculumRelevance: Local/Regional/National/ InternationalNeeds

E Course / E Content

URL:http://www.moneycontrol.com
https://www.investopedia.com/

CourseDesigner:
Dr.K.Loganathan
AssociateProfessor,Dept.ofB.Com(PA) BOSChairman,STC

CourseOutcomes (COs):OnSuccessfulcompletionof thiscoursethestudentswillableto:		
COs	**CourseOutcome(CO)Statement**	**Bloom'sTaxonomyKnowledgeLevel**
CO1	Rememberthenexus of personalfinance	**K1**
CO2	Applytheknowledgeof differentfinancialplanning	**K2**
CO3	Analyzethevariousaspectsofpersonalliferisk	**K3**
CO4	Evaluatetheparameters ofdifferentalternatives	**K4**
CO5	Createafinancialmodelfortheirlife	**K5**

MappingwithProgrammeOutcomesand ProgrammeSpecificOutcomes:											
CO/PO	**PO1**	**PO2**	**PO3**	**PO4**	**PO5**	**PO6**	**PO7**	**PO8**	**PSO1**	**PSO2**	**PSO3**
CO1	3	2	2	2	2	2	2	2	1	2	2
CO2	3	2	3	3	2	2	2	2	2	2	2
CO3	3	2	3	3	2	2	2	2	2	2	2
CO4	3	2	2	3	2	2	2	2	2	2	2
CO5	3	2	3	3	2	2	2	2	2	2	2
Total	15	10	13	14	11	10	10	10	10	10	10
Average	3	2	2.6	2.8	2.2	2	2	2	2	2	2

3–Strong,2-Medium,1-Low

CourseCode	Type	CourseName	Category	Lecture [L]	Tutorial [P]	Practical [P]	Credit
23BAB1N10	Theory	Agricultural Marketing	SEC1	2			2

Preamble:FundamentalKnowledgeon Agriculturalproductsmarketing

UNIT	COURSECONTENT	NO. OFSESSIONS
I	**Agriculture market:** Agriculture market- definition - components ofagriculture market –classification. Market structure – intermediaries.Agriculturalmarketing-conceptsanddefinition–scope– stakeholders- function of agricultural marketing in India. Cooperativemarketing.Producer'ssurplus:Meaning,Typesofproducerssurplus, marketablesurplus,factorsaffectingmarketablesurplus.	**6**
II	**Agriculturalproducts:**Agriculturalproducts-characteristics.Gradingfarm products- need, methods of fruit and vegetable grading - Warehousingcorporation;centralandstate,objectives,functions,advantages.FoodcorporationofIndia-objectivesandfunctions.Efficiencyofmarketing–storage-qualitycontrol.Agriculturalproducts–AGMARK-pricingofagriculturalproducts-process,meaning,need for agricultural pricepolicy.	**6**
III	**Agricultural products Storage:** Role of transportation in agriculturalMarketing- Cold storage --Cooperative Cold Storages – new conceptsofpreservationoffoodproducts.Riskinagriculturalmarketing– significance- types of risk - futures trading - contract farming – newtrends.	**6**
IV	**Agricultural information system:** Agricultural information system-introduction- concepts - benefits - models and its implications – MISand arbitrage – storage- policy makers- MIS and agri enterprises, e-choupal,IndianAgribusinessSystemsPrivateLimited(IASL),AGMARKNET,e-NAM, APMC, AFFMMRI-challenges.	**6**
V	**AgriculturalMarketing:**AgriculturalMarketing-institutions.Schemes offered by Ministry of Agriculture, Government of India-MinistryoffoodProcessingIndustries,APEDA-NationalCo-operativeDevelopment Corporation - commodity boards: Spices board of India-Cotton corporation of India –Market research schemes. Rural MarketingModels.-Pesticideandinsecticidemarketing –casestudies.	**6**
	TOTAL	**30**

RecommendedTextbooks:

1. Acharya S.SandAgarwal NL,Agricultural Marketing in India. Oxford & IBH

SuggestedReferenceTextbooks:

1.Kahlon,A.SandTyagi.D S,1983Agricultural Price PolicyinIndia.AlliedPublishersPvt.Ltd.,

2..Kulkarni, K R.1964,AgriculturalMarketing inIndia.TheCo-operatorsBooks Depot,Mumbai.

FocusofCourse: Employability/SkillDevelopment/Entrepreneurship

LevelofCurriculumRelevance: Local/Regional/National/International Needs

- NPTELVideo:http://nptel/index.php/search
- e-Pathshala:http://e-pathshala/index.php/search
- YouTube :http://youtube/index.php/search
- www.agritech.tnau.ac.in

CourseDesigner:
Dr.K.Manikandan
AssistantProfessor,Dept.ofB.Com (ABA) BOSChairman,STC

CourseOutcomes(COs):OnSuccessfulcompletionofthiscoursethestudentswillableto:

COs	CourseOutcome(CO) Statement	Bloom'sTaxonomyKnowledgeLevel
CO1	Toknowthebasicconceptandcomponentsofagriculturalmarketing.	**K1**
CO2	Tounderstandtheagricultural products	**K2**
CO3	Toknowthe transportationandrisk inagriculturalmarketing	**K3**
CO4	TounderstandtheSchemesforagriculture.	**K4**
CO5	Toknowtheinformationsystemusageinagriculturalmarketing.	**K5**

MappingwithProgrammeOutcomesandProgrammeSpecificOutcomes:

CO/PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3
CO1	3	2	2	2	2	2	2	2	1	2	2
CO2	3	2	3	3	2	2	2	2	2	2	2
CO3	3	2	3	3	2	2	2	2	2	2	2
CO4	3	2	2	3	2	2	2	2	2	2	2
CO5	3	2	3	3	2	2	2	2	2	2	2
Total	15	10	13	14	11	10	10	10	10	10	10
Average	3	2	2.6	2.8	2.2	2	2	2	2	2	2

3– Strong, 2-Medium,1-Low

Course Code	Type	Course Name	Category	Lecture [L]	Tutorial [P]	Practical [P]	Credit
23BAS1N10	Theory	**Information Security**	Employability	2			2

Preamble	TounderstandInformationSecurity	
Prerequisite	ToapplyDigitalrightsmanagement.	

Unit	**Coursecontents**	**Hours**
I	**Informationsecurity:**HistoryofIS-Whatissecurity?-characteristic ofIS-componentsof Isystem–securitysystemlifecyclemodel.	6
II	**Cryptography:** Concepts and techniques- plain text and cipher text-Encryptionprinciples-Cryptanalysis-cryptographalgorithm-CryptographtoolsAuthenticationmethodspasswords-keysversus passwords-AttackingSystemsviapasswords-Passwordverification.	6
III	**Firewalls:**Virusesandworms-Digitalrightsmanagement--Whatis firewalls-TypesofFirewall-DesignPrinciplesofFirewall	6
IV	**Hacking:**Hackerhierarchy-passwordcracking-Phishing-spoofing-denialofservices.	6
V	**NetworkHacking**-Wirelesshacking.-Windowshacking-Webhacking-Ethicalhacking.	6
	Total	30

TextBook:

1.Dr.MichaelE.Whitman,HerbertJ.Mattord–PrinciplesandPracticeof InformationTechnology– CourseTechnologyCengageLearning4th edition,2012

2. AtulKahatoCryptographyandNetworksecurityMcGrawHillEducation3rdedition,2012

ReferenceBook:

DevanN.ShahInformationSecurityPrinciplesandPractice

Focusof Course: Employability

LevelofCurriculumRelevance:Local/Regional /NationalNeeds

E-Resource/e-ContentURL:

http://www.yourarticlelibrary.com/managerial-economics/8-types-of-pricing-strategies-normally-adopted-by-firms-economics/29028

Course Designer:Dr.A.Selvakumar AssistantProfessor Departmentof B.Com(CA).STC	**BoS Chairman: Dr.I.Siddiq** AssociateProfessor Departmentof B.Com,STC

Onsuccessfulcompletion ofthis coursethestudents willbeableto:		
CO	**CourseOutcomeStatement**	**BloomsTaxonomy KnowledgeLevel**
CO1	HistoryofIS	K1
CO2	Classify the basic concepts of Cryptograph toolsAuthenticationmethodspasswords.	K2
CO3	Apply**:**DNS,IP SEC-Social media	K3

MappingwithProgramOutcomesandProgramSpecificOutcomes

COs/POs	**PO1**	**PO2**	**PO3**	**PO4**	**PO5**		**PSO1**	**PSO2**	**PSO3**	**PSO4**	**PSO5**
CO1	3	3	1	2	2		3	1	2	3	3
CO2	2	3	2	1	1		3	2	1	2	3
CO3	2	2	3	3	1		2	3	3	2	2

3-Strong,2–Medium,1 -Low

Course Code	Type	CourseName	Category	Lecture (L)	Tutorial (T)	Practica (P)	Credit
23BBI3N10	NME-1	**DigitalBanking**	Theory	30	-	-	2
Preamble	Thestudentswillgainknowledgeontheproductsof E-Banking						
Prerequisite	BankingActivities						

Syllabus

Unit	CourseContents	Hours
1	Digital Banking: Meaning and its products- Advances of E-Banking-Constraintsin E-Banking. E-Banking Components-Traditional BankingVs E-Banking- Facets of E-Banking -E-Banking transactions - truncated cheque and Electronic cheque - Models for E-banking-completecentralizedsolution-featuresCCS-Cluster approach-Hitech.BankwithinBank.	6
2	OnlineBanking:Introduction–conceptandmeaning-theelectronicdeliverychannels-needforcomputerization-AutomaticTellerMachine(ATM)athome–ElectronicFundTransfer(EFT)-uses–computerization in clearing houses- Telebanking- Banking on homecomputers–ElectronicMoney Transfer -uses ofEMT.	6
3	Updating Bank saving accounts –Computer bank branches-FinancialTransaction Terminals- (FTT)-ECheque-Magnetic Ink CharacterRecognition (MICR) and Cheques - E-Banking in India-Procedure-Programmes-Componets-How to go on net for Online Bankingadvantages-Limitations.	6
4	E-Banking Security- Introduction need for security –Security concepts-Privacy–Survey. Findings on security-Attack-Cyber crimes-Reasons forPrivacy- Tampering-Encryption –Meaning-The encryption process-mayappear as follows - Cryptogram-Cryptanalyst-cryptography-Types ofCipher systems –Code systems-Cryptography-Cipher-Decipher-Jumbling-Asymmetric-Cryptosystem-DataEncryptionStandard(DES).	6
5	E-Builder solutions-Digital certificate-Digital Signature &ElectronicSignature-E-Security solutions—solutions providers-E-lockingtechnique- E-locking services-Netscape security solutions-Pry Zone -E-software security Internet- Transactions-Transaction security-PKI-Sierras Internet solutions-inc – security devices-Public KeyInfrastructure-(PKI)-FirewallsSecureLedger-(FSL)-SecureElectronic	6
Total		**30**

TextBook:

1.C.S.Rayudu,**"E-Business",**HimalayaPublishingHouse,2014.

ReferenceBooks: 1. 1.Dr.R.K.Uppal**,"InternetBanking**"-KunalBooks,2022 2. AbhaSingh,"**E-Banking**"-ABDPublishers,NewDelhi.2012 3. RamkumarSinha,"**BankingandE-Services**"-PacificBook Internationals,2011
FocusofCourse: Employability
E-Resource/e-ContentURL:https://www.mps.it/persone/digital-banking/digital-banking.html

Course Designer:Dr. M.Selvarani Associate Professor Dept.ofB.Com(B&I)	**BoSChairman:**

CourseOutcome

CO Number	CourseOutcome(CO)Statement	Blooms TaxonomyKnowledgeLevel
CO1	FamiliarizestudentswithE-Banking	K1
CO2	UnderstandBankingoptimizationinthedigitalplatform	K2
CO3	Investigate how security system is maintained in the E-Banking.	K3
CO4	Learnthetechniques usedinE-BankingSystem	K3

MappingCourseOutcomeswithProgram OutcomesandProgramSpecificOutcomes

Cos/ POs	PO1	PO2	PO3	PO4	PO5		PSO1	PSO2	PSO3	PSO4	PSO5
CO1	L	M	M	M	S		M	M	M	S	S
CO2	L	M	S	S	S		S	M	M	S	S
CO3	L	M	S	S	S		S	M	M	S	S
CO4	L	M	S	S	S		S	M	M	M	S

S–Strong;L –Low;M –Medium

Course Code	Type	CourseName	Category	Lecture (L)	Tutorial (T)	Practical (P)	Credit
23BBA1N10	NME	BasicsofEvent Management	Concept	2	-	-	2

LearningObjectives	
C1	Toknowthebasicofeventmanagementitsconcepts.
C2	Tomakeaneventdesign.
C3	Tomakefeasibilityanalysisforevent.
C4	Tounderstandthe5PsofEventMarketing.
C5	Toknowthefinancialaspectsofeventmanagementanditspromotion.

Unit	CourseContent	Number ofSessions
I	Introduction:EventManagement–Definition,Need,Importance,Activities.	6
II	ConceptandDesignofEvents:EventCo-ordination,Developing&, Evaluatingeventconcept–EventDesign	6
III	EventFeasibility:Resources–Feasibility,SWOTAnalysis	6
IV	EventPlanning&Promotion–Marketing&Promotion–5PsofEvent Marketing–Product,Price,Place,Promotion,PublicRelations	6
V	EventBudget–FinancialAnalysis–EventCost–EventSponsorship.	6
	Total	**30**

RecommendedTextbooks:

1. EventManagement:ABoomingIndustryandanEventfulCareerbyDeveshKishore,GangaSagar Singh -Har-AnandPublicationsPvt.Ltd.
2. EventManagementbySwarupK.Goyal-AdhyayanPublisher–2009.
3. EventManagement&PublicRelationsbySavitaMohan-EnkayPublishingHouse.
4. EventPlanning-Theultimateguide-PublicRelationsbyS.J.SebellinRoss.
5. EventManagementByLynnVanDerWagen&BrendaRCarlos,PearsonPublishers.

SuggestedReferenceTextbooks:

1. EventManagementByChaudhary,Krishna,Bio-GreenPublishers.
2. SuccessfulEventManagementByAntonShone&BrynParry.
3. Eventmanagement,anintegrated&practicalapproachByRazaqRaj,PaulWalters&TahirRashi d.
4. EventPlanningEthicsandEtiquette:APrincipledApproachtotheBusinessofSpecialEventMana gementby Judy Allen, WileyPublishers.
5. EventPlanning:Management&MarketingForSuccessfulEvents:Management&MarketingforSucc essfulEvents:BecomeanEventPlanningPro&CreateaSuccessfulEventSeriesbyAlex GenadinikCreateSpaceIndependentPublishingPlatform,2015.

FocusofCourse:Employability

LevelofCurriculumRelevance:InternationalNeeds

e-Resource/e-ContentURL:

1.https://ebooks.lpude.in/management/bba/term_5/DMGT304_EVENT_MANAGEMENT.pdf

2. https://www.inderscience.com/jhome.php?jcode=ijhemInternationalJournalofHospitality&EventManagement. 3. https://www.emeraldgrouppublishing.com/journal/ijefmInternationalJournalofEventandFestivalManagement 4. https://www.eventbrite.com/blog//?s=roundup 5. https://www.eventindustrynews.com/
CourseDesigner: TANSCHE-CHENNAI BOS Chairman–BBA

CourseOutcomes (Cos):		
Onsuccessfulcompletion of thiscoursethestudentswillableto:		
CO1	Tounderstandbasicsofeventmanagement	K2
CO2	Todesignevents	K3
CO3	Tostudyfeasibilityoforganisinganevent	K1
CO4	TogainFamiliaritywithmarketing&promotionofevent	K1
CO5	Todevelopeventbudget	K3

MappingwithProgrammeOutcomesandProgrammeSpecificOutcomes:

Cos/Pos	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
CO 1	M	S	S	S	S	S	S	S
CO 2	S	S	S	S	M	S	S	S
CO3	S	M	S	S	S	S	S	S
CO4	S	S	S	S	S	S	S	S
CO5	S	S	S	S	S	S	S	S

S–Strong; L–Low;M–Medium

Course Code	CourseName	Category	Lecture (L)	Tutorial (T)	Practical (P)	Credit
23BMA1N10	NumericalAbility-I	NME1	30	-	-	2

Preamble: Totrainthestudentsonsolvingquantitativeaptitudeproblemsinthesaidarea.

Prerequisite: BasicKnowledgeof LCM,rootsandproportion(SamcheerkalviuptoXstdlevel)

Unit	Coursecontents	Instructional hours
I	H.C.FandL.C.M ofNumbers DecimalFractions	6
II	Squarerootandcuberoot Average	6
III	PercentagesProfitandLoss	6
IV	Ratioand proportion Partnership	6
V	ChainRule Time &Work	6
	Total	**30**

TextBook(s): Dr.R.S.Aggarwal,"QuantitativeAptitiude",S.Chand&Sons,2013

Unit I :Page No 30-36,50-54UnitII :PageNo 121-122, 139-143Unit III :PageNo 215-217,256-258Unit IV:PageNo 296-299,311-314
UnitV :Page No 326-330,341-346

ReferenceBook(s):

1. Abhijit Guha Educational Consultant of Quantitative Aptitude for Competitive ExaminationsPublished byTata McGraw-Hill Education Pvt Ltd sixth Reprint 2011.
2. Kiran'sTextbookofQuickerMathematics(QuantitativeAptitudeandNumericalAbility)SatelliteBabaPublishingHouse PvtLtd.

LearningMethods(*):

Assignment/Seminar/Quiz/GroupDiscussion/Case-Study/Self-Study/etc.,

FocusofCourse:

SkillDevelopment

e-Resource/e-ContentURL:

https://www.youtube.com/watch?v=58Bx5dkTDTI

CourseDesigner:Prof.K.Sivaswamy

Dean,Mathematics,STC BoSChairman

CourseOutcomes(COs)

Onsuccessfulcompletionofthiscoursethestudentswillbeableto

CO Number	CourseOutcome(CO)Statement	BloomsTaxonomy Knowledge Level
CO1	DevelopskilltosolveproblemsonHCF,LCManddecimalfraction	K1
CO2	Familiarisesolvingproblemsonsquareroot,cuberootandaverage	K1
CO3	Enrichtheabilityinsolvingproblemsonpercentagesandprofit andloss	K3
CO4	Developabilityforsolvingproblemsin ratioandproportion,Patnership.	K3
CO5	FamiliariseproblemsonChainrule,Timeandwork	K2

MappingwithProgramOutcomesandProgramSpecificOutcomes:

COs/POs	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	**L**	**M**	**M**	**M**	**M**	**L**	**M**	**M**	**L**	**M**
CO2	**L**	**S**	**M**	**-**	**M**	**L**	**L**	**M**	**M**	**L**
CO3	**M**	**M**	**S**	**L**	**M**	**L**	**S**	**M**	**M**	**M**
CO4	**M**	**L**	**L**	**M**	**M**	**M**	**L**	**S**	**M**	**M**
CO5	**L**	**M**	**S**	**M**	**L**	**M**	**L**	**M**	**M**	**M**

S–Strong;L–Low;M –Medium

CourseCode	Type	Course Name	Category	Lecture [L]	Tutorial [P]	Practical [P]	Credit
23BEN1N10	Theory	WritingSkillsforthe Media	SEC INM E	2	-	-	2

Preamble:
Totrain thestudentson theartofmediawriting

UNIT	COURSECONTENT	NO.OF SESSIONS
I	TypesofMedia Writing-Historyof mediaNews Paperand Magazine Writing,CreativeWriting,NarrativeWriting,InterpretativeWriting	**6**
II	ReportWritingforRadioandTVProgrammes	**6**
III	Editorialwriting : Leader writing, Write-Ups , Middles, Opinion WritingLetter'sto Editor	**6**
IV	TechnicalWriting:Science,Business,Environmental	**6**
V	ArticleWritingand ConceptualWriting	**6**
	TOTAL	30

RecommendedTextbooks:
1)Chadhdha,Savita:1998:ModernJournalismandNewsWriting,Delhi, TaxshilaPrakashan,2)George,A.Hough : 2006,Newswriting,NewDelhi,KanishkaPublishers

SuggestedReferenceTextbooks:

- Pant.,N.C.2008,MediaLekhankeSidhant,Delhi,TaxshilaPrakashan
- Mishra,ChandraPrakash:2013MediaLekhanSidhantaurVyavhar, SanjayPublisher
- Mehta.Yashoddhara:2018,MedialekhanSidhant aurPrayog,Delhi,RawatPublication.Prasad. Govind and Pandey Anupam:2011, Media Lekhan aur Sampadan Kala, N. DelhiDiscoveryPubishingHouse

Focusof Course:Employability

LevelofCurriculumRelevance: InternationalNeeds

ECourse/E ContentURL:
https://www.digimat.in/nptel/courses/video/109107139/L52.html
https://www.digimat.in/nptel/courses/video/109102156/L01.html

CourseDesigner:

Mr.Jeevanantham AssistantProfessor-

Dr.J.Das BOSChairman –

CourseOutcomes(COs):OnSuccessfulcompletionof thiscoursethestudentswillableto:

COs	CourseOutcome(CO)Statement	Bloom'sTaxonomyKnowledgeLevel
CO1	Knowtheinsightsofwritings	**K1**

CO2	Understandthe various rulesin writingformedia.	**K2**
CO3	Developtheskilltowrite formalwritings.	**K3**
CO4	Emergeasa goodindustrywrite.	**K4**
CO5	Comprehendtheinsightsofwritings	**K5**

MappingwithProgrammeOutcomesand ProgrammeSpecificOutcomes:

CO/PO	**PO1**	**PO2**	**PO3**	**PO4**	**PO5**	**PSO1**	**PSO2**	**PSO3**	**PSO4**	**PSO5**
CO1	S	S	S	S	S	S	S	S	S	S
CO2	L	S	S	S	L	S	S	S	S	S
CO3	S	S	S	L	S	S	S	S	S	S
CO4	S	S	S	S	S	S	S	S	S	S
CO5	S	L	S	S	S	S	S	S	S	S

S–Strong;L–Low;M–Medium

Course Code	Type	CourseName	Category	Lecture [L]	Tutorial [P]	Practical [P]	Credit
23BPY1N10	Theory	PsychologicalWellbeing	SEC I NME I	2	-	-	2

- Preamble: To enlighten the students on the vital skills that they need to inculcatewithinthemselves inorder topreparethemselvesforabrightandoptimisticfuture;
- Tohelpthestudentsknow howpsychologyacts asabasicdrivingforceforall thebasicskills required to lead an equanimous life;

UNIT	COURSECONTENT	NO. OF SESSIONS
I	**Basics of Human Motivation:** Meaning – Nature – Basic TheoriesofMotivation-Maslow'sNeedHierarchyTheory;**ClassifyingHumanMotives:**PhysiologicalMotives–Hunger–Thirst–Sleep–Air–Shelter–AvoidanceofPain;PsychologicalMotives–Achievement–Affiliation–Power–Self Esteem-Aggression	6
II	**Basics of Human Emotions:** Emotions: Meaning – Definition – AspectsofEmotion-RobertPlutchik'sPrimaryEmotions;PhysiologicalChanges in Human Body	6
III	**BasicsofMemoryTechniques:**Memory–meaning–basicprocess;memory techniques – mnemonics – loci – key word and peg wordsystem–chunking–linkmethod.StudyHabits–Recitation–rehearsal – selection –serial position – whole vs part learning –spacedpractice – over learning.	6
IV	**Inculcating Positive Thoughts:** Defining Happiness and Wellbeingvia one dimensional and multi dimensional theories – MeasuringSubjectivewellbeingbyselfreportmeasures–StabilityandImportanceof Happiness	6
V	**MaintainingHappiness:**IncreasingHappinessandLifeSatisfaction: Intensity and Frequency of Positive emotion –Creatinggoodmood – Sustainable and maintaining happiness.	6
	TOTAL	30

Recommended Textbooks:Baron,RobertA(1997).Psychology(4th Edition).London:Allynan dBaconLtd.

SuggestedReferenceTextbooks:

- Devito,J.A(2013).TheInterpersonalCommunicationBook(13th Edition).Boston:PearsonEducationInc.pp.106-180
- Baumgardner,S.R.,&Crothers, M.K.(2009).PositivePsychology(1st

Edition).NewDelhi:DorlingKindersley(India)Pvt.Ltd.

Snyder,R.S.(2007).PositivePsychology:TheScientificandPracticalExplorationofHumanStrength.NewDelhi: SAGE Publications:Ltd.

FocusofCourse:SkillDevelopment

LevelofCurriculumRelevance: InternationalNeeds

CourseDesigner:

AshwanthKannaV,

AssistantProfessor-PSY BOSChairman– PSY

CourseOutcomes(COs):OnSuccessfulcompletionofthiscoursethestudentswillableto:

COs	CourseOutcome(CO) Statement	Bloom's Taxonomy KnowledgeLevel
CO1	Presentvariouswaysof understanding Motivation.	**K1**
CO2	Explainthe basics ofhumanemotions.	**K2**
CO3	DefinethevarioustypesofMemorytechniques	**K1**
CO4	Outlinethemeasuresofinstillingpositivethoughts	**K2**
CO5	Identifythe various methodsformaintaining happiness	**K3**

MappingwithProgrammeOutcomesandProgrammeSpecificOutcomes:

CO/PO	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	L	L	L	M	L	M	L	L	M	M
CO2	L	L	L	M	M	L	L	L	M	M
CO3	L	L	L	M	M	L	L	L	M	M
CO4	L	L	L	M	M	L	L	L	M	M
CO5	L	L	L	M	M	L	L	L	M	M

S–Strong;L–Low;M–Medium

Course Code	Type	Course Name	Category	Lecture [L]	Tutorial [P]	Practical [P]	Credit
23BCH1N10	Theory	FOODCHEMISTRY	SEC	2	-	-	2

Preamble:Highersecondarychemistry

UNIT	COURSECONTENT	NO. OFSESSIONS
I	**FoodAdulteration** Sourcesoffood,types,advantagesanddisadvantages.Foodadulteration-contaminationofCoffee,Sugar,turmeric,milk,butter and Fruits - Common adulterants, Ghee adulterants and theirdetection.Detectionofadulteratedfoodsbysimpleanalyticaltechniques.	6
II	**FoodPoison** Foodpoisons-naturalpoisons(alkaloids-nephrotoxin)-pesticides, (DDT, BHC, Malathion) -Chemical poisons - First aid forpoisonconsumedvictims.	6
III	**FoodAdditives** Food additives -artificial sweeteners – Saccharin - Cyclomate andAspartate.Foodflavours-esters,aldehydesandheterocycliccompounds – Food colours – Emulsifying agents – preservatives -leavening agents. Baking powder – yeast – tastemakers – MSG -vinegar.	6
IV	**Beverages** Beverages-softdrinks-soda-fruitjuices-alcoholicbeverages-	6

	examples. Carbonation-addiction to alcohol– diseases ofliver andsocialproblems.	
V	**EdibleOils** Fatsandoils -Sourcesofoils -productionofrefined vegetableoils- preservation.Saturated and unsaturated fats - iodine value - role ofMUFAandPUFAinpreventingheartdiseases-determinationofiodinevalue,RMvalue,saponificationvaluesandtheirsignificance.	6
	TOTAL	

RecommendedTextbooks:

1. Foodchemistry,H.K.Chopra,P.S.Panesar,Narosapublishinghouse,2010.

2. JayashreeGhosh,FundamentalConceptsofAppliedChemistry,S.Chand&Co.Publishers,second edition,2006.

3. Foodchemistry,H.K.Chopra,P. S.Panesar,Narosapublishninghouse,2010.

4. FoodChemistry,Dr.L.Rakesh Sharma,Evincepubpublishing,2022.

5. Foodprocessingandpreservation,G.Subbulakshmi,ShobhaAUdipi,PdminiSGhugre,Newage internationalpublishers,secondedition,2021.

SuggestedReferenceTextbooks:

1. H.-D.Belitz,WernerGrosch,FoodChemistrySpringerScience&BusinessMedia,4thEdition,2009.

2. M.Swaminathan,FoodScienceandExperimentalFoods,GaneshandCompany,1979.

3. Hasenhuettl,Gerard.L.;Hartel,Richard.W.FoodEmulsifiersandtheirapplicationsSpringerNew York2nded.2008.

4. FoodChemistry,H.-D.Belitz,W.Grosch,P.Schieberle,Springer,fourthrevised andextendededition,2009.

5. Principles of food chemistry, John M. deMan, John W. Finley, W. Jefferey Hurst, Chang YongLee,Springer,Fourthedition,2018.		
FocusofCourse:Employability/SkillDevelopment/Entrepreneurship		
LevelofCurriculumRelevance:Local/Regional/National/InternationalNeeds		
ECourse/EContentURL:		
CourseDesigner: Tansche-Chennai BOSChairman,STC		
CourseOutcomes(COs):OnSuccessfulcompletionofthiscoursethestudentswillableto:		
Cos	CourseOutcome(CO)Statement	Bloom's Taxonomy Knowledge Level
CO1	learnaboutFoodadulteration-contaminationof,Sugar,turmeric,milk,butterandFruits	K 1
CO2	getanawarenessaboutfoodpoisonslikenaturalpoisons(alkaloids - nephrotoxin)pesticides, DDT,BHC,Malathion	K 2
CO3	getanexposureonfoodadditives,artificialsweeteners,Saccharin,Cyclomate andAspartateinthefoodindustries	K 3
CO4	acquireknowledgeonbeverages,softdrinks,soda,fruitjuicesandalcoholicbeveragesexamples.	K 4
CO5	study about fats and oils - Sources of oils - production of refinedvegetableoils-preservation.Saturatedandunsaturatedfats–MUFAandPUFA	K 5

MappingwithProgrammeOutcomesandProgrammeSpecificOutcomes:										
CO/PO	PO1	PO2	PO3	PO4	PO5	PSO 1	PSO 2	PSO 3	PSO 4	PSO5
CO1	S	S	S	S	S	S	S	M	S	M
CO2	M	S	S	S	M	S	S	M	M	M
CO3	S	S	S	M	S	S	S	M	S	M
CO4	S	S	S	S	S	S	S	M	M	M
CO5	M	S	S	S	S	S	S	M	M	S
S–Strong;L –Low;M–Medium										

Code	**Type**	**Course Name**	**Category**	**Lecture (L)**	**Tutorial (T)**	**Practical (P)**	**Credit**
23AECSS10	Theory	Soft Skills I	AECC SS1	-	-	30	2

Preamble: The course provides hands on skills for designing.

Unit	**Course contents**	**Hours**
I	Introduction to soft skills, Significance of Soft Skills, Soft Skills vs Hard Skills. Building Confidence- Strategies for learning to build confidence - Best confidence Building Activities. Managing your Emotions- Changing the Outlook.	6
II	Confident behaviors vs Behaviors associated with Low self - confidence Understanding self and personal branding. Attitude, Types of Attitude, positive attitude, self-confidence and self–motivation.	6
III	Communication skills – Overview, Types of Communication, Principles and barriers of communication. Verbal communication skills, Oral, Telephonic and Social Media communication Non-verbal communication skills, body language, attire and etiquettes,	6

	interpersonal skills, networking, dealing with difficult people, Personal grooming, self-discipline, self-presentation	
IV	Number System, LCM & HCF, Square Root and Cube Root, Simplification	6
V	Ratio & Proportion, Partnership, Profit & Loss, Time, Work &Wages, Time & Distance	6
Total		**30**

Text Book(s) :

1. Nishit Sinha & Dinesh Khattar, "Campus Recruitment Training", Pearson India Publications, 2022 .

Reference Book(s):

1. Dale Carnegie. "How to Develop Self-Confidence & Influence People by Public Speaking ", Fingerprint Publications, 2017.
2. Sabina Pillai &Agna Fernandez. "Soft Skills and Employability Skills,Cambridge University Press", 2018.
3. "A Complete Manual for Campus Placements ", 2019, GK Publications Private Limited

Focus of Course: Employability

ONLINE RESOURCE

https://www.thebalancemoney.com/what-are-soft-skills-2060852

https://www.skillsyouneed.com/ips/what-is-communication.html

https://www.forbes.com/sites/francesbridges/2017/07/21/10-ways-to-build-confidence/

https://k12.thoughtfullearning.com/teachersguide/writers-express/45-building-vocabulary-skills

https://www.indiabix.com/

https://www.faceprep.in/quantitative-aptitude/

https://prepinsta.com/how-to-prepare-for-campus-placements/

Course Designer: M.Devi Priya

Aptitude Trainer **BoS Chairman**

Course Outcomes (COs)

On successful completion of this course the students will be able to:

CO Number	Course Outcome (CO) Statement	Blooms Taxonomy Knowledge Level
CO1	Understand the importance of soft skills needed for their profession	K2
CO2	come self-confident and self- motivated individuals to face the competitive world.	K2

CO3	Apply the verbal and non-verbal skills in professional career	K3
CO4	Identify an appropriate approach to solve quantitative problems	K2
CO5	Apply the problem-solving skills in everyday activities	K3

SEMESTER – II

Course Code	Type	Course Name	Category	Lecture [L]	Tutorial [P]	Practical [P]	Credit
23LAN2T10	Theory	பொதுத்தமிழ் - 2	Language	45	-	-	3

Learning Objectives

The Main Objectives of this Course are to:

- சுமயஇலக்கியங்களையும் சிற்றிலக்கியங்களையும் மாணவர்களுக்குஅறிமுகம் செய்தல்.
- மொழித்திறனையும் சிறுகதை இலக்கியவடிவத்தையும் மாணவர்க்குஉணர்த்துதல்.

Prerequisite:பன்னிரெண்டாம் வகுப்பில் தமிழைஒருபாடமாகப் பயின்றிருக்கவேண்டும்.

UNIT	COURSE CONTENT	No. of Sessions
I	**அலகு பக்தி இலக்கியம்** 1. திருநாவுக்கரசர்தேவாரம் - நாமார்க்கும் குடியல்லோம் எனத் தொடங்கும் எனத் தொடங்கும் பதிகம் (10 பாடல்கள்) 8. ஆண்டாள் - திருப்பாவை (முதல் 10 பாசுரம்)	9
II	**அலகு பக்தி இலக்கியம்** 1. வள்ளலார் - அருள் விளக்கமாலை (முதல் 10 பாடல்) 2. எச்.ஏ.கிருட்டிணப்பிள்ளை - இரட்சணியமனோகரம் - பால்யபிரார்த்தனை 9. குணங்குடி மஸ்தான் சாகிபு - பராபரக்கண்ணி (முதல் 10 கண்ணி)	9
III	**அலகு சிற்றிலக்கியங்கள்** 1. தமிழ்விடு தூது (முதல் 20 கண்ணி) 2. திருக்குற்றாலக் குறவஞ்சி - குறத்திமலைவளம் கூறுதல் 3. முக்கூடற்பள்ளு - நாட்டு வளம்	9
IV	**அலகுஐஏ பாடம் சார்ந்த இலக்கியவரலாறு (பல்லவர்காலம்,நாயக்கர்காலம்)** 1. பன்னிரு திருமுறைகள் 2. பன்னிரு ஆழ்வாழ்வர்கள் 4. சிற்றிலக்கியங்கள்	9
V	**அலகுஏமொழித்திறன்.்.போட்டித் தேர்வுத் திறன்** 1. தொடர் வகைகள்	9

	2. மரபுத்தொடர்,பழமொழிகள் 3. பிறமொழிச் சொற்களைக் களைதல் 4. வழூஉச் சொற்களைநீக்குதல் 5. இலக்கணக் குறிப்புஅறிதல் குறிப்பு: அலகு 4, 5 ஆகியனபோட்டித் தேர்வுநோக்கில் நடத்தப்படவேண்டும்)	
	TOTAL	45

Recommended Textbooks: -

Suggested Reference Textbooks:

5. தமிழ் இலக்கியவரலாறு - சிற்பிபாலசுப்பிரமணியன்
6. புதியநோக்கில் தமிழ் இலக்கியவரலாறு - தமிழண்ணல்
7. வகைமைநோக்கில் தமிழ் இலக்கியவரலாறு - எ.ஃ.ப். பாக்கியமேரி
8. தமிழ் இலக்கியவரலாறு - மு.வ.

Focus of Course: Employability / **Skill Development** / Entrepreneurship

Level of Curriculum Relevance: **Local / Regional /National** / International Needs

E Course / E Content URL:

• Tamil Heritage Foundation- www.tamilheritage.org <http://www.tamilheritage.org>

• Tamil virtual University Library- www.tamilvu.org/ library http://www.virtualvu.org/library

• Project Madurai - www.projectmadurai.org.

• Chennai Library- www.chennailibrary.com <http://www.chennailibrary.com>.

• Tamil Universal Digital Library- www.ulib.prg <http://www.ulib.prg>.

• Tamil E-Books Downloads- tamalebooksdownloads. blogspot.com

• Tamil Books on line- books.tamil cube.com

• Catalogue of the Tamil books in the Library of British Congress archive.org

• Tamil novels on line - books.tamilcube.com

Course Designer: TANSCHE

Chennai BOS Chairman – Tamil, STC

Course Outcomes(COs): On Successful completion of this course the students will able to:

Cos	Course Outcome (CO) Statement	Bloom's Taxonomy Knowledge Level
CO1	பக்தி இலக்கியங்களைக் கற்பதன் மூலம் பக்திநெறியையும்,சமயநல்லிணக்கத்தையும் தெரிந்துபின்பற்றுவர்.	**K1**

CO2	சிற்றிலக்கியங்களின் வழி இலக்கியச் சுவையினையும் பண்பாட்டுஅறிவினையும் பெறுவர்.	**K2**
CO3	பட்டப் படிப்பினைப் படிக்கும்போதேபெரும்பான்மையானதமிழ் இலக்கியங்கள் குறித்தஅறிவினைப் பெறுவர்.	**K3**
CO4	தமிழ்ச் சமூகப் பண்பாட்டுவரலாற்றினை இலக்கியங்கள் வாயிலாகஅறிவர்.	**K4**
CO5	போட்டித் தேர்வுகளில் வெற்றிபெறுவதற்குத் தமிழ்ப் பாடத்தினைப் பயன்கொள்ளும் வகையில் ஏற்றபயிற்சிபெறுவர்.	**K5**
K1 - Remember; K2 - Understand; K3 - Apply; K4 - Analyze; K5 Evaluate; K6 - Create		

MappingCourseOutcomeswithProgrammeOutcomesandProgrammeSpecificOutcomes:

COs/POs/ PSOs	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3
CO1	S	M	S	S	S	S	M	S
CO2	S	S	M	M	M	M	M	M
CO3	S	M	S	S	M	S	M	S
CO4	S	S	S	M	M	S	S	S
CO5	S	S	M	M	M	S	S	S

Course Code	Type	Course Name	Category	Lecture [L]	Tutorial [P]	Practical [P]	Credit
23LAN2H10	Theory	Hindi - 2	Part I	45	-	-	3

COURSEOBJECTIVE:

- A basic understanding of contemporary poetry can be gained and the nature ofmodernpoetry can berealized.
- Realizing the nature of drama and its nature and improving the knowledge ofreadingand understanding the natureofcontemporary plays.
- Understands the benefits of correspondence and can enhance thecorrespondenceyou need.
- TranslationisespeciallyusefulfortranslatingfromHinditoEnglish.

UnitNo.	Course Content	Instructional hours
I	**MODERNPOETRY:** **PANCHVATIby MYTHLISHARANGUPTA**	**15**
II	**ONEACT PLAY:EKANIKIPIYUSH** 1. Owrangjeb ki aakirirath - Ramkumar varma 2. Ek din - Lakshminarayan Misra 3. Vapasi - Vishnuprabhakar 4. Badsurathrajkumari - Krishnachandra 7. 5. Aakket- Harijeeth	**10**
III	**LETTERWRITING** (Leave Letter, Job Application, Ordering Books, Letter to Publisher,Personal Letter)	**7**
IV	**CONVERSATION**: (Doctor&Patient,Teacher&Student, Storekeeper&Buyer,TwoFriends,Booking Clerk&PassengeratRailwayStation,Autorickshawdriverand Passenger) Ref: Bolchal Ki Hindi Aur Sanchar by Dr. Madhu Dhavan VaniPrakashan, NewDelhi.	**7**
V	**TRANSLATION:HINDI-ENGLISHONLY**Lessons –1-15onlyANUVADHABYAS-III	**6**

	TOTAL	**45**

MappingCourseOutcomeswithProgrammeOutcomesandProgrammeSpecificOutcomes:

COs/POs/ PSOs	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3
CO1	S	S	S	S	S	S	S	S
CO2	M	S	S	M	S	M	S	S
CO3	S	M	M	M	M	S	S	M
CO4	L	S	L	S	L	S	L	M
CO5	S	S	M	S	L	M	L	L

S-Strong M-Medium L-Low

Course Code	Type	Course Name	Category	Lecture [L]	Tutorial [P]	Practical [P]	Credit
23LAN2M10	Theory	Malayalam - 2	Part I	45	-	-	3

COURSEOBJECTIVE:

- A basic understandingofcontemporarypoetrycan be gained andthenatureofmodern poetrycan berealized.
- Realizing the nature of drama and its nature and improving the knowledge ofreadingand understandingthe natureofcontemporaryplays.
- Understandsthebenefitsofcorrespondenceandcanenhancetheᴑrrespondence you need.
- Translationisespeciallyuseful fortranslatingfrom EnglishtoMalayalam

Unit	Course Content	Instructional hours
I	Novel-Enmakaje	15
II	Novel–Enmakaje	10
III	Memmories–NeermaathalamPootthakaalam	7
IV	Memmories–NeermaathalamPootthakaalam	7
V	Translation(EnglishtoMalayalam)	6
TOTAL		45

TextBooks:

1. Emakaje–AmbikasuthanMangad –DCBooksKottayam,Kerala
2. NeermaathalamPootthakaalam-Madhavikutty-DCBooksKottayam,Kerala

ReferenceBooks:

1. AthmakathasahithyamMalayalathil-Dr.VijayalamJayakumar(N.B.S.Kottayam)
2. MalayalaNovelSahithyaCharitram-K.M.Tharakan(N.B.S.Kottayam)
3. SahithyaCharitramPrasthanangalilude-Dr.K.MGeorge,(D.C.BooksKottayam)
4. MalayalaSahithyavimarsam-SukumarAzheekode(D.C.books)

Course Outcomes (COs)

On successful completion of this course the students will be able to:

CO Number	Course Outcome (CO) Statement	Blooms Taxonomy Knowledge Level
CO1	Getabasic understandingofMemories	K1
CO2	ItwillcreatebasicknowledgeaboutEnvironmentalPsychology.	K1
CO3	Itwillcreateawarenessaboutourenvironment.	K2
CO4	Knowledgeisgainaboutour country,cultureetc	K3
CO5	ItwillbeaneyeopenertothestudentstowardsourMotherEarth.	K4

MappingCourseOutcomeswithProgrammeOutcomesandProgrammeSpecificOutcomes:

COs/POs/ PSOs	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3
CO1	S	S	S	S	S	S	S	S
CO2	M	S	S	M	S	M	S	S
CO3	S	M	M	M	M	S	S	M
CO4	L	S	L	S	L	S	L	M
CO5	S	S	M	S	L	M	L	L

S-Strong M-Medium L-Low

Course Code	Type	Course Name	Category	Lecture [L]	Tutorial [P]	Practical [P]	Credit
23LAN2F10	Theory	French - 2	Part I	45	-	-	3

COURSEOBJECTIVE:

To understand and use familiar everyday expressions and very basic phrases aimed at the satisfaction of

needs of a concrete type.

UnitNo.	Topics	Instructional hours
1	Etape 5(Lecons 1 -3)	15
2	Etape 6(Lecons 1 -3)	10
3	Etape 7-Leçons 1 –2	7
4	Etape 7–Leçon3	7
	Etape 8–Leçon1	
5	Etape 8–Leçons 2 –3	6
	Total	45

Etapes5to8,Pages63-114

TextBookPrescribed:

Adomania1–Methodedefrancais

Authors:Céline Himber,CorinaBrillant,Sophie Erlich

Publisher: HACHETTEFLE

Availableat:GOYALPublishersandDistributorsPvtLtd,NewDelhi(9810322459)

Reference:Latitudes1

Author: YvesLoiseau,RégineMerieuxPublisher:FrenchandEuropeanPublicationsInc

Availableat:GOYALpublishersanddistributorsPvtLtd,NewDelhi(9810322459)

SWAYAM:https://swayam.gov.in/nd2_cec19_lg04/preview

byProf.NirupamaRastogi(Retd)EnglishandForeignLanguagesUniversity,Hyderabad.

Course Code	Type	Course Name	Category	Lecture [L]	Tutorial [P]	Practical [P]	Credit
23LAN2E10	Theory	English - 2	Part II	45	-	-	3

Learning Objectives	
LO1	To introduce learners to the essential skills of communication in English
LO2	To enable them use these skills effectively in academic and non-academic contexts
LO3	To help them identify and eliminate common mistakes in writing and speaking
LO4	To enable them use various business communication strategies and to use advanced vocabulary
LO5	To familiarize them in writing descriptive essays and respond to arguments orally and in writing

Unit No.	Unit Title & Text	No. of Periods for the Unit
I	**Poetry** 1.1Very Indian Poem in Indian English - Nissim Ezekiel 1.2 Still I Rise - Maya Angelou 1.3 The Flower -Tennyson 1.4 On Killing a Tree -Gieve Patel	9
II	**Prose** 2.1 If You Are Wrong Admit it- Dale Carnegie 2.2 Kindly Adjust Please - Shashi Tharoor 2.3 The Spoon-fed Age- W.R. Inge	9
III	**Fiction** Alchemist - Paulo Coelho	9
IV	**Language Competency** 4.1 Homonyms, Homophones, Homographs Portmanteau words	9

	4.2 Verbs and Tenses, Subject Verb Agreement 4.3 Error correction	
V	**English in the Workplace** 5.1 Reading for General and Specific information [charts, tables, schedules, graphs etc] 5.2 Reading news and weather reports 5.3 Writing paragraphs 5.4 Taking and making notes	9
	Total	45

Text books (Latest Editions)

1	The Alchemist - Paulo Coelho Harper – 2005

References Books
(Latest editions, and the style as given below must be strictly adhered to)

1	Advanced English Grammar. Martin Hewings. Cambridge University Press, 2000
2	Descriptive English. SP Bakshi, Richa Sharma · 2019, Arihant Publications (India) Ltd.
3	The Reading Book: A Complete Guide to Teaching Reading. Sheena Cameron, Louise Dempsey, S & L. Publishing, 2019.
4	Skimming and Scanning Techniques, Barbara Sherman, Liberty University Press, 2014
5	Brilliant Speed Reading: Whatever you need to read, however ...Phil Chambers, Pearson, 2013.
6	The Alchemist, Paulo Coelho. Harper ; Later Printing edition, 2005.

WebResources

1	Very Indian poem by Nissim Ezekiel http://econtent.in/pacc.in/admin/contents/40_%20_2020103001102714.pdf
2	Still I Rise by Maya Angelou https://www.poetryfoundation.org/poems/46446/still-i-rise
3	The Flower by Tennyson: https://www.poemhunter.com/poem/the-flower-2/
4	On Killing a tree by Gieve Patel: https://www.poemhunter.com/poem/on-killing-a-tree/
5	If you are wrong, admit it: https://www.tbr.fun/if-youre-wrong-admit-it/
6	Kindly Adjust please - Shashi Tharoor https://www.theweek.in/columns/shashi-tharoor/2018/05/25/kindly-adjust-to-our-english.html?fbclid=IwAR3IhtdXqvuV4ySECn9S7SA6HmCEYISyd1QHd3BlwKgiNKKwdkeSg3qWp-U/
7	The Spoon Fed Age: https://www.nrkacademy.com/2016/04/spoon-feeding-by-wringe.html
8	The Alchemist: https://www.youtube.com/watch?v=lxBYpmxjeDU

CourseOutcomes(COs)		
Onsuccessfulcompletion ofthiscoursethestudentswillbeableto:		
CO Number	**CourseOutcome(CO)Statement**	**Bloom's Taxonomy Knowledge Level**
CO1	Learn to introduce themselves and talk about everyday activities confidently	K1
CO2	Be able to write short paragraphs on people, places and events	K2
CO3	Identify the purpose of using various tenses and effectively employ them in speaking and writing	K2
CO4	Gain knowledge to write subjective and objective descriptions	K3
CO5	Identify and use their skills effectively in formal contexts.	K4

MappingCourseOutcomeswithProgrammeOutcomesandProgrammeSpecificOutcomes:

COs/POs/ PSOs	**PO1**	**PO2**	**PO3**	**PO4**	**PO5**	**PSO1**	**PSO2**	**PSO3**
CO1	S	S	S	S	S	S	S	S
CO2	M	S	S	S	M	M	S	S
CO3	S	S	S	M	S	S	S	S
CO4	S	S	S	S	S	S	S	S
CO5	S	M	S	S	S	S	M	S

CourseCode	Type	CourseName	Category	Lecture (L)	Tutorial (T)	Practical (P)	Credit
23BCA2C10	**Theory**	Python programming	Core 3	60	-	-	4

Course Objective	
C1	Describe the core syntax and semantics of Python programming language.
C2	Describe the control structures of Python
C3	Discover the need for working with the strings and functions.
C4	Illustrate the process of structuring the data using lists, dictionaries, tuples and sets.
C5	Understand the usage of packages and Dictionaries.

UNIT	Details	No. of Hours
I	**Introduction:** The essence of computational problem solving – Limits of computational problem solving-Computer algorithms-Computer Hardware-Computer Software-The process of computational problem solving-Python programming language - Literals - Variables and Identifiers - Operators - Expressions and Data types, Input / output.	12
II	**Control Structures:** Boolean Expressions - Selection Control - If Statement- Indentation in Python- Multi-Way Selection - Iterative Control-While Statement- Infinite loops- Definite vs. Indefinite Loops- Boolean	12

	Flag. String, List and Dictionary, Manipulations Building blocks of python programs,Understanding and using ranges.	
III	**Functions:** Program Routines- Defining Functions- More on Functions: Calling Value-Returning Functions- Calling Non-Value-Returning Functions- Parameter Passing - Keyword Arguments in Python - Default Arguments in Python-Variable Scope. Recursion: Recursive Functions	12
IV	**Objects and their use:** Software Objects - Turtle Graphics – Turtle attributes-Modular Design: Modules - Top-Down Design - Python Modules -Text Files: Opening, reading and writing text files – Database Programming: Connecting to a database, Creating Tables, INSERT, UPDATE, DELETE and READ operations, Transaction Control, Disconnecting from a database, String Processing - Exception Handling	12
V	**Dictionaries and Sets:** Dictionary type in Python - Set Data type. Object Oriented Programming using Python: Encapsulation - Inheritance – Polymorphism. Python packages: Simple programs using the built-in functions of packages matplotlib, numpy, pandas etc.	12
	Total	**60**

Text Books

1	Charles Dierbach, “Introduction to Computer Science using Python - A computational Problem solving Focus”, Wiley India Edition, 2015.
2	Wesley J. Chun, “Core Python Applications Programming”, 3rd Edition , Pearson Education, 2016

Reference Books

1.	Mark Lutz, “Learning Python Powerful Object Oriented Programming”, O’reilly Media 2018, 5th Edition.
2.	Timothy A. Budd, “Exploring Python”, Tata MCGraw Hill Education Private Limited 2011, 1 st Edition.
3.	John Zelle, “Python Programming: An Introduction to Computer Science”, Second edition, Course Technology Cengage Learning Publications, 2013, ISBN 978- 1590282410
4.	Michel Dawson, “Python Programming for Absolute Beginers” , Third Edition, Course Technology Cengage Learning Publications, 2013, ISBN 978-1435455009

Web Resources

1.	http://interactivepython.org/courselib/static/pythonds2
2.	http://www.ibiblio.org/g2swap/byteofpython/read/
3.	http://www.diveintopython3.net/http://greenteapress.com/wp/think-python-2e/

FocusofCourse: Employability

CourseOutcomes(COs)		
Onsuccessfulcompletion ofthiscoursethestudentswillbeableto:		
CO Number	**CourseOutcome(CO)Statement**	**BloomsTaxonomy KnowledgeLevel**
CO1	Develop and execute simple Python programs.	K1
CO2	Write simple Python programs using conditionals and looping for solving problems	K2
CO3	Decompose a Python program into functions.	K2
CO4	Represent compound data using Python lists, tuples, dictionaries etc.	K3
CO5	Read and write data from/to files in Python programs.	K3

MappingCourseOutcomeswithProgrammeOutcomesandProgrammeSpecificOutcomes:

COs/POs/ PSOs	**PO1**	**PO2**	**PO3**	**PO4**	**PO5**	**PSO1**	**PSO2**	**PSO3**
CO1	**S**	L	M	L	M	L	L	L
CO2	M	**S**	M	M	M	L	L	L
CO3	M	M	M	**S**	L	M	M	M
CO4	M	M	M	M	M	**S**	M	M
CO5	M	M	M	M	M	M	**S**	M

CourseCode	Type	CourseName	Category	Lecture (L)	Tutorial (T)	Practical (P)	Credit
23BCA2C20	**Practical**	Practical : Python Programming	Core 4	**-**	**-**	**60**	**4**

Course Objective	
C1	To implement the python programming features in practical applications.
C2	To write, test, and debug simple Python programs.
C3	To implement Python programs with conditionals and loops.
C4	Use functions for structuring Python programs.
C5	Represent compound data using Python lists, tuples, dictionaries, turtles, Files and modules.

S.NO.	Details	No. of Hours
1	Program to convert the given temperature from Fahrenheit to Celsius and vice versa depending upon user's choice	5
2	Program to calculate total marks, percentage and grade of a student. Marks obtained in each of the five subjects are to be input by user. Assign grades according to the following criteria: ● Grade A: Percentage >=80 Grade B: Percentage >=70 and <80 ● Grade C: Percentage >=60 and <70 Grade D: Percentage >=40 and <60	5

	Grade E: Percentage <40	
3	Program, to find the area of rectangle, square, circle and triangle by accepting suitable input parameters from user.	5
4	Program to display the first n terms of Fibonacci series.	5
5	Program to find factorial of the given number using recursive function.	5
6	Write a Python program to count the number of even and odd numbers from array of N numbers.	5
7	Python function that accepts a string and calculate the number of uppercase letters and lower case letters.	5
8	Python program to reverse a given string and check whether the give string is palindrome or not.	5
9	Write a program to find sum of all items in a dictionary.	5
10	Write a Python program to construct the following pattern, using a nested loop 1 22 333 4444 55555 666666 7777777 88888888 999999999	5
11	Read a file content and copy only the contents at odd lines into a new file.	5
12	Create a Turtle graphics window with specific size.	5
	Total	**60**
Text Book		
1	Charles Dierbach, “Introduction to Computer Science using Python - A computational Problem solving Focus”, Wiley India Edition, 2015.	

Reference Books	
1.	Mark Lutz, “Learning Python Powerful Object-Oriented Programming”, O’reilly Media 2018, 5th Edition.
2.	Timothy A. Budd, “Exploring Python”, Tata MCGraw Hill Education Private Limited 2011, 1 st Edition.
3.	John Zelle, “Python Programming: An Introduction to Computer Science”, Second edition, Course Technology Cengage Learning Publications, 2013, ISBN 978- 1590282410
4.	Michel Dawson, “Python Programming for Absolute Beginers” , Third Edition, Course Technology Cengage Learning Publications, 2013, ISBN 978-1435455009
Web Resources	
1.	**http://interactivepython.org/courselib/static/pythonds2**
2.	http://www.ibiblio.org/g2swap/byteofpython/read/
3.	http://www.diveintopython3.net/http://greenteapress.com/wp/think-python-2e/
4.	NPTEL & MOOC courses titled Python programming
5.	http://spoken-tutorial.org/tutorial-search/? search_ foss= Python&search _language = English
6.	http://docs.python.org/3/tutorial/index.html
Recommended Toolstobeused: Python 3.7	
FocusofCourse: Employability	

CourseOutcomes(COs)		
Onsuccessfulcompletion ofthiscoursethestudentswillbeableto:		
CO Number	**CourseOutcome(CO)Statement**	**BloomsTaxonomy Knowledge Level**
CO1	To understand the problem-solving approaches	K2
CO2	To learn the basic programming constructs in Python	K3
CO3	To practice various computing strategies for Python-based solutions to real world problems	K3
CO4	To use Python data structures - lists, tuples, dictionaries.	K4
CO5	To do input/output with files in Python.	K4

MappingCourseOutcomeswithProgrammeOutcomesandProgrammeSpecificOutcomes:

COs/POs/ PSOs	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3
CO1	**S**	L	M	L	M	M	M	M
CO2	M	**S**	M	M	M	M	M	M
CO3	M	M	M	**S**	L	S	M	S
CO4	M	M	M	M	M	S	M	S
CO5	M	M	M	M	M	S	M	S

CourseCode	Type	CourseName	Category	Lecture (L)	Tutorial (T)	Practical (P)	Credit
23BCA2E10	**Theory**	Cyber Forensics	DSE	**45**	**-**	**-**	**3**

Course Objective	
C1	Understand the definition of computer forensics fundamentals.
C2	To study about the Types of Computer Forensics Evidence
C3	Understand and apply the concepts of Duplication and Preservation of Digital Evidence
C4	Understand the concepts of Electronic Evidence and Identification of Data
C5	To study about the Digital Detective, Network Forensics Scenario, Damaging Computer Evidence.

UNIT	Details	No. of Hours
I	**Overview of Computer Forensics Technology:** Computer Forensics Fundamentals: What is Computer Forensics? Use of ComputerForensics in Law Enforcement, Computer Forensics Assistance to HumanResources/Employment Proceedings, Computer Forensics Services, Benefits of professionalForensics Methodology, Steps taken by Computer Forensics Specialists. Types of Computer.Forensics Technology: Types of Business Computer Forensic, Technology–Types ofMilitary Computer Forensic Technology–Types of Law Enforcement–Computer Forensic. Technology–Types of Business Computer Forensic Technology.	9
II	**Computer Forensics Evidence and capture:** Data Recovery: Data Recovery Defined, Data Back–up and Recovery, The Role of Back –up in Data Recovery, The Data –Recovery Solution. Evidence Collection and Data Seizure: Collection Options, Obstacles, Types of Evidence, The Rules of Evidence, Volatile Evidence, General Procedure, Collection and Archiving, Methods of Collections, Artefacts, Collection Steps, Controlling Contamination: The chain of custody.	9
III	**Duplication and Preservation of Digital Evidence:** Processing steps, Legal Aspects of collecting and Preserving Computerforensic Evidence. Computer image Verification and Authentication: Special needs of Evidential Authentication, Practical Consideration, Practical Implementation.	9
IV	**Computer Forensics Analysis:** Discovery of Electronic Evidence - ElectronicDocument Discovery - A Powerful New Litigation Tool. Identification of Data: Time Travel, Forensic Identification and Analysis of Technical Surveillance Devices.	9
V	**Reconstructing Past Events:** How to Become a Digital Detective, Useable File Formats,Unusable File Formats, Converting Files. **Networks:** Network Forensics Scenario, a technical approach, Destruction Of E–Mail, Damaging Computer Evidence, Documenting the Intrusion on Destruction of Data, System Testing.	9
	Total	**45**
Text Book		
1	John R. Vacca, "Computer Forensics: Computer Crime Investigation", 3/E ,Firewall Media, New Delhi, 2002.	
Reference Books		
1.	Nelson, Phillips Enfinger, Steuart,"Computer Forensics and Investigations" Enfinger, Steuart, CENGAGE Learning, 2004.	
2.	Anthony Sammes and Brian Jenkinson,"Forensic Computing: A Practitioner's Guide", Second Edition, Springer–Verlag London Limited, 2007.	

3	.RobertM.Slade," Software Forensics Collecting Evidence from the Scene of a Digital Crime", TMH 2005.
Web Resources	
1	https://www.vskills.in
2	https://www.hackingarticles.in/best-of-computer-forensics-tutorials/
3	https://www.softwaretestinghelp.com/digital-forensics/
4	https://www.tutorialspoint.com/python_digital_forensics/index.htm

CourseOutcomes(COs)

Onsuccessfulcompletion ofthiscoursethestudentswillbeableto:

CO Number	**CourseOutcome(CO)Statement**	**BloomsTaxonomy Knowledge Level**
CO1	Understand the definition of computer forensics fundamentals.	K2
CO2	Evaluate the different types of computer forensics technology.	K2
CO3	Analyze various computer forensics systems.	K3
CO4	Apply the methods for data recovery, evidence collection and data seizure.	K3
CO5	Gain your knowledge of duplication and preservation of digital evidence.	K3

Mapping Course Outcomeswith Programme Outcomesand Program meSpecificOutcomes:

COs/POs/ PSOs	**PO 1**	**PO 2**	**PO 3**	**PO 4**	**PO 5**	**PSO1**	**PSO2**	**PSO**
CO 1	S	M	L	M	M	L	L	L
CO 2	M	S	L	L	L	L	L	L
CO 3	S	M	L	S	M	S	L	L
CO 4	S	M	L	S	S	M	M	L
CO 5	S	M	S	L	M	L	M	S

CourseCode	Type	CourseName	Category	Lecture (L)	Tutorial (T)	Practical (P)	Credit
23BCA1E20	**Theory**	Information Security	DSE	**-**	**-**	**45**	**3**

Course Objectives	
C1	To know the objectives of information security
C2	Understand the importance and application of each of confidentiality, integrity, authentication and availability
C3	Understand various cryptographic algorithms

C4	Understand the basic categories of threats to computers and networks	
C5	To study about the concepts of security in networks, web security	
UNIT	**Details**	**No. of Hours**
I	IntroductionIntroductionto Information Security: Security mindset, Computer Security Concepts (CIA), Attacks, Vulnerabilities and protections, Security Goals, Security Services, Threats, Attacks, Assets, malware, program analysis and mechanisms	9
II	**The Security Problem in Computing:** The meaning of computer Security, Computer Criminals, Methods of Défense. **Cryptography:** Concepts and Techniques: Introduction, plain text and cipher text, substitution techniques, transposition techniques, encryption and decryption	9
III	**Symmetric and Asymmetric Cryptographic Techniques:** DES, AES, RSA algorithms. **Authentication and Digital Signatures:** Use of Cryptography for authentication, Secure Hash function, Key management – Kerberos	9
IV	**Program Security:** Non-malicious Program errors – Buffer overflow, Incomplete mediation, Time-of-check to Time-of- use Errors, Viruses, Trapdoors, Salami attack, Man-in-the- middle attacks, Covert channels. File protection Mechanisms, User Authentication Designing Trusted O.S: Security polices, models of security, trusted O.S design, Assurance in trusted O.S. Implementation examples	9
V	**Security in Networks:** Threats in networks, Network Security Controls – Architecture, Encryption, Content Integrity, Strong Authentication, Access Controls, Wireless Security, Honeypots, Traffic flow security. Web Security: Web security considerations, Secure Socket Layer and Transport Layer Security, Secure electronic transaction	9
	Total	**45**
Recommended Text		
1.	Security in Computing, Fourth Edition, by Charles P. Pfleeger, Pearson Education	
2.	Cryptography And Network Security Principles And Practice, Fourth or Fifth Edition, William Stallings, Pearson	
References Books		
1.	Cryptography and Network Security: C K Shyamala, N Harini, Dr T R Padmanabhan, Wiley India, lst Edition	
2.	Cryptography and Network Security : Forouzan Mukhopadhyay, Mc Graw Hill, 2"d	

	Edition
3.	Information Security, Principles and Practice: Mark Stamp, Wiley India
4.	Principles of Computer Sceurity: WM.Arthur Conklin, Greg White, TMH
Web Resources	
1.	https://www.geeksforgeeks.org/what-is-information-security/
2.	https://www.tutorialspoint.com/what-is-information-security#:~:text=Information%20security%20is%20designed%20and,destruction%2C%20alteration%2C%20and%20disruption.
3.	https://www.w3schools.com/cybersecurity/

CourseOutcomes(COs)		
Onsuccessfulcompletion ofthiscoursethestudentswillbeableto:		
CO Number	**CourseOutcome(CO)Statement**	**BloomsTaxonomy Knowledge Level**
CO1	Understand network security threats, security services, and countermeasures	K2
CO2	Understand vulnerability analysis of network security	K2
CO3	Acquire background on hash functions; authentication; firewalls; intrusion detection techniques	K3
CO4	Gain hands-on experience with programming and simulation techniques for security protocols.	K3
CO5	Apply methods for authentication, access control, intrusion detection and prevention	K3

MappingCourseOutcomeswithProgrammeOutcomesandProgrammeSpecificOutcomes:

COs/POs/ PSOs	**PO 1**	**PO 2**	**PO 3**	**PO 4**	**PO 5**	**PSO1**	**PSO2**	**PSO**
CO 1	S	M	L	M	M	L	L	L
CO 2	M	S	L	L	L	L	L	L

CO 3	S	M	L	S	M	S	L	L
CO 4	S	M	L	S	S	M	M	L
CO 5	S	M	S	L	M	L	M	S

CourseCode	**Type**	**CourseName**	**Category**	**Lecture (L)**	**Tutorial (T)**	**Practical (P)**	**Credit**
23BCA1E20	Theory	Human Computer Interaction	DSE	-	-	**45**	**3**

Course Objectives		
C1	To learn about the foundations of Human Computer Interaction.	
C2	To learn the design and software process technologies.	
C3	To learn HCI models and theories.	
C4	To learn Mobile Ecosystem.	
C5	To learn the various types of Web Interface Design.	
UNIT	**Details**	**No. of Hours**
I	**FOUNDATIONS OF HCI :** ● The Human: I/O channels – Memory ● Reasoning and problem solving; The Computer: Devices – Memory – processing and networks; Interaction: Models – frameworks – Ergonomics – styles – elements – interactivity- Paradigms. - Case Studies	9
II	**DESIGN & SOFTWARE PROCESS:** ● Interactive Design: ● Basics – process – scenarios ● Navigation: screen design Iteration and prototyping. ● HCI in software process: Software life cycle – usability engineering – Prototyping in practice – design rationale. Design rules: principles, standards, guidelines, rules. Evaluation Techniques – Universal Design	9
III	**MODELS AND THEORIES:** HCI Models: Cognitive models: Socio-Organizational issues and stakeholder requirements Communication and collaboration models-Hypertext, Multimedia and WWW.	9
IV	**Mobile HCI:** ● Mobile Ecosystem: Platforms, Application frameworks ● Types of Mobile Applications: Widgets, Applications, Games ● Mobile Information Architecture, Mobile 2.0, Mobile Design: Elements of Mobile Design, Tools. - Case	9

	Studies	
V	**WEB INTERFACE DESIGN:** Designing Web Interfaces – Drag & Drop, Direct Selection, Contextual Tools, Overlays, Inlays and Virtual Pages, Process Flow - Case Studies	9
	Total	**45**

Recommended Text	
1	Alan Dix, Janet Finlay, Gregory Abowd, Russell Beale, ”Human -Computer Interaction‖”, III Edition, Pearson Education, 2004 (UNIT I, II & III)
2	Brian Fling,”Mobile Design and Development”, I Edition, O‘Reilly Media Inc., 2009(UNIT–IV)
3	Bill Scott and Theresa Neil, ―Designing Web Interfaces‖, First Edition, O‘Reilly, 2009. (UNIT-V)

References Books	
1.	Shneiderman, “Designing the User Interface: Strategies for Effective Human-Computer Interaction”, V Edition, Pearson Education.
2.	The Human-Computer Interaction Handbook Fundamentals, Evolving Technologies and Emerging Applications, Second Edition, Andrew Sears, Julie A. Jacko.

Web Resources	
1.	https://www.interaction-design.org/literature/topics/human-computer-interaction
2.	https://link.springer.com/10.1007/978-0-387-39940-9_192
3.	https://en.wikipedia.org/wiki/Human%E2%80%93computer_interaction
4.	https://www.tutorialspoint.com/human_computer_interface/index.htm

CourseOutcomes(COs)		
Onsuccessfulcompletion ofthiscoursethestudentswillbeableto:		
CO Number	**CourseOutcome(CO)Statement**	**BloomsTaxonomy Knowledge Level**

CO1	Understand the fundamentals of HCI.	K2
CO2	Understand the design and software process technologies.	K2
CO3	Understand HCI models and theories.	K3
CO4	Understand Mobile Ecosystem, types of Mobile Applications, mobile Architecture and design.	K4
CO5	Understand the various types of Web Interface Design.	K4

MappingCourseOutcomeswithProgrammeOutcomesandProgrammeSpecificOutcomes:

COs/POs/ PSOs	PO 1	PO 2	PO 3	PO 4	PO 5	PSO1	PSO2	PSO
CO 1	S	M	L	M	M	S	S	S
CO 2	M	S	L	L	L	S	S	S
CO 3	S	M	L	S	M	S	S	S
CO 4	S	M	L	S	S	S	S	S
CO 5	S	M	S	L	M	S	S	S

Course Code	Type	Course Name	Category	Lecture [L]	Tutorial [P]	Practical [P]	Credit

23BMA2G20	Theory	Statistics and its Applications II	Allied	3	1	--	3

Preamble:

- To give emphasis on application of distribution and application of large sample tests, small sample tests and Chi-Square distribution and quality control technique.

Pre-requisite:

To recall the problem solving skill on Binomial, Poisson, Normal distribution taught at HSC level.

UNIT	COURSE CONTENT	NO. OF SESSIONS
I	Binomial Distribution: Definition-Simple Problems- Poisson Distribution: Definition-Simple Problems- Normal Distribution – Properties- Uses - Simple Problems.	9
II	Large Samples:Population –Sample – Parametric and statistic – Sampling Distributionn of Mean -Test of Hypothesis-Hypothesis testing procedure-Significance level.Large sample test-Test for a specified mean-Test for equality of two means - test for the equality of two proportions - Simple Problems.	9
III	Small Samples t-test: t distribution – uses-Test for a specified mean-Test of significance for the difference between two population means when populationstandard deviations are not known - Simple Problems.	9
IV	Small samples- Chi square test: Definition of Chi square- Uses of Chi square test- Testing the significance of the difference between the observed and expected frequencies- Test of independence of attributes- 2×2 Contingency table - Simple Problems.	9
V	Statistical Quality Control:Definition-Causes of variations-Control chart-Control chart for variables - Construction of $\bar{X}$chart , R Chart- np Chart - C Chart – p chart- Simple Problems.	9
TOTAL		**45**

Recommended Textbooks:

1. Business Mathematics and statistics " P.R.Vittal" Margham publications Chennai, 2006.-

Suggested Reference Textbooks:

1.Fundamentals of mathematical statistics "S.C.Gupta, V.K.Kapoor", Sultan Chand & Sons, New Delhi,

2022.

2.Statistical methods, "S.P.Gupta" , Sultan Chand & Sons, New Delhi, 2014.

3.Business mathematics and statistics, "PA .Navanitham" , Jai Publishers, May 2014.

4. Business statistics, " S.C.gupta, Indragupta "Himalaya publishing house, 2007.

5. Probability statistics and Queueing theory "P.Kandasamy, K.Thilagavathy,K.Gunavathi", Sultan Chand, 2005.

Focus of Course: Employability

Level of Curriculum Relevance: International Needs

E Course / E Content URL:https://nptel.ac.in

Course Designer: Prof. K.Sivasamy

Dean Mathematics , STC BoS Chairman

Course Outcomes(COs): On Successful completion of this course the students will able to:

Cos	Course Outcome (CO) Statement	Bloom's Taxonomy Knowledge Level
CO1	Recognize Binomial, poisson& Normal distributions.	K1
CO2	Discuss tests ofLarge sample.	K2
CO3	Apply tests of small samples.	K3
CO4	Calculate Chi- Square test, test of independence attributes.	K4
CO5	Construction ofvarious charts for statistical Quality Control.	K5

Mapping with Programme Outcomes and Programme Specific Outcomes:

CO/PO	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3
CO1	S	L	S	-	-	S	M	L
CO2	M	L	S	L	-	S	M	M
CO3	S	L	S	L	-	S	M	M
CO4	S	L	S	-	-	S	M	M
CO5	S	L	S	-	-	S	M	M

S – Strong; L – Low; M – Medium

Course Code	Type	CourseName	Category	Lecture(L)	Tutorial(T)	Practical(P)	Credit
23BCS2N10	NME2/ SEC2	MultimediaSystemsLab	Practical	-	2	30	2

Preamble: ImplementmultimediaConcepts todevelopvariousapplications.

Prerequisite: Basicknowledgeonapplicationdevelopmentideas.

SYLLABUS

Ex.No	Coursecontents	InstructionalHours
1	UsethefollowingtoolsandeditaimageinPhotoshop:BasicSelectionTools,RectangularMarqueeTool,MovingtheMarquee,Objectselectiontool,MakingaPerfectCircle,	3
2	CreatelightingeffectsinPhotoshop.	3
3	CropanimagewiththehelpofcroptoolinPhotoshopandusesaveasoption.	3
4	CreateaSunflowerandWaterdropsusingPhotoshop.	3
5	ConvertaBlackandWhitePhototoColorPhotousingPhotoshop	3
6	Uploadanimageandworkwithdifferentfiltersoption.	3
7	Animateanimagewithimplementingtheconceptof Layers.	3
8	AnimateaPlaneFlyingintheCloudsusingPhotoshop.	3
9	CreatePlasticSurgeryforthe NoseusingPhotoshop.	3
10	CreateRolloverbuttonusingPhotoshop.	3
	Total	**30**

ReferenceBook:

1.Ranjan Parekh, **"Principles of Multimedia(2/e)"**, Tata McGraw-Hill Publishing Company Limited, New Delhi,2012

Recommended: Photoshop

FocusofCourse: Employability

CourseDesigner: **TANSCHEHOD,Dept.ofComputerScience**

Chennai BoS,Chairman.

CourseOutcomes(COs)		
Onsuccessfulcompletionofthiscoursethestudentswillbeableto:		
CO Number	**CourseOutcome(CO)Statement**	**Blooms TaxonomyKnowledgeLevel**
CO1	Applythefundamentalconceptsofmultimediaprogramming.	K3
CO2	Makeuseofvariousimageeditingtools.	K3
CO3	Developmultimediaprogramstoimplementdesigningandstreamingconcepts.	K3
CO4	Examinethetoolsfordevelopingrealtimeapplications	K4

MappingCourseOutcomeswithProgrammeOutcomes&ProgrammeSpecificOutcomes:

COs/POs/PSOs	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	L	M	M	M	S	S	L	M	M	M
CO2	L	M	S	S	M	M	M	M	M	M
CO3	M	M	S	S	S	S	M	S	S	S
CO4	L	M	S	M	M	S	M	S	S	S

S–Strong;L–Low;M–Medium

Code	Type	Course Name	Category	Lecture (L)	Tutorial (T)	Practical (P)	Credit
23BCA2N10	Practical	Digital Publishing Tools-II	SBC – NME II	-	-	30	2

Preamble: The course provides hands on skills for designing.

Prerequisite: Basics of designing.

Ex. No	Course contents	Hours
1	Create and Design Event posters by using Canva.	2
2	Create a Design a resume for a relevant character by using Canva.	2
3	Create a cover by using Canva.	2
4	Create a Graph and Chart by using Canva.	2
5	Design a flyer for college event by using Design Cap.	2
6	Design a Facebook Cover by using Design Cap.	3
7	Create a logo for event by using Design Cap.	3
8	Create and Schedule a timetable of your class by using Design Cap.	3
9	Adding Titles and Text in CorelDraw.	4
10	Create a design and Shaping background -Shaping, Trimming, Welding in Corel draw.	2
11	Creating and working with objects in Corel draw.	3
12	Create a College Advertisement in Corel draw.	2
Total		**30**

Tools to be used: Adobe Indesign, Scribus, Librewriter

Focus of Course: Employability

Course Designer: Ms. D. Manjula
Assistant Professor, Dept of BCA

Mrs. D. Geetha, HoD CS
BOS Chairman

Course Outcomes (COs)

On successful completion of this course the students will be able to:

CO Number	Course Outcome (CO) Statement	Blooms Taxonomy Knowledge Level
CO1	Apply various tools for designing in Canva	K3
CO2	ıke use of Design Cap tool and its techniques	K3
CO3	Design applications to demonstrate the usage of tools in	K3

	Corel draw.	
CO4	Design Face book covers and logos for events	K3
CO5	Make use of tools Corel draw tools	K3

MappingCourseOutcomeswithProgrammeOutcomesandProgrammeSpecificOutcomes:

COs/POs/ PSOs	**PO 1**	**PO 2**	**PO 3**	**PO 4**	**PO 5**	**PSO1**	**PSO2**	**PSO**
CO 1	S	M	L	M	M	S	S	S
CO 2	M	S	L	L	L	S	S	S
CO 3	S	M	L	S	M	S	S	S
CO 4	S	M	L	S	S	S	S	S
CO 5	S	M	S	L	M	S	S	S

Course Code	Type	CourseName	Category	Lecture (L)	Tutorial (T)	Practical (P)	Credit
23BIT2N10	NME	OfficeAutomationfor Presentation	Practical	-		30	2

Preamble: Implement theOfficeAutomationSoftwarefeaturesforvariouspurpose

Prerequisite: BasicknowledgeonOfficeAutomationTools

SYLLABUS

Ex. No	Coursecontents	Hours
	POWERPOINT	
1.	PresentationusingTextwithanimation	3
2.	Creatingaphotoalbum	3
3.	CreatingaPresentationwithAudioandVideo	3
4.	Copingcontentfromdifferentpresentation	3
5.	CreateTablesandCharts inyourpresentation	3
6.	UseClipart andSmartArt inyourpresentation	3
7.	WorkingwithDrawing Tools	3
8.	Embeddingwebcontentinyourpresentation	3
9.	CreatingaTemplateslide	3
10	AddingTransitionsandAnimations	3
	Total	**30**

ReferenceBook:

1.PeterWeverka,"MicrosoftOffice2010AllinoneforDummies",WileyIndia,20102.JohnWalkenbach,HerbTysonet.al,"Microsoftoffice2010 Bible",WileyIndia, 2010.

Recommended: Anyofficeautomationtool

Focus ofCourse: Employability

CourseDesigner: **Ms.P.ShobanaMs.D.Geetha**

AssistantProfessorinInformationTechnology HOD,Dept.

STC. BoS,Chairman.

CourseOutcomes (COs)

Onsuccessfulcompletionofthiscoursethestudentswillbeableto:

CONumber	CourseOutcome(CO)Statement	Blooms TaxonomyKnowledge Level
CO1	Usethepresentationtoolinaudio,videoandanimation	**K3**
CO2	Illustratethewaystoperformtheoperationslikecopyingetc	**K3**
CO3	Applythedrawingorthepicturesinthepresentation	**K3**
CO4	Composethealbumwithtransitionsand animations	**K3**

MappingCourseOutcomeswith ProgrammeOutcomes&ProgrammeSpecificOutcomes

COs/POs/ PSOs	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	L	M	M	M	S	S	L	M	M	M
CO2	L	M	S	S	M	M	M	M	M	M
CO3	M	M	S	S	S	S	M	S	S	S
CO4	L	M	S	M	M	S	M	S	S	S

Course Code	CourseName	Type	Category	Lecture (L)	Tutorial (T)	Practical (P)	Credit
23BFS2N10	CyberForensics	Theory	Concept	30		-	2

SYLLABUS

Unit	Coursecontents	Hours
I	INTRODUCTION TO SECURITY TRENDS: Introduction Cyber Threat – Definition of Cyber Crime – Classification– Diversity of Cyber Crime – CyberHate Crimes – Cyber Terrorism.	6
II	CyberStrategy–NationalSecurityStrategy–CyberSecurityStrategy– Organized Crime Strategy – Cyber Crime Strategy - Police and CrimeCommissioners.	6
III	INVESTIGATING CYBER CRIME: Preventing Cyber Crime – PasswordProtection – Get Safe Online - Crime Investigation Skills – CriminalInvestigation – Code of Ethics – Evidence – Hi-Tech Investigations –Capturingand AnalyzingDigital Evidence.	6
IV	DIGITALFORENSICS:IntroductiontoDigitalForensics-ForensicSoftwareandHardware- AnalysisandAdvancedTools-Forensic TechnologyandPractices-WindowsSystemForensics-LinuxSystemForensics- Network Forensics	6
V	CASE STUDY: Latest Study Topics on Cyber Crime and Investigations -Recent Cyber Crime Cases – Recent Digital Forensics Cases – Bridging theGapsinCyberCrime Investigationsbetweenthe cybersecuritystakeholders.	6
	Total	30

TextBook(s):

1. ThomasHalt,AdamM. BosslerandKathrynC.SeigfriedSpellar,―CybercrimeandDigitalForensics:AnIntroduction‖, RoutledgeTaylor and FrancisGroup2017.

(https://www.docdroid.net/cWvNYZZ/by-thomas-j-holt-adam-m-bossler-kathryn-seigfr-5009186-z-liborg-pdf)

2. BernadetteHSchell,ClemensMartin,―Cybercrime‖,ABC–CLIOInc,California,2004

FocusofCourse:Employability

CourseDesigner :
Mr.Midhun S
AssistantProfessor, Dept.ofDCFS,

BoS Chairman
Prof.DGeetha
HOD,CS

CourseOutcomes(COs)		
Onsuccessfulcompletion ofthis coursethestudents willbeableto:		
CONumber	**CourseOutcome(CO) Statement**	**Blooms Taxonomy Knowledge Level**
CO1	Discussthesecurityissuesovernetwork layerandtransportlayer	K1
CO2	Applysecurityprinciplesintheapplicationlayer	K1
CO3	Explaincomputerforensics	K2
CO4	UseforensicstoolsAnalyzeandvalidateforensicsdata	K3
CO5	Analysisemail, mobiledevicedataforidentificationofevidence	K3

Mappingwith ProgramOutcomes:

COs/POs /PSOs	PO1	PO2	PO3	PO4	PO5	PSO 1	PSO2	PSO3	PSO4	PSO5
CO1	L	M	L	L	L	L	L	L	M	L
CO2	L	L	L	L	L	M	M	M	M	S
CO3	M	M	M	M	M	S	L	M	M	L
CO4	L	L	M	M	S	S	L	M	M	S
CO5	M	M	S	M	S	M	S	M	M	S

S– Strong; **L** –Low; **M**– Medium

CourseCode	Type	Course Name	Category	Lecture (L)	Tutorial (T)	Practical (P)	Credit

23BAM2N10	NME	AdvancePythonProgramming	NME	2	-	-	2
Preamble: Basicknowledgeofanyprogramminglanguageconceptslikefunctions,modules, objectorientedconcepts.							
Prerequisite: Basicprogrammingskillsandlogicalthinking.							

Syllabus:

Ex.No	Coursecontents	Hours
1	Computethemarksheetofastudent.	2
2	Creationoffunctions	2
3	Creationofmodules.	2
4	Creationofclass	2
5	Fileoperations.	3
6	ReadaCSVFile.	3
7	Basic operations usingnumpylibrary	3
8	Writeaprogramforrandomnumbergeneration	3
9	Writeaprogram forNormalDistribution	3
10	Writeaprogram for cleaningdata	3
11	Writeaprogram for generate ascatter plot	2
12	Writeaprogramfor generateahistogram	2
Total		**30**

ReferenceBook:

1. JakeVanderPlas, “Python DataScienceHandbook: EssentialTools forWorkingwithData”,Kindle Edition, O’REILLY,2016.
2. Gowrishankar S, Veena, “Introduction to Python Programming”, CRC Press/Taylor &Francis,2019.

Focusof Course:-Employability

CourseDesigner:

Mr.G.Murugesan

Deptof AI

CONumber	CourseOutcome(CO)Statement	BloomsTaxonomyKnowledge
CO1	Describetheconcept offunctions.	K1
CO2	Infertheusageof creationand usageofmodules.	K2
CO3	Analysefundamental ofnumpylibrary	K3
CO4	Illustratetheprocessofpandaslibrary.	K3

MappingwithProgrammeOutcomesandProgrammeSpecificOutcomes:

COs/POs	PO1	PO2	PO3	PO4	PO5		PSO1	PSO2	PSO3	PSO4	PSO5
CO1	L	M	M	M	S		L	L	L	L	L
CO2	L	M	M	M	S		L	L	L	L	L
CO3	L	M	M	M	S		L	L	L	L	L
CO4	L	M	S	M	S		L	L	L	L	L

S– Strong; L –Low; M– Medium

Course Code	Type	CourseName	Category	Lecture (L)	Tutorial (T)	Practical (P)	Credit
23BDA2N10	NME	**Data Visualization usingTableau– II**	Practical	-	-	30	2
Preamble: ThiscourseenablestudentstolearnpracticalimplementationofDataVisualizationusing TableauTool							

Syllabus:

Unit	CourseContent	Number ofSessions
1	ToconnectwithDataSource,Refresh,EditMetadatausingTableau	3
2	Tocreateanewworksheet,RenameitandperformNumeric,StringandDate calculationsinTableau	3
3	Toworkwithvarioussortandfiltersavailablein Tableau	3
4	TocreateBar chart,Line chartusingTableau	3
5	TocreatePiechart,CrosstabusingTableau	3
6	Tocreate Scatterplot, Bubblechart usingTableau	3
7	TocreateBoxplot,TreeMapusingTableau	3
8	TocreateGanttchart,HistogramusingTableau	3
9	TocreateWaterfallchartusingTableau2	3
10	TocreateaSuperstoreDashboardusing Tableau	3
	Total	30

ReferenceBook:

1.MollyMonsey,PaulSochan-"TableauForDummies" –2016, WileyBrandpublications.

RecommendedToolstobeused: Tableaupublic Desktop

FocusofCourse:SkillDevelopment

e-Resource/e-ContentURL:https://www.tutorialspoint.com/tableau/index.htm

COURSEDESIGNER

Mrs.A.ReshmaParveenMrs.D.Geetha

Departmentof DSA

BOSCHAIRMAN

HODDeptofBCA

CourseOutcomes(COs):		
OnSuccessfulcompletionofthiscoursethestudentswillableto:		
CO Number	**CourseOutcome(CO)Statement**	**BloomsTaxonomyKnowledge Level**
CO1	ConnecttoDatasourcesandworkwithmetadata	**K1**
CO2	ImplementvariousfunctionandcalculationsinData	**K2**
CO3	ImplementthevarioussortandfiltersavailableinTableau	**K3**
CO4	DesignvariousvisualizationgraphsandchartsusingTableau	**K3**
CO5	Designdashboardusing Tableau	**K4**

MappingwithProgrammeOutcomesandProgrammeSpecificOutcomes:

Cos/ POs	**PO1**	**PO2**	**PO3**	**PO4**	**PO5**		**PSO1**	**PSO2**	**PSO3**	**PSO4**	**PSO5**
CO1	L	L	M	S	S		M	L	S	M	M
CO2	L	M	M	S	S		M	L	M	M	M
CO3	L	M	S	S	S		S	M	S	M	M
CO4	L	M	S	S	S		S	M	S	M	M
CO4	L	M	S	S	S		S	M	S	M	M

S–Strong;L–Low;M–Medium

Course Code	Type	CourseName	Category	Lecture (L)	Tutorial (T)	Practical (P)	Credit
23BCM2N10	SECII NME-2	Entrepreneurship	Concept	20	10	-	2

Preamble: Itwillenablethestudentstogainknowledgeon Entrepreneurshipandtheroleof entrepreneurineconomic development.

Unit	CourseContents	Hours
I	Entrepreneurship–Meaning-Definition-NatureandImportanceofEntrepreneurship–Characteristics-functionandtypesof Entrepreneur–EntrepreneurialProspective–IntrapreneursVsEntrepreneur–WomenEntrepreneur&RuralEntrepreneur–Problems-PhasesofEDP-Roleof Entrepreneurineconomicdevelopment–Startup inIndia	6
II	ProjectPreparationandManagement:BusinessIdea-ConceptandMeaningofProjectandClassification–ProjectIdentification—ProjectFormulation-ProjectDesign–ProjectReport–ProjectAppraisal.	6
III	InstitutionalServicetoEntrepreneur–DistrictIndustriesCenter(DIC),SmallIndustriesDevelopmentOrganization(SIDO),NationalSmallIndustriesCorporationLtd.(NSIC),Micro,Small&Medium EnterprisesDevelopment(MSMED)-SmallIndustriesDevelopmentCorporations(SIDCO)-Industrial and Technical Consultancy Organisation ofTamilnadu(ITCOT),andTheKhadiandVillageIndustriesCommission (KVIC)–MicroUnitsDevelopmentandRefinanceLimited(MUDRA)	6
IV	InstitutionalFinancetoEntrepreneur-IFCI,SFC,IDBI,ICICI,TIIC,LIC andGIC,UTI,SIPCOT,SIDBI	6
V	GovernmentAssistanceandFinance:IncentivesandSubsidies–Venture Capital–SeedCapitalAssistance	6
	Total	**30**

TextBooks:

1. C.B.Gupta and N.P.Srinivasan, ‑Entrepreneurial Development‖, SultanChand&CompanyLtd,NewDelhi–110002.Edition–2012.
2. RadhaV,‑Entrepreneurial DevelopmentPrasannaPublishers,Chennai, Edition–2011

ReferenceBook:-

1. S.S.Khanka,EntrepreneurialDevelopment,KalyaniPublishers,B-I/1292,RajinderNagar,Ludhiana-141008, Edition-2007
2. RenuAroraandS.KI.Sood, ‑FundamentalsofEntrepreneurshipandSmallBusiness‖, SultanChand & Company Ltd, NewDelhi –110002.,Edition– 2012
3. P.Saravanavel,‑Entrepreneurial Development,Prasanna Publishers,Chennai, Edition– 2002.

FocusofCourse:-Employability

e-Resources/e-ContentURL:

- NPTELVideo:http://nptel/index.php/search
- e-Pathshala:http://e-pathshala/index.php/search
- YouTube :http://youtube/index.php/search

CourseDesigner	**BoS-Chairman**
R.Nagarajan	Dr.I.Siddiq
AssistantProfessor,Dept.ofB.Com	Head,Dept. ofCommerce

CourseOutcomes(COs):

OnSuccessfulcompletion ofthiscoursethestudentswillableto:

CO Number	**CourseOutcome(CO)Statement**	**Blooms Taxonomy Knowledge**
CO1	ToremberEntrepreneur,EntrepreneurshipIntrapreneursand WomenEntrepreneur	**K1**
CO2	Tounderstandthe role of entrepreneur ineconomicdevelopment	**K2**
CO3	Tounderstandthe DIC, SIDO, NSIC, MSMEDI-SSIC,SIDCO-ITCOT,IIC,andKVICservicesto Entrepreneurs	**K2**
CO4	ToapplythetechniquesforobtainingGovernmentIncentivesand Subsidies	**K3**

MappingwithProgramOutcomesand ProgramSpecificOutcomes:

COs/POs	**PO1**	**PO2**	**PO3**	**PO4**	**PO5**		**PSO1**	**PSO2**	**PSO3**	**PSO4**	**PSO5**
CO1	M	S	M	M	L		M	M	S	M	M
CO2	M	M	S	M	M		M	M	M	L	S
CO3	M	S	S	S	L		S	M	M	S	M
CO4	S	M	S	M	L		S	S	M	L	L

S–Strong;L–Low;M–Medium

Course Code	Type	Course Name	Category	Lecture (L)	Tutorial (T)	Practical (P)	
23BBC2N10	SEC II NME- 2	Accountign Software - II	Concept	20	10	-	

LearningObjectives		
LO1	ToImpart theknowledgeon subsidiary bookwith GST.	
LO2	Tocreatethestockitemsto preparestocksummary	
LO3	Topreparefinalaccounts.	
LO4	Tocreatevariousledgers forBankreconciliationstatement	
LO5	Toshowtheentries forDepreciationaccount	
Prerequisite:ShouldhavestudiedCommerceinXIIStd		
Unit	**Contents**	**No. ofHours**
I	PreparesubsidiarybookwithGST(Purchase)	3
II	Preparationofstocksummary	3
III	Preparationoftrialbalance	4
IV	Preparationof finalaccounts	4
V	Preparationofinvoicedetails	4
VI	PreparationofBank reconciliationstatement	4
VII	PreparationofOutstandingstatement	4
VIII	PreparationofDepreciationaccount	4
	TOTAL	**30**
CO	**CourseOutcomes**	
CO1	ApplytheaccountingsoftwareforGST calculations.	
CO2	Enabletomaintainthestock levelsingodownandshowroom.	
CO3	PreparationofFinancialstatements	
CO4	Preparationofinvoicebillandoutstanding statements.	
CO5	Applythe softwareformaintain business transactions	
Textbooks		
1	Ashok,K.Nadhani,**"TallyERP.9TrainingGuide",** BPBPublications,Revised Edition, 2010.	
ReferenceBooks		
1	Rajesh Chheda.U, Obaidmotiwala**, "Learn Tally.ERP.9",** Ane Book Pvt.Ltd**.,** Edition2013.	

NOTE:LatestEditionofTextbooks MaybeUsed	
WebResources	
1	https://www.youtube.com/watch?v=qv4dB3qUVHs
2	https://www.youtube.com/watch?v=8jH90qPicro
3	https://www.tutorjoes.in/tally_prime_tutorial/bank_reconciliation_statement_in_tally_prime

MappingWithProgrammeOutcomesandProgrammeSpecificOutcomes

	PO1	**PO2**	**PO3**	**PO4**	**PO5**	**PO6**	**PO7**	**PO8**	**PSO1**	**PSO2**	**PSO3**
CO1	3	2	3	2	2	2	3	2	3	3	2
CO2	3	2	3	2	3	2	3	2	3	3	2
CO3	3	2	3	2	3	2	3	2	3	3	2
CO4	3	2	3	2	2	2	3	2	3	3	2
CO5	3	2	3	2	2	2	3	2	3	3	2
TOTAL	15	10	15	10	12	10	15	10	15	15	10
AVERAGE	3	2	3	2	2.4	2	3	2	3	3	2

3-Strong, 2-Medium, 1-Low

Course Code	Type	CourseName	Category	Lecture [L]	Tutorial [P]	Practical [P]	Credit
23BPA2N10	**Theory**	**Basicsof StockMarket**	**SEC2**	**30**			**2**
Preamble:Tocreateanawarenessamongthe studentsabouttheconceptofStockMarket							
UNIT	**COURSECONTENT**						**NO. OFSESSIONS**
I	**Stock Market:** Meaning-Importance-Functions-Investment-Need-Types – Distinguish between shareand stock.						**6**
II	**StockMarketSystem:**Primarymarket–meaning–Meritsanddemerits – Secondarymarket –meaning, Meritsand Demerits– Differencebetweenprimaryand SecondaryMarket.						**6**
III	**Capitalmarketinstruments:**Meaning–Typesofinstruments – EquitysharesMeaning–meritsanddemerits- PreferenceShares-Meaning - Typesofpreferenceshares–Meritsanddemerits;Debentures-Meaning– types–meritsanddemerits–Bonds						**6**
IV	**StockMarket Indices:** Meaning,purpose,andconstructionofdevelopingindex–RoleofBSEandNSE-Features						**6**
V	**RoleofRegulatory:**SEBI-Functions-RoleofSEBIactivitiesinStockmarket						**6**
						TOTAL	**30**
RecommendedTextbooks: 1.Dr.S.Gurusamy,"CapitalMarke'TataMcGraw –HillEducationPvt Ltd,2ndedition2008.							
SuggestedReferenceTextbooks: 1. PunithavathyPandian,"SecurityanalysisandPortfolioManagement",VikasPublishingHousePvtLtd. 2. V.Avadhani, InvestmentandSecuritiesMarketinIndiaHimalayaPublishingHouse. 3. SanjeevAgarwal.AguidetoIndianCapitalMarket,BharatPublishers 4. RaviPulianiandMaheshPuliani,ManualofSEBI,BharatPublication. 5. Prasanna Chandra"Investment Analysis and Portfolio Management "TataMcgraw Hill,3Rdedition.							
FocusofCourse: Employability/SkillDevelopment/Entrepreneurship							
LevelofCurriculumRelevance: Local/Regional/National/InternationalNeeds							

E Course / E Content

URL:http://nptel/index.php/search http://e-pathshala/index.php/searchhttp://youtube/index.php/search

www.agritech.tnau.ac.in

CourseDesigner:

Dr.K.Jayaprakash

AssociateProfessor,DepartmentofB.Com(ABA) BOSChairman,STC

CourseOutcomes (COs):OnSuccessfulcompletionof thiscoursethestudentswillableto:

COs	CourseOutcome(CO)Statement	Bloom'sTaxonomyKnowledge Level
CO1	Tolearntheoverviewof Stock Market	K1
CO2	TounderstandvariousCapital MarketInstruments	K2
CO3	Tounderstandtheconcept toindices	K3
CO4	Toanalyzetheroleofregulatoryofstockmarket	K4

MappingwithProgrammeOutcomesand ProgrammeSpecificOutcomes:

CO/PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3
CO1	3	2	2	2	2	2	2	2	1	2	2
CO2	3	2	3	3	2	2	2	2	2	2	2
CO3	3	2	3	3	2	2	2	2	2	2	2
CO4	3	2	2	3	2	2	2	2	2	2	2
CO5	3	2	3	3	2	2	2	2	2	2	2
Total	15	10	13	14	11	10	10	10	10	10	10
Average	3	2	2.6	2.8	2.2	2	2	2	2	2	2

3–Strong,2-Medium,1-Low

CourseCode	Type	CourseName	Category	Lecture [L]	Tutorial [P]	Practical [P]	Credit
23BAB2N10	Theory	Digital Marketing	SEC 2	2			2

Preamble:Basicknowledgeofthemarketingandsocialmedia.

UNIT	COURSECONTENT	NO.OF SESSIONS
I	**ECommerceBusiness:**ECommerceBusiness&DigitalMarketing– Meaning – Paradigm shift - Application of E-Commerce in differentSectors–DigitalMarketingtrendsandChallengesinE-Commerce business.	**6**
II	**E-Security:**BusinessModel–ECommerce&DigitalMarketing– B2BandB2C–IntelligentAgents–MobileCommerceOnlinePayment – E-Security– SecurityProtocols –siteshacked– Internet Governance – Firewall.	**6**
III	**DigitalMarketingChannels:**Digitalmarketing-vision,mission,andgoals of digital marketing –importance of digital marketing – Websitedesign and Hosting – Search Engine Optimisaiton (SEO) – Blogs -DigitalMarketingChannels-socialmediamarketing– emailmarketing –Youtubemarketing–PayperclickandSearchEngineMarketing.	**6**
IV	**Digital Advertising:** Digital Marketing and Advertising – Types ofDigital promotions – Print Advertising - Display screens - ContentmarketingandCustomizationStrategies– DigitalAdvertisinginIndia –DigitalMarketing andunderstanding buyerbehavior.	**6**
V	**DigitalMarketingStrategiesandServices:**DigitalMarketingStrategiesandServices-OnlineRetailSector–OnlineFinancialServices – Online Travel services – Online career services – onlinepublishing– onlineentertainment-consumerProtectionPrivacyand InformationRights –WarrantiesandNewProducts.	**6**
	TOTAL	**30**

RecommendedTextbooks:

1. RobStokesandtheMindsofQuirk,"**eMarketing:Theessentialguidetomarketingin adigitalworld"**, QuirkeMarketing (Pty) Ltd,. 5th Edition,
2. DamianRyan,**"UnderstandingDigitalMarketing:MarketingStrategiesforEngagingthe DigitalGeneration Paperback–Import"**,KoganPage,4th Edition.

SuggestedReferenceTextbooks:

1.Kalakota,R.andWhinston,A., Frontiers ofElectronicCommerce, 2011, Pearson.

2. Turban,E.,King,D.andLee,J.,ElectronicCommerce:AManagerialandSocialNetworksPerspective, 2015, 8/e, PrenticeHall
3. Turban,E.,Lee,J.,King,D.,Liang,T.P.andTurban,D.,ElectronicCommerce2015,8/e, ,Pearson
4. TracyLTuten,MichaelRSoloman,Social Media Marketing, 2/e,2016, Sage.
5. DanZarrella,"TheSocialMediaMarketingBook(EBook)",PublishedbyO'rielly
6. VandanaAhuja,"DigitalMarketing",OxfordUniversityPress,1stEdition(2015),
7.MoutusyMaity,"InternetMarketing-ApracticalApproachintheIndianContext",OxfordUniversity Press,2017.

FocusofCourse:Employability/SkillDevelopment/Entrepreneurship

LevelofCurriculumRelevance:Local/Regional/National/International Needs

- NPTELVideo:http://nptel/index.php/search
- e-Pathshala:http://e-pathshala/index.php/search
- YouTube :http://youtube/index.php/search
- www.agritech.tnau.ac.in

CourseDesigner:

Dr.K.Jayaprakash

AssociateProfessor,Dept.ofB.Com(ABA) BOSChairman,STC

CourseOutcomes(COs):On Successfulcompletionofthiscoursethestudentswillableto:

COs	CourseOutcome(CO) Statement	Bloom'sTaxonomyKnowledge Level
CO1	TolearntheoverviewofE CommerceBusiness	**K1**
CO2	TounderstandtheE-Security.	**K2**
CO3	ToanalysetheDigitalMarketingChannels	**K3**
CO4	Tounderstandthe conceptof digitalpromotion	**K4**
CO5	ToidentifytheDigitalMarketingStrategiesand Services	**K5**

MappingwithProgrammeOutcomesandProgrammeSpecificOutcomes:

CO/PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3
CO1	3	2	2	2	2	2	2	2	1	2	2
CO2	3	2	3	3	2	2	2	2	2	2	2
CO3	3	2	3	3	2	2	2	2	2	2	2
CO4	3	2	2	3	2	2	2	2	2	2	2
CO5	3	2	3	3	2	2	2	2	2	2	2
Total	15	10	13	14	11	10	10	10	10	10	10
Average	3	2	2.6	2.8	2.2	2	2	2	2	2	2

3– Strong, 2-Medium,1-Low

Course Code	Type	CourseName	Category	Lecture [L]	Tutorial [P]	Practical [P]	Credit
23BAS2N10	Theory	**OfficeAdministration**	Employability	2			2

Preamble	Aimtounderstandtheconceptsofofficeadministration,officelayout
Prerequisite	To applyfilingreports.

Unit	**Coursecontents**	**Hours**
I	Office–Definition –Importance–Function of anOffice– OfficeManagementElements–FunctionofOfficeManagement– OfficeManager.	6
II	OfficeOrganisation –Principles –TypesofOrganisation –Delegationof authority–Principlesof delegation	6
III	OfficeSystemsandprocedures –Officemethods–Importance–Analysisof theofficesystemandprocedures –Contentsof OfficeManual.	6
IV	Officeaccommodationandlayout –Advantagesanddisadvantages –office furniture– planningthe officespace– open &private offices	6
V	Workingenvironment –Office forms –Filing–Indexing–Officereports.	6
	Total	30

TextBook:

1.**OfficeManagement byMishra**

ReferenceBook:**1.OfficeManagementby Kathiresan&Radha**

Focusof Course: Employability

LevelofCurriculumRelevance:Local/Regional /NationalNeeds

E-Resource/e-ContentURL:

http://www.yourarticlelibrary.com/managerial-economics/8-types-of-pricing-strategies-normally-adopted-by-firms-economics/29028

Course Designer:Dr.R.Vasuki AssociateProfessor DepartmentofB.Com,STC	**BoS Chairman:Dr.I.Siddiq**AssociateProfessor DepartmentofB.Com,STC

MAPPINGWITHPROGRAMOUTCOMESANDPROGRAMSPECIFICOUTCOMES

COs/POs	PO1	PO2	PO3	PO4	PO5		PSO1	PSO2	PSO3	PSO4	PSO5
CO1	S	S	L	M	M		S	L	M	S	S
CO2	M	S	M	L	L		S	M	L	M	S
CO3	M	M	S	S	L		M	S	S	M	M

S–Strong;L–Low;M–Medium

Course Code	Type	CourseName	Category	Lecture (L)	Tutorial (T)	Practical (P)	Credit
23BBI4N20	NME-2	**Elements ofInsurance**	Theory	30	-	-	2
Preamble	Togainbasicknowledgeininsuranceconceptsrelatedtovariouskindsofinsurance						
Prerequisite	Noprerequisiterequired						

Syllabus

Unit	CourseContents	Hours
1	**IntroductiontoInsurance**:Meaninganddefinitionofinsurance–Features of insurance- Essentials of valid insurance contract -Functions,Importance of insurance- Benefits – Kinds of insurance organization- Roleof insurance in the development of commerce and industry-Reinsurance - Classificationofinsurance.	3
2	**Lifeinsurance**:Definition-essentialfeaturesoflifeinsurance– procedureforeffectinglifeinsurance-lifeinsurancepolicies-classificationofpolicies- assignment andnomination oflifepolicies **Marine insurance:** introduction- elements – double insurance in marineinsurance– marinepolicy-kinds of marinepolicies.	3
3	**Fire insurance**: subject matter of fire insurance – features- principles offire insurance- fire policy- procedure for taking fire insurance policy-typesoffireinsurancepolicy-fireinsuranceclaims.	4
4	**Miscellaneous Insurance:**Motor insurance- Personal accident – healthinsurance – agriculture insurance- cattle insurance live stock insurance-poultryinsurance,sheepandgoatinsurance– fidelityguaranteeandpropertyinsurance.	4
5	**Role of insurance intermediaries**: insurance broker-corporateinsurance agent essential qualities required for a successfulagent.	4
Total		**30**
TextBook: 1.FundamentalsofInsurance- Dr.Periyasamy,HimalayaPublishingPvtLtd,Mumbai		
ReferenceBooks: 1.MishraM.N:InsurancePrinciplesandpractice; S.Chandandco,New Delhi.		

3.Insuranceprinciplesandpractice-Moorthy.A,Marghampublications,Chennai 4.Principlesandpractice Insurance-Dr.Periyasamy,HimalayaPublishingPvtLtd,Mumbai
FocusofCourse: Employability
e-Resource/e-ContentURL:https://www.canarahsbclife.com/faqs/life-insurance/what-is-meant-by-principles-of-insurance.html

CourseDesigner: Dr.S.Poornimadevi AssistantProfessor,DeptofB.Com(B&I),STC	**BoSChairman:**

CourseOutComes (COs):		
Onsuccessfulcompletionofthecourse,the studentswillbeableto:		
CO Number	**CourseOutcome(CO) Statement**	**Blooms TaxonomyKnowledgeLevel**
CO1	LearnthefundamentalsconceptsofInsurance	K1
CO2	UnderstandvariouskindsofInsurance	K2
CO3	AnalysetheroleofInsuranceintermediaries	K3

MappingwithprogrammeOutcome

COs/ POs	PO1	PO2	PO3	PO4	PO5		PSO1	PSO2	PSO3	PSO4	PSO5
CO1	S	S	S	S	S		S	S	M	S	S
CO2	L	M	S	M	M		S	S	S	S	S
CO3	M	S	S	S	M		S	M	S	S	S

S– Strong;L – Low;M– Medium

Course Code	Type	CourseName	Category	Lecture (L)	Tutorial (T)	Practical (P)	Credit
23BBA2N10	NME	Managerial Skill Development	Concept	2	-	-	2
Learning Objectives							
C1	Toimprovetheself-confidence,groomthepersonalityandbuild emotionalcompetence.						

C2	Toaddressself-awarenessandtheassessmentofcoremanagementskillssuchas communication,workingwithteamsandcreatingapositiveenvironmentforchange.
C3	ToassesstheEmotionalintelligence.
C4	Toinducecritical-thinkingandanalyticalskillstoinvestigatecomplexproblemsto proposeviablesolutions.
C5	Toimproveprofessionaletiquettes.

Unit	CourseContent	Number ofSessions
I	Self: Core Competency, Understanding of Self, Components of Self— Self-identity, Self-concept, Self - confidence and Self-image. Skill Analysis andfindingtherightfit.Self-learningstyles,attitudetowardschangeand applicationsofskills	6
II	SelfEsteem:Meaning&Importance,Componentsofself-esteem,Highandlow self-esteem, measuring our self-esteem and its effectiveness, Personality mappingtests,AppreciativeIntelligence.	6
III	BuildingEmotionalCompetence:EmotionalIntelligence-Meaning,Components, Importance and Relevance, Positive and Negative Emotions.,HealthyandUnhealthyexpressionofEmotions,Thesix-phasemodelof CreativeThinking: ICEDIPmodel.	6
IV	Thinkingskills:TheMind/Brain/Behaviour,thinkingskills,CriticalThinking and Learning, Making Predictions and Reasoning, Memory andCritical Thinking, Emotions and Critical Thinking. Creativity: Definitionand meaning of creativity, The nature of creative thinking, Convergent andDivergentthinking,Idea generationandevaluation(BrainStorming), Image generationand evaluation.	6
V	Communicationrelatedtocourse:Howtomakeoralpresentations,conductingmeetings,reportingofprojects,reportingofcaseanalysis,answering in Viva Voce, Assignment writing Debates, presentations, roleplays and group discussions on current topics. Audio and Video Recordingoftheaboveexercisestoimprovethenon-verbalcommunicationand professionaletiquettes.	6
	Total	**30**

RecommendedTextbooks:

1. ManagerialSkillArticles
2. TheManagement Skillsof SALLManagers -SiSALJournal

3. ManagerialSkillsbyDr.K.AlexS.CHAND
4. ManagerialSkills2byCynthiaMenezes Prabhu,PentoPrintPublishingLLP
5. Gallagher(2010),
SkillsDevelopmentforBusiness&ManagementStudents,OxfordUniversityPress.PROF. SANJIV

SuggestedReferenceTextbooks:

1. Joshi,G.(2015),CampustoCorporate-YourRoadmaptoEmployability,SagePublication.
2. McGrathE.H.(9Ed.2011),BasicManagerialSkills,PrenticeHallIndiaLearningPrivateLimited.
3. WhettenD.(eEd.2011),DevelopingManagementSkills,PrenticeHallIndiaLearningPrivateLimited.
4. P.Varshney,A.Dutta,ManagerialSkillDevelopment,AlfaPublications,2012.
5. EQ-softskillsforCorporateCarrerbyDr.Sumeet Suseelan.

FocusofCourse:Employability

LevelofCurriculumRelevance:InternationalNeeds

e-Resource/e-ContentURL:

1.https://www.ipjugaad.com/syllabus/ggsip-university-bba-4th-semester-managerialskill-development-syllabus/63
2. https://www.academia.edu/4358901/managerial_skill_development_pdf
3. https://www.academia.edu/4358901/managerial_skill_development_pdf
4. https://rccmindore.com/wp-content/uploads/2015/06/Managerial-SkillsAll-Units-AC.pdf
5. https://www.aisectuniversityjharkhand.ac.in/PDFDoc/StudyNotes/MBA/SEM%201/MBA-1-MSD(Managerial%20skill%20development).pdf

CourseDesigner:

TANSCHE-CHENNAI BOSChairman–BBA

CourseOutcomes (Cos):		
Onsuccessfulcompletion of thiscoursethestudentswillableto:		
CO1	Identifythepersonalqualitiesthatareneededtosustainintheworldof work.	K2
CO2	ExploremoreadvancedManagementSkillssuchasconflictresolution,empowerment, workingwithteams and creatingapositiveenvironmentfor change.	K3
CO3	Acquirepracticalmanagementskillsthatareofimmediateusein managementorleadershippositions.	K2
CO4	Employcritical-thinkingandanalyticalskillstoinvestigatecomplex businessproblems to proposeviablesolutions.	K2
CO5	Makepersuasive presentations that reveal strong written and oral communicationskillsneededintheworkplace.	K1

MappingwithProgrammeOutcomesandProgrammeSpecificOutcomes:

Cos/Pos	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
CO 1	M	M	S	S	S	S	S	S
CO 2	M	M	S	S	S	S	S	S
CO 3	S	S	S	S	S	S	S	S
CO 4	S	S	S	S	S	S	S	S
CO 5	S	S	S	S	S	S	S	S

S–Strong; L–Low;M–Medium

Course Code	CourseName	Category	Lecture (L)	Tutorial (T)	Practical (P)	Credit
23BMA2N10	NumericalAbility-II	NME2	30	-	-	2

Preamble: Totrainthestudentsonsolvingproblemsonquantitativeaptitudeandmensuration.

Prerequisite: BasicKnowledgeofsimplificationandareaofplanecurvesandpropertiesofsphere,cylinder andcone.

Unit	Coursecontents	Instructional hours
I	TimeandDistance ProblemsonTrains	6
II	BoatsandStreams AllegationsorMixture	6
III	Simple InterestCompound Interest	6
IV	Area	6
V	VolumeandSurfaceArea	6
	Total	**30**

TextBook(s):

Dr.R.S.Aggarwal of Quantitative Aptitude S.Chand& Sons,2013Unit I:Page No:384-388, 405-408.
UnitII :Page No: 425-428, 435-438.UnitIII:PageNo:445-448,466-471.
UnitIV:PageNo:499-516.
UnitV :PageNo:555-564.

ReferenceBook(s):

1. Abhijit Guha Educational Consultant of Quantitative Aptitude for Competitive ExaminationsPublishedbyTataMcGraw-Hill Education PvtLtdsixth Reprint2011
2.Kiran'sTextbookofQuickerMathematics(QuantitativeAptitudeand NumericalAbility)Satellite BabaPublishingHousePvtLtd

LearningMethods(*):

Assignment/Seminar/Quiz/GroupDiscussion/Case-Study/Self-Study/etc.,

FocusofCourse:

SkillDevelopment

e-Resource/e-ContentURL:

https://www.youtube.com/watch?v=58Bx5dkTDTI

CourseDesigner:Prof.K.Sivaswamy

Dean,Mathematics,STC BoSChairman

CourseOutcomes(COs)		
Onsuccessfulcompletionofthiscoursethestudentswillbeableto		
22BMA4N10 **CONumber**	**CourseOutcome(CO)Statement**	**BloomsTaxonomyKnowledge Level**
CO1	Developskilltosolveproblemsontrains,timeanddistance	K1
CO2	DevelopabilityinsolvingBoatandstreams,Mixtureproblem	K1

CO3	Developabilityinsolvingproblemsinsimpleandcompound interest								K3	
CO4	Familiarizeproblemsonareasofplanefigures								K3	
CO5	Skillinthemenstruationofthreedimensionalsolids								K2	
MappingwithProgramOutcomesandProgramSpecificOutcomes:										
COs/POs	**PO1**	**PO2**	**PO3**	**PO4**	**PO5**	**PSO1**	**PSO2**	**PSO3**	**PSO4**	**PSO5**
CO1	L	M	M	M	M	L	M	M	L	M
CO2	L	S	M	-	M	L	L	M	M	L
CO3	M	M	S	L	M	L	S	M	M	M
CO4	M	L	L	M	M	M	L	S	M	M
CO5	L	M	S	M	L	M	L	M	M	M
3–Strong;2–Low;1–Medium										

CourseCode	Type	Course Name	Category	Lecture [L]	Tutorial [P]	Practical [P]	Credit
23BEN2N10	Theory	Professional andTechnical Writing	SEC IINME	2	-	-	2

Preamble:
Thiscourseaimsatfacilitatingthestudentstodeveloptheirabilitiesandskillsinteaching methodologiesofProfessionalandTechnicalWritings

UNIT	COURSECONTENT	NO.OF SESSIONS
I	**BasicsofTechnicalCommunication**:ImportanceofTechnicalCommunication, Levels of Communication, Visual Aids in TechnicalCommunication. **ProfessionalCommunication**inaDigital,Social,MobileWorld,Communication Challenges ina Diverse, Global contexts. Analyzingthe Situation DefiningYour Purpose Marketplace.	**6**
II	**Reading Comprehension:** Techniques for Good Comprehension,StructureoftheText,StructureofParagraphs,Punctuation,Author's Viewpoint(Inference),Reader Anticipation:DeterminingtheMeaningof Words, Typical Reading ComprehensionQuestions, Predicting theContent,UnderstandingtheGist.	**6**
III	**CommunicationChallengesinaDiverse,GlobalAnalyzingthe**	

	Situation Defining Your Purpose Marketplace: Understanding theOpportunities and Challenges of Communication in a Diverse World,DevelopingCulturalCompetency,RecognizingVariationsinaDiverse World.	**6**
IV	**ReadingandWriting**:ElementsofEffectiveWriting,WritingBusinessMessages,TheArtofCondensation,TechnicalReports,TechnicalProposals,FormalLetters,Resume,Memos,andEmail, ResearchPapersandTechnicalDescriptions.	**6**
V	**Completing Business Messages**: Revising Your Message: EvaluatingtheFirstDraft,RevisingtoImproveReadability,EditingforClarityandConciseness,ProducingYourMessage,ProofreadingYourMessage DistributingYourMessage.	**6**
	TOTAL	30
RecommendedTextbooks: 1) Raman,Meenakshi,andSangeetaSharma.TechnicalCommunicationPrinciplesandPractices.3rded., vol. 1 1, Oxford, 2015; 2) Bovée,CourtlandL,et al.BusinessCommunicationToday.15thed.,vol.11,Pearson,2021.		
SuggestedReferenceTextbooks: Baker,Suzie.ProfessionalandTechnicalWriting. 1sted.,vol.11,"CreativeCommons AttributionNonCommercial4.0,2019.		
Focusof Course:Employability		
LevelofCurriculumRelevance: InternationalNeeds		
E Course / E Content URL:https://youtu.be/NM53k7x_jjk https://youtu.be/Hdi1S52bhNghttps://youtu.be/by4m2kvuwso		
CourseDesigner: Mrs.Srija AssistantProfessor- Dr.J.Das BOSChairman –		

CourseOutcomes(COs):OnSuccessfulcompletionof thiscoursethestudentswillableto:		
COs	**CourseOutcome(CO)Statement**	**Bloom'sTaxonomy Knowledge Level**
CO1	learnEnglishLanguage toperformvarietyoffunctions	**K1**
CO2	useSociableuseofEnglishlanguage	**K2**
CO3	developlearners'abilitytouseEnglisheffectively forthepurposeofpracticalcommunication	**K3**
CO4	developlearners'awarenessofthenatureoflanguageand language-learningskills	**K4**

CO5	learnEnglishLanguagetoperformvarietyoffunctions									K5
MappingwithProgrammeOutcomesand ProgrammeSpecificOutcomes:										
CO/PO	**PO1**	**PO2**	**PO3**	**PO4**	**PO5**	**PSO1**	**PSO2**	**PSO3**	**PSO4**	**PSO5**
CO1	S	S	S	S	S	S	S	S	S	S
CO2	L	S	S	S	L	S	S	S	S	S
CO3	S	S	S	L	S	S	S	S	S	S
CO4	S	S	S	S	S	S	S	S	S	S
CO5	S	L	S	S	S	S	S	S	S	S
S–Strong;L–Low;M–Medium										

Course Code	Type	CourseName	Category	Lecture [L]	Tutorial [P]	Practical[P]	Credit
23BPY2N10	Theory	Psychological SelfManagement	SECIII NMEIII	2	-	-	2

Preamble: Tolearnthehackof everydaylifefora successfullifeandcareer.

UNIT	COURSECONTENT	NO.OFSESSIONS
I	**Basics of Leadership Styles:** Leadership – meaning – various formsof leaderships –Charismatic leadership – transactional leadership–transformationalleadership–Authenticleadership–Spiritualleadership–Servantleadership–Ethical leadership	6
II	**BasicsofStress:**Meaning–VariationsofStress–Eustress–Distress –Hypostress–Hyperstress;CausesofStress–Stressfullifeevents–hassles of everyday life – Work related and environmental sources ofstress; **Basics of Conflicts andFrustration:**Conflict–meaning–4types;Frustration–meaning–6frustrationreactions–sourcesoffrustration.	6
III	**ManagementofStress:**Stress–GASModel;Copingwithstress–activecopingstyles:meditation–exercise–biofeedback–relaxation – chemotherapy – time management –rolemanagement–assertivenesstraining–stressinoculation–supportgroups–humour therapy.	6
IV	**Timemanagement:**ThePsychologyofTimemanagement-Setclearpriorities – Overcome procrastination - Delegate to other - Invest inpersonaldevelopment	6
V	**Angermanagement:**MeaningofAnger–ConditionofAnger–TriggersofAnger–Four CoreofAnger–Management ofAnger	6
	TOTAL	30

RecommendedTextbooks:

- Baron,RobertA(1997).Psychology(4th Edition).London:AllynandBaconLtd.
- TracyB(2013)TimeManagement.UnitedStatesofAmerica:AMACOMLtd.
- GlennR.Schiraldi,MelissaHallmarkKerr,(2002)AngerManagementSourceBook,Tata McGrawHill.

SuggestedReferenceTextbooks:

- Hilgard,E.R.et.al.,(1975).IntroductiontoPsychology(6th Ediition).NewDelhi:Oxfor

d&IBHPublishingCo.Pvt.Ltd.,

- Schermerhorn, J.R et.al [2010]. Organizational Behaviour [11th Edition]. John Wileyand Sons,Inc. USA.pp. 321– 334.

FocusofCourse:SkillDevelopment

LevelofCurriculumRelevance: InternationalNeeds

E Course/ E Content URL:

https://youtu.be/sunnGz6QL4Q

CourseDesigner:

AshwanthKannaV

AssistantProfessor-PSY BOSChairman– PSY

CourseOutcomes(COs):OnSuccessfulcompletionofthiscoursethestudentswillableto:

COs	CourseOutcome(CO) Statement	Bloom's Taxonomy KnowledgeLevel
CO1	Understandthecomponents contributing toleadership.	**K2**
CO2	Predictandlearn thebasicsofstress,conflictandfrustration.	**K2**
CO3	Understandtheimportanceofmanaging Stress.	**K2**
CO4	Applythe various methods used fortimemanagement	**K3**
CO5	AnalyzetheimportanceandmethodsofAngermanagement	**K4**

MappingwithProgrammeOutcomesandProgrammeSpecificOutcomes:

CO/PO	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	L	L	L	M	L	M	L	L	M	M
CO2	L	L	L	M	M	L	L	L	M	M
CO3	L	L	L	M	M	L	L	L	M	M
CO4	L	L	L	M	M	L	L	L	M	M
CO5	L	L	L	M	M	L	L	L	M	M

S–Strong;L–Low;M–Medium

Course Code	Type	Course Name	Category	Lecture [L]	Tutorial [P]	Practical [P]	Credit
23BCH2N10	Theory	DAIRYCHEMISTRY	SEC	2	-	-	2
Preamble:Highersecondarychemistry							
UNIT	COURSECONTENT						NO. OFSESSIONS
I	**CompositionofMilk** Milk-definition-general composition of milk- constituents of milk - lipids,proteins,carbohydrates,vitaminsandminerals-physicalproperties of milk - colour, odour, acidity, specific gravity, viscosityandconductivity-Factorsaffectingthecompositionofmilk-adulterants,preservativeswithneutralizerexamplesandtheirdetection-estimationoffat,acidityand totalsolidsinmilk.						6
II	**ProcessingofMilk** Microbiologyofmilk-destructionofmicro-organismsinmilk,						6

	physico – chemical changes taking place in milk due to processing - boiling, pasteurization – types of pasteurization -Bottle, Batch andHTST (High Temperature Short Time) – Vacuum pasteurization –Ultra HighTemperaturePasteurization.	
III	**MajorMilkProducts** Cream - definition - composition - chemistry of creaming process - gravitationalandcentrifugalmethodsofseparationofcream-estimation of fat in cream. Butter - definition -composition - theoryof churning – desi butter - salted butter, estimation of acidity andmoisture content in butter. Ghee - major constituents - commonadulterantsaddedtogheeandtheirdetection-rancidity-definition - prevention - antioxidants and synergists - natural andsynthetic.	6
IV	**SpecialMilk** Standardisedmilk-definition-merits-reconstitutedmilk-definition-flowdiagramofmanufacture-Homogenisedmilk-flavouredmilk-vitaminisedmilk-tonedmilk-Incitationmilk-Vegetabletonedmilk-humanizedmilk-34condensedmilk-definition,composition andnutritivevalue.	6
V	**FermentedandotherMilkProducts** Fermentedmilkproducts–fermentationofmilk-definition,onditions, cultured milk - definition of culture - example, conditions - culturedcream, butter milk - Bulgarious milk -acidophilous milk – YoheerIndigeneous products- khoa and chhena definition - Ice cream -definition-percentagecomposition-types-ingredients-manufactureofice–cream,stabilizers-emulsifiersandtheirrole-milkpowder-definition-needformakingmilkpowderdryingprocess-typesofdrying.	6
	TOTAL	
RecommendedTextbooks:		

1. K.BagavathiSundari,Applied Chemistry,MJPPublishers,firstedition,2006.

2. K.S.RangappaandK.T.Acharya,IndianDairyProducts,AsiaPublishingHouseNewDelhi,1974.

3.Textbookofdairychemistry,M.P.Mathur,D.DattaRoy,P.Dinakar,IndianCouncilofAgricultural Research, 1stedition,2008.

4. ATextbookofdairychemistry,SauravSingh,DayaPublishinghouse,1st edition,2013.

5. Textbookofdairychemistry,P.L.Choudhary,Bio-Greenbookpublishers,2021.

SuggestedReferenceTextbooks:

1. RobertJennessand S.Patom,PrinciplesofDairyChemistry,S.Wiley,NewYork,2005.

2. F.P.Wond,FundamentalsofDairyChemistry,Springer,Singapore,2006.

3. SukumarDe,OutlinesofDairyTechnology,OxfordUniversityPress,NewDelhi,1980.

4. P.F.FoxandP.L.H.Mcsweeney,DairyChemistryandBiochemistry,Springer,Secondedition,2016.

5. Dairychemistryandbiochemistry,P.F.Fox,T.Uniacke-Lowe,P.L.H.McSweeney,J.A.OMahony,Springer,Secondedition, 2015.

FocusofCourse:Employability/SkillDevelopment/Entrepreneurship

LevelofCurriculumRelevance:Local/Regional/National/InternationalNeeds

ECourse/EContentURL:

CourseDesigner:

Tansche-Chennai BOSChairman,STC

CourseOutcomes(COs):OnSuccessfulcompletionofthiscoursethestudentswillableto:

COs	CourseOutcome(CO)Statement	Bloom's Taxonomy Knowledge Level

CO1	understandaboutgeneralcompositionofmilk– constituentsanditsphysical properties.	K1
CO2	acquire knowledge about pasteurization of Milk and various typesof pasteurization - Bottle, Batch and HTST Ultra High TemperaturePasteurization.	K2
CO3	learnaboutCreamandButtertheircompositionandhowtoestimate fatincreamandGhee	K3
CO4	explainaboutHomogenizedmilk,flavouredmilk,vitaminisedmilkandto ned milk.	K4
CO5	haveanideaabouthowtomakemilkpowderanditsdryingprocess- typesofdryingprocess	K5

MappingwithProgrammeOutcomesandProgrammeSpecificOutcomes:										
CO/PO	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	S	S	S	S	S	S	S	M	S	M
CO2	M	S	S	S	M	S	S	M	M	M
CO3	S	S	S	M	S	S	S	M	S	M
CO4	S	S	S	S	S	S	S	M	M	M
CO5	M	S	S	S	S	S	S	M	M	S
S–Strong;L –Low;M–Medium										

Code	Type	Course Name	Category	Lecture (L)	Tutorial (T)	Practical (P)	Credit
23AECSS20	AECC SS1	Soft Skills II	Theory	-	-	30	2

Preamble: The course provides hands on skills for designing.		
Unit	**Course contents**	**Hours**
I	Soft skills and its importance: Pleasure and pains of transition from an academic environment to work environment. Need for change. Fears, stress and competition in the professional world - Characteristics of the person perceived, characteristics of the situation, characteristics of the perceiver. Attitude, values, motivation, emotion management, steps to like yourself, positive mental attitude, assertiveness	6
II	Vocabulary building: A brief introduction into the methods and practices of learning vocabulary. Learning how to face questions on antonyms, synonyms, spelling error, analogy, etc. Wrong form of words and confused words like understanding the nuances of spelling changes and wrong use of words. Listening skills: The importance of listening in communication and how to listen actively.	6
III	Prepositions, articles and punctuation: A experiential method of learning the uses of articles and prepositions in sentences is provided. Presentations: Preparations, outlining, hints for efficient practice, last minute tasks, means of effective presentation, language, gestures, posture, facial expressions, professional attire.	6
IV	Boats & Streams, Alligation& Mixture, Problem on ages, SI & CI, Area & Perimeter.	6
V	Volume & Surface, Percentage and Average, Pipe & Cisterns.	6
Total		**30**

Text Book(s) :

1. Campus Recruitment Training pack by Nishit Sinha & Dinesh Khattar , 2022 – Pearson India Publications

Reference Book(s):

1. M .S. Rao. “Soft skills”, I .K. International publishing House Pvt.ltd, Bangalore,2011
2. Sabina Pillai & Agna Fernandez. “Soft Skills and Employability Skills, Cambridge University Press”, 2018
3. “A Complete Manual for Campus Placements”, GK Publications Private Limited 2019.
4. Kumkum Gupta. Everyday Vocabulary, Arihant Publications 2016.

Focus of Course: Employability

ONLINE RESOURCE

https://www.thebalancemoney.com/what-are-soft-skills-2060852
https://www.skillsyouneed.com/ips/what-is-communication.html
https://www.forbes.com/sites/francesbridges/2017/07/21/10-ways-to-build-confidence/

https://k12.thoughtfullearning.com/teachersguide/writers-express/45-building-vocabulary-skills https://www.indiabix.com/ https://www.faceprep.in/quantitative-aptitude/ https://prepinsta.com/how-to-prepare-for-campus-placements/
Course Designer: M.Devi Priya **Aptitude Trainer** **BoS Chairman**

Course Outcomes (COs)		
On successful completion of this course the students will be able to:		
CO Number	**Course Outcome (CO) Statement**	**Blooms Taxonomy Knowledge Level**
CO1	Understand the importance of soft skills needed for their profession	K2
CO2	come self-confident and self- motivated individuals to face the competitive world.	K2
CO3	Apply the verbal and non-verbal skills in professional career	K3
CO4	Identify an appropriate approach to solve quantitative problems	K2
CO5	Apply the problem-solving skills in everyday activities	K3

Distribution of marks for ContinuousInternal Assessment (CIA)and End Semester Examinations (ESE)(UG&PG-Theory)

S. No	Course	Max Marks	Marks for		Components for CIA							
			CIA	ESE	Test			MCQ	Seminar [PG]/ Assignment [UG]	Attd. [UG]	OBE - SBC	Total
					CIA I	CIAII	Model					
1	Theory(Value Based Course) (UG)	50	50	-	20(Best of 2 tests)		25	-	5 [UG]	-	_	50
2	Theory(IDC–PG)	50	50	-	20 (Best of 2 tests)		30	-	-	-	_	50
3	Theory (UG &PG) (Core/Discipline Specific Elective / Discipline Centered Elective/Generic Elective)	100	25	75	03 (Best of 2 tests)		07	5	5[PG]	5 [UG]	05*@	25
4	Theory(Skill Enhancement Courses)(UG)	75	30	45	6 (Best of 2 tests)		9	5	-	5	5#	30
5	Theory(Skill Enhancement Courses / Soft Skills / Professional Skills)&(Ability Enhancement Compulsory Courses)(PG)	50	50	-	10 (Best of 2 tests)		20	-	10 [PG]	-	10 @	50
6	Theory(Ability Enhancement Compulsory Courses)(UG)	50	50	-	10 (Best of 2 tests)		15	-	10 [UG]	5	10* @	50

NOTE: SBC – Skill Based Components [OBE based]

MCQ – Multiple ChoiceQuestions

- IDC – Inter DepartmentalCourse
- #-1Skillbasedtask
- *-2Skillbasedtasks [Only For UG]
- @-3Skillbasedtasks [Only For PG]

Distribution of marks for Continuous InternalAssessment (CIA) and End Semester Examinations (ESE)

(UG &PG–Practical)

S. No	Course	Max Marks	Marks for		Components for CIA						
			CIA	ESE	CIAI	CIA II	Model Exam	LabPerformance	Observation	OBE SBC	Total
1	Practical(Core/Discipline Specific Elective / Discipline Centered Elective/Generic Elective)	100	40	60	10(Best of 2 tests)		15	05	05	5* @	40
2	Practical (Skill Enhancement Courses)(UG)	75	30	45	6 (Best of 2 tests)		9	5	5	5#	30
3	Practical (Skill Enhancement Courses / Soft Skills / Professional Skills)(PG)	50	50	-	10 (Best of 2 tests)		20	5	5	10@	50
4	Practical (Ability Enhancement Compulsory Courses) (UG& PG)	50	50	-	10 (Best of 2 tests)		20	5	5	10*@	50

NOTE: SBC – Skill Based Components [OBE based]

- #-1Skillbasedtask
- *-2Skillbasedtasks [Only For UG]
- @-3Skillbasedtasks [Only For PG]

Distribution of marks for Continuous Internal Assessment (CIA) and End Semester Examinations(ESE)(UG&PG–Project andInternship)

S. No	Course	Max Marks	Marks for		CIA				ESE	
			CIA	ESE	Review I	Review II	Report sub	Model viva voce	Evaluation	Viva voce

1	Project / Internship / Industry Module	100	40	60	10	10	10	10	40	20
2	Project / Internship / Industry Module	75	30	45	05	05	10	10	25	20

Distribution of marks for Continuous Internal Assessment (CIA) and End Semester Examinations(ESE)(UG &PG Psychology &PG Social Work – Internship andFieldwork)

S. No	Courses	Max Marks	Marks for		CIA				ESE	
			CIA	ESE	Atten.	Work diary / IC	Report/ Record	Professional Knowledge&Initiatives/ Model viva voce	Evaluation	Viva voce
1	Internship forPsychology – UG & PG / Field work for PG - Social work	100	40	60	10	10	10	10	40	20

- **NOTE:** The new regulations introduced by the Bharathiar University are applicable to CIA, ESE and the Question Paper pattern only. But the regulations already in vogue are applicable without any change to all other areas like course credits, hours of teaching etc., for the students admitted from the academic year 2021 – 2022 andonwards.

25 SKILL BASED TASKS FOR THEORY / PRACTICAL COURSES:

- ASSIGNMENTS
- FLOWCHARTS
- MINIATURES
- DEMONSTRATION
- SNAPTALK
- VIVA VOCE
- CLASS PRESENTATION [ORAL/POSTER]

- BUSINESSPLAN
- GROUPDISCUSSION
- SIMULATIONEXERCISE
- CASESTUDY
- GAMES
- PUZZLES
- MODELS
- PAPERPRESENTATION
- ARTICLEREVIEW
- DEBATE
- SEMINAR
- REPORTS
- PORTFOLIOS
- QUESTIONNAIRE
- PUBLICATION
- SURVEY
- MINI PROJECT [INDIVIDUAL /GROUP]
- USP COMPONENT [UNIQUE TO THECOURSE]

Pattern of Examinations: The college follows semester pattern. Each academic year consists of two semesters and each semester ends with the End Semester Examinations. A student should have a minimum of 75% attendance out of 90 working days to become eligible to sit for the examinations.

Internal Examinations: The questions for every examination shall have equal representation from the units of syllabus covered. The question paper pattern and coverage of syllabus for each of the internal (CIA) tests for UG programs are as follows.

Internal Assessment Test

i. First CIA Test

Syllabus : First & Second Units
Working Days : On completion of 30 working days, approximately
Duration : Two Hours
Max. Marks : 50

ii. Second CIA Test

Syllabus : Third and Fourth Units
Working Days : On completion of 65 working days, approximately
Duration : Two Hours
Max. Marks : 50

iii. Model Examinations
Syllabus : All Five Units
Working Days : On completion of 85 working days, approximately
Duration : Three Hours
Max. Marks : 75

For the internal assessment test, the question paper pattern shall be as given below for the 2023 – 2024 Batch -

UG: CIA TEST – I & II

[FOR 2 UNITS - 2 HOURS – 50 MARKS]

[FOR ALL THEORY COURSES COURSES]

SECTION A

[06 MULTIPLE CHOICE QUESTIONS]

[ALL 6 FROM K1 LEVEL]: **06 x 01= 06 MARKS**

(MINIMUM THREE QUESTION SHALL BE ASKED FROM EACH UNIT)

SECTION B

[250 WORDS – EITHER OR TYPE – 4 QUESTIONS]

[2 QUESTIONS FROM K1 LEVEL]

[4 QUESTIONS FROM K2 LEVEL]

[2 QUESTION FROM K3 LEVEL]: **04 x 05 = 20 MARKS**

(MINIMUM TWO QUESTIONS SHALL BE ASKED FROM EACH UNIT)

SECTION C

[500 WORDS – EITHER OR TYPE – 3 QUESTIONS]

[2 QUESTIONS FROM K1 LEVEL]

[2 QUESTIONS FROM K2 LEVEL]

[2 QUESTION FROM K3 LEVEL]: **03 x 08 = 24 MARKS**

(MINIMUM ONE &MAXIMUM TWO QUESTIONS SHALL BE ASKED FROM EACH UNIT)

TOTAL: 50 MARKS

PG: CIA TEST – I & II

[FOR 2 UNITS - 2 HOURS – 50 MARKS]

[FOR ALL THEORY COURSES]

SECTION A

[06 MULTIPLE CHOICE QUESTIONS]

[ALL 6 FROM K1 LEVEL]: **06 x 01= 06 MARKS**

(MINIMUM THREE QUESTION SHALL BE ASKED FROM EACH UNIT)

SECTION B

[250 WORDS – EITHER OR TYPE – 4 QUESTIONS]

[2 QUESTIONS FROM K1 LEVEL]

[2 QUESTIONS FROM K2 LEVEL]

[4 QUESTION FROM K3 LEVEL]: **04 x 05 = 20 MARKS**

(MINIMUM TWO QUESTIONS SHALL BE ASKED FROM EACH UNIT)

SECTION C

[500 WORDS – EITHER OR TYPE – 3 QUESTIONS]

[2 QUESTIONS FROM K3 LEVEL]

[2 QUESTIONS FROM K4 LEVEL]

[2 QUESTION FROM K5 LEVEL]: **03 x 8 = 24 MARKS**

(MINIMUM ONE &MAXIMUM TWO QUESTIONS SHALL BE ASKED FROM EACH UNIT)

TOTAL: 50 MARKS

PG: CIA TEST – I & II

[FOR 2 UNITS - 2 HOURS – 50 MARKS]

[FOR IDC OFFERED BY MATHEMATICS DEPARTMENT]

SECTION A

[50 MULTIPLE CHOICE QUESTIONS]

[ALL 50 FROM K1 LEVEL]: **50 x 01= 50 MARKS**

(MINIMUM TEN QUESTIONS SHALL BE ASKED FROM EACH UNIT)

UG: MODEL & END SEMESTER EXAMINATION

[FOR ALL THEORY COURSES INCLUDING NME]

[FOR 5 UNITS – 3 HOURS – 75 MARKS]

SECTION A

[10 MULTIPLE CHOICE QUESTIONS]

[ALL 10 FROMK1LEVEL]: **10x01= 10MARKS**

SECTION B

[250 WORDS – EITHER OR TYPE – 5 QUESTIONS]

[4 QUESTIONS FROM K1LEVEL]

[4 QUESTIONS FROM K2LEVEL]

[2 QUESTIONS FROMK3LEVEL]: **05 x 05 = 25 MARKS**

SECTION C

[500 WORDS – EITHER OR TYPE – 5 QUESTIONS]

[4 QUESTIONS FROM K1LEVEL]

[4 QUESTIONS FROM K2LEVEL]

[2 QUESTION FROM K3 orK4LEVEL]: **05 x 08 = 40MARKS**

TOTAL: **100MARKS**

PG: MODEL & END SEMESTER EXAMINATION

[FOR 5 UNITS – 3 HOURS – 75 MARKS]

[FOR ALL THEORY COURSES]

SECTION A

[10 MULTIPLE CHOICE QUESTIONS]

[ALL 10 FROMK1LEVEL]: **10x01= 10MARKS**

SECTION B

[250 WORDS – EITHER OR TYPE – 5 QUESTIONS]

[4 QUESTIONS FROM K1LEVEL]

[4 QUESTIONS FROM K2LEVEL]

[2 QUESTIONS FROMK3/K4LEVEL]: **05 x 05 = 25 MARKS**

SECTION C

[500 WORDS – EITHER OR TYPE – 5 QUESTIONS]

[4 QUESTIONS FROM K3 LEVEL]

[2 QUESTIONS FROM K4 LEVEL &

1 QUESTION **COMPULSORY [Q.NO.20]**FROM K4 LEVEL]

[2 QUESTIONS FROMK5LEVEL] : **05 x 08 = 40MARKS**

TOTAL: **100MARKS**

The following is the Question Paper Pattern for the courses Environmental Studies and Value Education and Human Rights, Inter Departmental Courses [for PG]

Syllabus :Two Units / All Five Units
Duration :Two / Three Hours
Max. Marks : 50

Question Paper Pattern

Section A (5 x 10 = 50 marks)

Five Questions of "*either / or"* type. Each question carries 10 marks.
Answer all questions

Q.1 (a) _____ or (b) _____
Q.2 (a) _____ or (b) _____
Q.3 (a) _____ or (b) _____
Q.4 (a) _____ or (b) _____
Q.5 (a) _____ or (b) _____

Assignments for UG

Each student is expected to submit at least two assignments per course. The assignment topics will be allocated by the course teacher. The students are expected to submit the first assignment before the commencement of first CIA and the second assignment before the commencement of second CIA.

Scoring pattern for Assignments for UG

Punctual Submission : 2 Marks
Contents : 4 Marks
Originality/Presentation skill : 4 Marks
Maximum : 10 Marks x 2 Assignments = 20 marks

Attendance Marksfor UG

Attendance Range		Marks
96 % and above	-	5 Marks
91 % & up to 95 %	-	4 Marks
86% & up to 90 %	-	3 Marks
81% & up to 85 %	-	2 Marks
From 75 % to 80%	-	1 Mark
Maximum	-	5 Marks

ALL UG & PG THEORY – MULTIPLE CHOICE QUESTIONS

[FOR 5 UNITS –55 MINUTES – 50 MARKS]

QUESTIONS WILL BE SET VIA CAMU PORTAL / GOOGLE FORM QUIZ

[50 MULTIPLE CHOICE QUESTIONS]

[ALL 50 FROM K1 LEVEL]: **50 x 01= 50 MARKS**

(MINIMUM TEN QUESTIONS SHALL BE ASKED FROM EACH UNIT)

Outcome Based Education Assessment Pattern (Internals)

2023–2024 batch onwards

InternalsSetup : Theory – 25 marks (UG/PG)

Name of the Examinations	Examination Conduction Marks	Marks to convert as Final Mark
CIA Test [Best of Two]	50	03
Model Examination	75	07
MCQ	50	05
Attendance [UG] / Seminar [PG]	05	05
2 OR 3Skill Based Task	10	05
Total Marks		**25**

InternalsSetup : Theory – 30 marks (UG/PG)

Name of the Examinations	Examination Conduction Marks	Marks to convert as Final Mark
CIA Test [Best of Two]	50	06
Model Examination	75	09
MCQ	50	05
Attendance [UG] / Seminar [PG]	05	05
1 Skill Based Task	05	05
Total Marks		**30**

InternalsSetup : Value Based Course [EVS / VE] – 50 marks (UG)

Name of the Examinations	Examination Conduction Marks	Marks to convert as Final Mark
CIA Test [Best of Two]	50	20
Model Examination	50	25
Assignment	05	05
Total Marks		**50**

InternalsSetup : IDC – 50 marks (PG)

Name of the Examinations	Examination Conduction Marks	Marks to convert as Final Mark
CIA Test [Best of Two]	50	20
Model Examination	50	30
Total Marks		**50**

InternalsSetup : Theory – 50 marks (UG- AECC)

Name of the Examinations	Examination Conduction Marks	Marks to convert as Final Mark
CIA Test [Best of Two]	50	10
Model Examination	50	15
Seminar	10	10
Attendance	05	05
2Skill Based Task	10	10
Total Marks		**50**

InternalsSetup : Theory – 50 marks (PG- SEC/PS/SS/AECC)

Name of the Examinations	Examination Conduction Marks	Marks to convert as Final Mark
CIA Test [Best of Two]	50	10
Model Examination	50	20
Seminar	10	10
3 Skill Based Task	10	10
Total Marks		**50**

InternalsSetup : *Practical – 40 marks [UG/PG]*

Name of the Examinations	Examination Conduction Marks	Marks to convert as Final Mark
CIA Test [Best of Two]	50	10
Model Examination	60	15
Lab Performance	05	05
Observation	05	05
2/3 Skill Based Task	05	05
Total Marks		**40**

InternalsSetup : *Practical – 30 marks [UG/PG]*

Name of the Examinations	Examination Conduction Marks	Marks to convert as Final Mark
CIA Test [Best of Two]	50	6
Model Examination	50	9
Lab Performance	5	5
Observation	5	5
1 Skill Based Task	5	5
Total Marks		**30**

InternalsSetup : *Practical – 50 marks [UG/PG] – [SEC/AECC/SS/PS]*

Name of the Examinations	Examination Conduction Marks	Marks to convert as Final Mark
CIA Test [Best of Two]	50	10
Model Examination	50	20
Lab Performance	05	05
Observation	05	05
2/3 Skill Based Task	10	10
Total Marks		**50**

InternalsSetup : *Project / Internship– 40 marks*

Name of the Examinations	Examination Conduction Marks	Marks to convert as Final Mark
Review – I	10	10
Review – II	10	10
Report Submission	10	10
Model Viva-voce	10	10
Total Marks		**40**

InternalsSetup : *Project / Internship– 30 marks*

Name of the Examinations	Examination Conduction Marks	Marks to convert as Final Mark
Review – I	05	05
Review – II	05	05
Report Submission	10	10
Model Viva-voce	10	10
Total Marks		**30**

InternalsSetup : PSY & MSW *Internship and Field Work – 40 marks*

Name of the Examinations	Examination Conduction Marks	Marks to convert as Final Mark
Work diary/IC	10	10
Report/Record	10	10
Professional Knowledge & Initiatives / Viva-voce	10	10
Attendance	10	10
Total Marks		**40**

External Examinations:

The external examinations for theory courses will be conducted for 75% marks for all UG and PG degree programs,(In case of Total mark is 75, External will be 45 marks). The external theory examinations will be conducted only after the completion of 90 working days in each semester.

Normally, the external practical examinations will be conducted before the commencement of theory examinations. Under exceptional conditions these examinations may be conducted after theory examinations are over. The external evaluation will be for 75%(In case of Total mark is 75, External will be 45 marks) of each practical course.

The **External Assessment marks for Practical Examinations** are based on the following criteria. The assessment is for 75 % marks of each practical course.

Programmes (2*20)	40
(Algorithm 10 marks, Key and execution10 marks)	
Record	20

Total	**60**

The **External Assessment marks forSkill BasedPractical Examinations** are based on the following criteria. The assessment is for 45 marks of each practical course.

Programmes (2*20)	40
(Algorithm 08 marks, Key and execution12 marks)	
Record	05

Total	**45**

The **External Assessment marks forNon Major ElectivePractical Examinations** are based on the following criteria. The assessment is for 75 marks.

Programmes (2*30)	60
(Algorithm 10 marks, Key and execution 20 marks)	
Record	15

Total	**75**

The **External Assessment marks for Project / Industry Module and Summer Internship [Inclusive of Psychology & Social Work]**are based on the following criteria. The assessment is for 60 marks.

a)Evaluation	40
b)Vivavoce	20

Total	**60**

The **External Assessment marks for Project / Industry Module and Summer Internship**are based on the following criteria. The assessment is for 45 marks.

a)Evaluation	25
b)Vivavoce	20

Total	**45**

THE EXTERNAL & TOTAL PASSING MINIMUM MARKS:

CLASSIFICATION	MARKS

FOR UG: TOTAL 100 MARKS	
UG: EXTERNAL PASSING MINIMUM [40%]	30/75
UG: TOTAL PASSING MINIMUM [40%]	40/100
FOR UG: TOTAL 75 MARKS	
UG: EXTERNAL PASSING MINIMUM [40%]	18/45
UG: TOTAL PASSING MINIMUM [40%]	30/75
FOR PG: TOTAL 100 MARKS	
PG: EXTERNAL MINIMUM [50%]	38/75
PG: TOTAL MARKS MINIMUM [50%]	50/100

SREE SARASWATHI THYAGARAJA COLLEGE (AUTONOMOUS)
THIPPAMPATTI, POLLACHI - 642 107

Student Grievance Form

(Forms Available at Utility Stores)

Date:
Place:

From
Register No : …….....,
Name : …….....,
Class : …….....,
Sree Saraswathi Thyagaraja College,
Pollachi – 642 107

To
The Principal / Examination-in-charge,
Sree Saraswathi Thyagaraja College,
Pollachi – 642 107

Through:
1. Head of the Department,
Department of …….……,
Sree Saraswathi Thyagaraja College,
Pollachi – 642 107
2. Dean of the Department
Faculty of …….,
Sree Saraswathi Thyagaraja College,
Pollachi – 642 107

Respected Sir / Madam,

Sub: ……... - reg.

NATURE OF GRIEVANCE

……...……
……
……

Thanking you,

Yours Truly,

Signature

Forwarded by:
HOD with comments / recommendation
……...……
2. Dean with comments / recommendation
……...……....
3. Signature and Directions of the Principal
……...……....
4. Controller of Examinations:

…….....