

# **B.Sc. (Printing & Packaging Technology)**

**Choice Based Credit System (CBCS)/Learning Outcomes-based Curriculum Framework(LOCF) under NEP 2020**

w.e.f. Academic Session 2022-23.

Eligibility: 10+2 in any discipline



**Institute of Mass Communication & Media Technology  
Kurukshetra University, Kurukshetra**



	Credits Subject -1	Subject - 2	Credits Subject -3			Credits	(Audit)		
V Level 1-7	CC-1H1	X	X	GE-3*@ 6 Credits of Level -5/6	SEC - 5(Major Subject-1)@ 6 credits	DSE-1 (Major Subject-1) DSE-2 (Major Subject-2)	2	20+ 10of inter nshi p+6 H+6 *	Grad uatio n in Arts/ Scien ce/co mmer ce
VI Level -7	CC-1H2	X	X	GE-4*@ 6 Credits of Level -5/6	SEC -6(Major Subject-2)@ 6 credits	DSE-3 (Major Subject-1) DSE-4 (Major Subject-2)	2	20 +6 H+6 *	@14 2 credit s/hon ors in Subje ct@1 54 Credi ts
Seme ster	<b>CORE COURS ES @ 6 Credits</b>	<b>Research Ability Enhancement Courses(RAEC) and Thesis</b>			<b>Research Progression Seminars</b>			<b>Cre dits</b>	<b>Exit</b>
VII Level -8	CC-1H1 and CC- 1H2(off level 7 to be complete d by graduate students without honors	Research Ethics @4 credits Research Methodology @4 credits			Review of Literature general seminar @ 4 credits Synopsis writing and seminar @ 4 credits			16	Grad uatio n in subje ct (Hon ors and Resea rch) @ 194 credit s
VIII Level -8		Dissertation/Thesis Preparation/Writing @ 20 credits			<b>Mid term seminar @ 2 credits</b> <b>Pre submission Seminar @ 2 credits</b>			<b>24</b>	

**AECC will be offered according to the time table adjustments in the Institute/Department.**

\*MOOC Course from Swayam Portal.

\*\* SEC can be offered in all semester according to the time table adjustments in the institute.

**\*\*Internship/Industry Training** A candidate must complete one time industrial training of 3 weeks before exit from 1/2/3 year. The internship report will be submitted in 2/4/6<sup>th</sup> semester.

**General instructions:**

- One credit equivalent to 1 hour of teaching/2 hours of Practical work
- Teaching workload will be calculated on the basis of teaching contact hours of the course
- One credit (theory /Practical) equivalent to 25 marks

### **Total No. of Courses, Credit and Marks**

<b>Course</b>	<b>No. of Courses</b>	<b>Credits Teaching/Week</b>	<b>Credits Practical/Week</b>	<b>Credits Tutorials/Week</b>	<b>Total Credits</b>	<b>Marks</b>
Core Courses	16	16x4=64	16x2=32	--	64+32=96	16x150 =2400
AECC	2	2x2=4	--	--	4	2x50=100
SEC	6	6x4=24	--	--	24	6x50 =300
DSE	4	4x4=16	4x2=8	--	16+8=24	4x150 =600
Industrial Training	--	--	--	--	10	1x50 =50
Research Ability Enhancement Courses(RAEC) and Thesis	--	--	--	--	16	
Research Progression Seminars	--	--	--	--	24	
<b>Total</b>	<b>29</b>	<b>102</b>	<b>44</b>	<b>-</b>	<b>158</b>	<b>3450</b>

**Scheme of Examination of B.Sc. (Printing & Packaging Technology) programme in accordance with NEP 2020 (Multiple Entry-Exit, Internships and Choice Based Credit System) w.e.f. Academic Session 2022-23 in phased manner.**

**Semester-I**

Course Code	Course Title	Course Type	Contact Hours per Week				Credits	Total Credits	Marks				Duration of Exam
			L	T	P	Total			T	P	IA	Total	
AECC-N100	Communicative English	AECC-1	2	-	-	2	2	2	25	-	25	50	2 Hours
B-PPT-N101	Printing Process (Theory)	CC-1A	4	-	-	4	4	6	50	-	50	100	3 Hours
B-PPT-N102	Printing Process (Practical)		-	-	2	4	2		-	25	25	50	3 Hours
B-PPT-N103	Typography (Theory)	CC-2A	4	-	-	4	4	6	50	-	50	100	3 Hours
B-PPT-N104	Typography (Practical)		-	-	2	4	2		-	25	25	50	3 Hours
B-PPT-N105	Fundamentals of Packaging (Theory)	CC-3A	4	-	-	4	4	6	50	-	50	100	3 Hours
B-PPT-N106	Fundamentals of Packaging (Practical)		-	-	2	4	2		-	25	25	50	3 Hours
B-PPT-N107	Computer Science (Theory)	SEC-1	1	-	-	1	1	2	20	-	5	25	2 Hours
B-PPT-N108	Software Lab					1	1			20		5	25
B-PPT-N109	Activity/Hobby Gita-A Manual of Life (Option-i) Public Speaking (Option-ii)						2	2	Satisfactory/Non Satisfactory				
<b>Total Credits</b>								<b>24</b>	<b>Total Marks</b>			<b>550</b>	

**Semester-II**

Course Code	Course Title	Course Type	Contact Hours per Week				Credits	Total Credits	Marks				Duration of Exam
			L	T	P	Total			T	P	IA	Total	
AECC-N200	Environmental Studies	AECC-2	2	-	-	2	2	2	25	-	25	50	3 Hours
B-HIN-N200	Communicative Hindi	AECC-3	2	-	-	2	2	2	25	-	25	50	2 Hours
B-PPT-N201	Food Packaging (Theory)	CC-1B	4	-	-	4	4	6	50	-	50	100	3 Hours
B-PPT-N202	Food Packaging (Practical)		-	-	2	4	2		-	25	25	50	3 Hours
B-PPT-N203	Graphic Design (Theory)	CC-2B	4	-	-	4	4	6	50	-	50	100	3 Hours
B-PPT-N204	Graphic Design (Practical)		-	-	2	4	2		-	25	25	50	3 Hours
B-PPT-N205	Sheet fed Offset Technology (Theory)	CC-3B	4	-	-	4	4	6	50	-	50	100	3 Hours
B-PPT-N206	Sheet fed Offset Technology (Practical)		-	-	2	4	2		-	25	25	50	3 Hours
B-PPT-N207	Human Value & Ethics	SEC-2	2	-	-	2	2	2	25	-	25	50	2 Hours
B-PPT-N208	Activity/Hobby						2	2	Satisfactory/Non Satisfactory				
<b>Total Credits</b>								<b>26</b>	<b>Total Marks</b>			<b>600</b>	

**List of Total Subjects in B.Sc. (Printing & Packaging Technology):**

<b>Sr. No.</b>	<b>Course Type</b>	<b>Number of Subjects</b>
<b>1</b>	CC	16
<b>2</b>	AECC	02
<b>3</b>	SEC	06
<b>4</b>	DSE	04
	<b>Total</b>	<b>28</b>

<b>Semester</b>	<b>Course Type</b>	<b>Number of Subjects</b>
<b>Semester I</b>	CC	3
	AECC	1
	SEC	1
<b>Semester II</b>	CC	3
	AECC	1
	SEC	1
<b>Semester III</b>	CC	3
	SEC	1
	GE	1
<b>Semester IV</b>	CC	3
	SEC	1
	GE	1
<b>Semester V</b>	CC	1
	SEC	1
	GE	1
	DSE	2
<b>Semester VI</b>	CC	1
	SEC	1
	GE	1
	DSE	2
<b>Total</b>		<b>35</b>

**List of Abbreviations**

**L** -Lecture  
**T**- Tutorial  
**P**- Practical  
**IA** – Internal Assessment  
**CC**- Core Course  
**AECC**- Ability Enhancement Compulsory Course  
**SEC**- Skill Enhancement Course  
**DSE**- Discipline Specific Elective  
**GE**-General Elective

## **PROGRAMME OUTCOMES**

**On successful completion of the programme, the student will be able to:-**

- PO1** Acquire knowledge related to the discipline under study.
- PO2** Communicate and reflect effectively and efficiently on the issues related to the discipline.
- PO3** Exhibit the professional skills and competencies acquired during the Programme of study.
- PO4** Apply the knowledge and skills acquired in planning, organizing, evaluation and decision making.
- PO5** Explore, analyze and provide solutions to the problems related to the discipline and life.
- PO6** Develop exposure to actual working environment leading to employability and entrepreneurship.
- PO7** Exhibit scientific & research capabilities in academic, professional and general life pursuits.
- PO8** Recognize, appreciate and follow ethical issues relating to the discipline and society.

## **Programme Specific Outcomes:**

After completion of under graduate programme in Printing & Packaging Technology, the learner will be able to :

- PSO1** Acquire fundamental knowledge of Printing and packaging Technology as an academic discipline.
- PSO 2** Display the knowledge of appropriate theory, practices and tools for the specification, design and implementation
- PSO3** Develop competency for employability and Entrepreneurship by practicing techniques and tools for innovative Printing & Packaging applications.
- PSO 4** Demonstrate Printing & Packaging skills by undertaking projects.
- PSO 5** Link knowledge of Printing and packaging with other chosen auxiliary disciplines of study.



## AECC-N100: Communicative English

Time: 2 Hrs.  
Credits: 2

Total Marks: 50  
Theory:25  
Internal Assessment: 25

Contact hours per week: 2

**Course objectives:** The paper is designed to enhance proficiency in English Language. It seeks to develop the basics of English Language through different modules. Each unit will enable and capacitate the learner to have communication competence which is required in the present-day world. The basic knowledge of communication will enable the learners to share and enliven ideas, experience and know-how ubiquitous in the world.

<b>Course Learning Outcomes:</b>
After completing the Course, the student will be able to:
<b>AECC-N100.1:</b> Learn the rhetoric of presentation
<b>AECC-N100.2:</b> Learn, comment and respond to correspondence
<b>AECC-N100.3:</b> Learn the basics of grammar and composition
<b>AECC-N100.4:</b> Acquaint with verbal and non-verbal communication

**Note:** All questions are compulsory.

- Q.1.** The paper setter will set two question from unit-II. The student shall attempt one out of the given two. (05)
- Q.2.** This question shall be based on unit-III. The student shall attempt one out of the given two. (10)
- Q.3.** There will be 15 grammatical items based on unit-IV. The student shall attempt any 10 items. (10)

**Internal Assessment:** The students shall be required to make presentation /PPT based on unit-I.

### Unit-I

#### Listening and speaking skills

Listening skills (Active-passive, Accent)

Speaking Skills (Accent, Stress, Intonation, Assertion, Rhetorical questions, Pause, Pitch)

Oral presentation, Debates, Elocution and Extempore

### Unit-II

#### Writing skills

Report writing

Paragraph writing

Letter writing

### Unit-III

#### Technical and Modern communication

Resume writing

E-mail

Blogs and comments on social media

### Unit-IV

#### Grammar

Noun, Pronoun, Verb, Adverb, Adjective, Preposition, Conjunction and their uses

Common errors in the use of English (Noun, Pronoun, Adjective, Adverb, Conjunctions)

Correct use of verbs and Articles

Vocabulary: Homonyms, Homophones, Pair of words

## **References:**

- Communicative English, Dr. Jimmy Sharma, Arihant Parkashan Pvt. Ltd.
- Strengthen Your English, Bhaskaran and Horsburgh, Oxford University Press
- Basic Communication Skills for Technology, and area J Rutherford, Pearson Education Asia.
- Murphy's English Grammar with CD, Murphy, Cambridge University Press
- English Skills for Technical Students by Orient Longman
- Everyday Dialogues in English by Robert J. Dixon, Prentice-Hall of India Ltd., 2006.



## B-PPT-N101: PRINTING PROCESS (THEORY)

Time: 3 Hrs.

Credits : 4

Total Marks: 100

Theory : 50

Internal Assessment: 50

**Course Objectives:** This course is designed for theoretical understanding of basic Printing process, its history and development from ancient to the modern world. It also provides the technical ability to understand pre-press, press, and post press operations in printing press.

<b>Course Learning Outcomes:</b>
The students learned about the Printing process and the student will be able to:
<b>B-PPT-N101.1:</b> Acquire knowledge about development in Indian Printing Industry
<b>B-PPT-N101.2:</b> Know about historical development of printing
<b>B-PPT-N101.3:</b> Develop the knowledge about the different printing processes
<b>B-PPT-N101.4:</b> Know the basic operations in printing – Pre-press, Press & Post Press

**Note:-** The question paper will be divided into five Units containing nine questions. Students are required to attempt five questions in all. There will be two questions in each unit from I to IV and students are required to attempt one question from each unit. Unit V will have only one Compulsory question containing six short notes covering the entire syllabus and students are required to attempt any four. All questions will carry equal marks.

### UNIT –I

**History of printing:** History of Printing, Scope of Indian Printing Industry, Applications of printing Industry, Indian printing Industry- An emerging market, size of the industry, total contribution to the economy, employment opportunity, Recent trends in Printing.

### UNIT –II

**Printing Processes:** Introduction to conventional printing processes- Relief, Planography, Intaglio, Screen. On Demand printing, Electrostatic, Digital and Mini Offset. Specialized printing -Thermography, Die Stamping, Hot foil stamping, Hologram printing. Suitability & limitations and applications of various printing Processes

### **UNIT –III**

**Basic operations in printing-** Pre -Press, Press and Post –press section,: Basic concepts, Typesetting of text matter, formatting the text pagination and arranging the pictures and graphics, Film outputting of text and visual elements particularly color separation, assembly of film and plate making. press: Pre make ready, make-ready operations , Finishing operations

### **UNIT –IV**

**Letterpress and Screen printing machines** - Classification of letterpress printing machines, types of platen, cylinder and rotary machines with their mechanical and operational features. Screen Printing Machines: Manual, semiautomatic and fully automatic screen printing machines. Rotary screen printing Machines .

**Running Defects of different printing process:** Common printing defects comes in various printing processes, causes and their remedies.

### **References :**

1. Letter Press Printing Part 1, 2, By C.S. Misra
2. Printing Technology By Adams, Faux, Rieber
3. Screen Printing Review By Babett Magee
4. Screen Printing By John Stephens
5. Art and Print Production By N.N. Sarkar



## **B-PPT-N102: PRINTING PROCESS (PRACTICAL)**

Time: 3 Hrs.  
Credits :2

Total Marks: 50  
Practical: 25  
Internal Assessment : 25

**Course Objectives:** This course is designed for practical understanding of basic Printing process, It also provides the technical ability to understand pre-press, press, and post press operations in printing press.

<b>Course Learning Outcomes:</b>
The students learned about the Printing process and the student will be able to:
<b>B-PPT-N102.1:</b> Enhance practical knowledge about printing processes.
<b>B-PPT-N102.2:</b> Know about the tools and equipment used for printing.
<b>B-PPT-N102.3:</b> Get technical knowledge about operations of letterpress printing machine.
<b>B-PPT-N102.4:</b> Know about operations in printing – Pre-press, Press & Post Press

**Note:- The students will do practical assignments assigned by the concerned teacher throughout the whole semester and will submit them in the form of hardcopy/softcopy to the teacher. External Examiner will evaluate the work done by the student, will conduct the practical and viva voce.**

### **LIST OF PRACTICALS**

1. Identification of different tools &equipment used in letterpress.
2. Schematic diagram of different Printing Processes.
3. Printing of line & half tone block in single & multi color.
4. Operational and mechanical features of different letter press Printing Machines.
5. Study of Running & printing faults on letter press machine.
6. Identification of different printing processes





## **B-PPT-N103: TYPOGRAPHY (THEORY)**

Time: 3 Hrs.  
Credits :4

Total Marks: 100  
Theory: 50  
Internal Assessment : 50

**Course Objectives:** The students will learn about the Typographical Process and will be able to enhance knowledge about Type, Letters ,Characters, Symbols ,Classification of Printing Type and develop the knowledge about the Typesetting department, Tools and Material used in Typesetting department.

<b>Course Learning Outcomes:</b> Upon successful completion of this course, the student will be able to:
<b>B-PPT-N103.1:</b> Demonstrate the proper use of type as a design tool.
<b>B-PPT-N103.2:</b> Create letterforms as part of a consistent alphabet.
<b>B-PPT-N103.3:</b> Understand typographic rules and measurements to composition.
<b>B-PPT-N103.4:</b> Recognize different type styles and categories.

**Note:- The question paper will be divided into five Units containing nine questions. Students are required to attempt five questions in all. There will be two questions in each unit from I to IV and students are required to attempt one question from each unit. Unit V will have only one Compulsory question containing six short notes covering the entire syllabus and students are required to attempt any four. All questions will carry equal marks.**

### **Unit - I**

**Introduction to Typography** - definition, concept and scope, Printing type - Two Dimensional and Three-Dimensional structure their characteristics, Printers Measurement and Systems: Point System, other units of measurements and application. Design features and principles of printing types, fundamental and finishing strokes of types.

### **Unit – II**

**Classification of printing types** based on serifs, point sizes, cases, faces, series, families etc. type font and sorts, principles of size and design identification, Suitability of different types for different processes and publications, typesetting Calculations relating to type sizes and dimensions of printing pages.

### **Unit – III**

**Typesetting Department:**-Work and role of the type-setting, department with in a printing press, Photo Type -setting., Proofing and Proofing Reader's marks; word breaks; proofing stages. Composing Tools and Equipment, Basic composing tools for hand composition, spacing material; locking- up devices; proofing presses, kinds of rules.

### **Unit –IV**

**Composition** Imposition, Sheet work, Half-sheet work, Work and tumble & Work and twist. The regular schemes up to 32 pages (upright and landscape), Planning of composition department, Floor plan and arrangement of equipment, Paper and its calculation.

**References:**

- 1 Theory & practice of composition - By A.C. Goel
- 2 Composing & Typography Today - By B.D. Mehendirutta.
3. Letter Press Printing Part I, II - By C.S. Mishra
4. Printing Technology By Adams,Faux,Riber
5. Art & Production By N.N. Sarkar



## **B-PPT-N104: TYPOGRAPHY (PRACTICAL)**

Time: 3 Hrs.  
Credits : 2

Total Marks: 50  
Practical: 25  
Internal Assessment : 25

**Course Objectives:** This course is designed for practical understanding of Mechanical Type. It provides the technical ability to understand fundamental and finishing strokes of the types.

<b>Course Learning Outcomes:</b>
The students learned about the Printing process and the student will be able to:
<b>B-PPT-N104.1:</b> Use of Block Letters & Numbering
<b>B-PPT-N104.2:</b> Demonstrate the physical structure of mechanical type and its composition
<b>B-PPT-N104.3:</b> Use of Various types of fonts
<b>B-PPT-N104.4:</b> Use of Fundamental and finishing strokes.

**Note:- The students will do practical assignments assigned by the concerned teacher throughout the whole semester and will submit them in the form of hardcopy/softcopy to the teacher. External Examiner will evaluate the work done by the student, will conduct the practical and viva voce.**

### **LIST OF PRACTICALS**

1. Block Lettering & Numbering (Normal Types).
2. Four-line Principle (Drawing).
3. Physical (Features) parts of the type (Structural Diagram).
4. Fundamental strokes.
5. Finishing strokes & their identification.
6. Introduction to various fonts & their drawing characteristics.



## **B-PPT-N105: FUNDAMENTALS OF PACKAGING (THEORY)**

Time: 3 Hrs.  
Credits :4

Total Marks: 100  
Theory: 50  
Internal Assessment : 50

**Course Objectives:** This course is designed for theoretical understanding of Packaging Technology, various packaging application, design of package and for creating sense of understanding the various types of packaging.

<b>Course Learning Outcomes:</b> Upon successful completion of this course, the students learned about the Packaging Technology and the student will be able to:
<b>B-PPT-N105.1:</b> Develop the knowledge of Packaging Technology to understand the Packaging Industry.
<b>B-PPT-N105.2:</b> Know about the various applications and classifications of packaging.
<b>B-PPT-N105.3:</b> Understand the function of package, types of package and elements of package design.
<b>B-PPT-N105.4:</b> Develop the knowledge of folding Carton production process and finishing operations.

**Note:-** The question paper will be divided into five Units containing nine questions. Students are required to attempt five questions in all. There will be two questions in each unit from I to IV and students are required to attempt one question from each unit. Unit V will have only one Compulsory question containing six short notes covering the entire syllabus and students are required to attempt any four. All questions will carry equal marks.

### **Unit - I**

#### **Basics of Packaging:**

**Packaging** Introduction, Classifications of Packaging - Flexible packaging and rigid packaging, Function of a package, Types of package, Factors influencing design of a package, Elements of Package Design, Hazard on the package - mechanical, climatic, biological and other hazards.

### **Unit – II**

#### **Folding Carton Production & Innovative Packaging Techniques**

Folding cartons production process, types of folding carton, Paperboard, types of paperboard used in carton making, components in a corrugated board, Vacuum packaging, shrink packaging, stretch wrapping, blister packaging, Aerosol packaging, Blow Molding - Extrusion blow Molding, Injection blow molding.

## **Unit – III**

### **Packaging Distribution & logistics**

Introduction to logistics, element of logistics, distribution of channels, Packaging Cycle, Product life curve, classification of pallets, material handling techniques-warehousing & storage, Markings on Package - Handling marks, routing marks, information marks, shelf life,

## **Unit -I V**

### **Future Trends and Finishing operations**

Futuristic trends in packaging, adhesive tapes - fabric tapes, paper tapes, film tapes, foil tapes, foam tapes, two faced tapes. Labels- designing, manufacturing and applications, Packaging finishing operations – coating, lamination, hot & cold foil stamping, die-cutting, embossing & de-embossing, liner and folding & gluing.

### **References :**

Packaging design and performance - **Frank Paine**

Advances in plastic packaging technology - **John Briston.**

Packaging design an introduction - **Laszlo Roth.**

Packaging Technology - Volume I, II, III - IIP





## **B-PPT-N106: FUNDAMENTALS OF PACKAGING (PRATICAL)**

Time: 3 Hrs.  
Credits :2

Total Marks: 50  
Practical : 25  
Internal Assessment : 25

**Course Objectives** : This course is designed for practical understanding of Packaging Technology classification, packaging machines, materials used in packaging, design of package and its application

<b>Course Learning Outcomes:</b>
The students learned about the Packaging Technology and the student will be able to:
<b>B-PPT-N106.1:</b> Design flexible packages
<b>B-PPT-N106.2:</b> Design rigid packaging
<b>B-PPT-N106.3:</b> Test raw different types material
<b>B-PPT-N106.4:</b> Prepare various of package design

**Note:-** The students will do practical assignments assigned by the concerned teacher throughout the whole semester and will submit them in the form of hardcopy/softcopy to the teacher. External Examiner will evaluate the work done by the student, will conduct the practical and viva voce.

### **LIST OF PRACTICALS**

1. Designing and preparation of various flexible packages.
2. Designing and preparation of various rigid packages.
3. Study and operation of various packaging machines.
4. Designing & preparation of various designs of paper bags.
5. Testing of raw materials like- paper, paperboard, plastic and ink.
6. Drop test, Vibration test, inclined impact test, Compression test.



## **B-PPT-N107: COMPUTER SCIENCE (THEORY)**

Time: 2 Hrs.

Credits: 1

Total Marks: 25

Theory: 20

Internal Assessment: 5

Contact hours per week: 1

**Course Objectives:** This course is designed for theoretical understanding of computer system and its components, functioning and its application software exposure.

<b>Course Learning Outcomes:</b>
After completing the Course, the student will be able to:
<b>B-PPT-N107.1:</b> Understand the basic knowledge of computer system.
<b>B-PPT-N107.2:</b> Know about the functioning of operating systems.
<b>B-PPT-N107.3</b> Understand the basic concept of Internet and computer networks .
<b>B-PPT-N107.4:</b> Understand the basics of Application Software.

**NOTE:-** The examiner will set total 10(ten) questions covering the entire syllabus. Student will attempt any five questions. All questions will carry equal marks.

### **Unit-I**

**Operating System** - Definition & Functions of Operating System, Basics of Popular Operating Systems; The User Interface, Exploring Computer, Icons, taskbar, desktop, Using Menu and Menu-selection, managing files and folders, Control panel – display properties, add/remove software and hardware, Running an Application, Using help; Creating Short cuts, Basics of O.S Setup; Common utilities.

### **Unit-II**

**Word Processing:** Introduction to Word Processing, Menus, Creating, Editing & Formatting Document, Spell Checking, Printing, Views, Tables, Word Art, Mail Merge, Macros.

### **Unit-III**

**Spread Sheet:** Elements of Electronics Spread Sheet, Applications, Creating and Opening of Spread Sheet, Menus, Manipulation of cells: Enter texts numbers and dates, Cell Height and Widths, Copying of cells, Mathematical, Statistical and Financial function, Drawing different types of charts.

### **Unit-IV**

**Presentation Software:** Creating, modifying and enhancing a presentation, Delivering a presentation, Using sound, animation and design templates in presentation.

## **REFERENCES BOOKS**

- Help files from Apache Open Office, <https://wiki.openoffice.org/wiki/Documentation>
- Channele Andy, “Beginning OpenOffice 3: From Novice to Professional”, aPress Publications
- Beginning OpenOffice 3: From Novice to Professional, Andichannele, Apress.
- Microsoft Office 2016 Step by Step: MS Office 2016 Step by S\_p1, By Joan Lambert, Curtis Frye
- Computer Fundamentals - By Pradeep K. Sinha, Priti Sinha, BPB Publications, 6th Edition
- Getting Started with LibreOffice 5.0, Friends of OpenDocuments Inc., <Http://friendsofopendocument.com>
- Documentation from LibreOffice, <https://documentation.libreoffice.org/en/english-documentation/>



## **B-PPT-N108: COMPUTER SCIENCE (PRACTICAL)**

Time: 2 Hrs.

Credits: 1

Total Marks: 25

Practical: 20

Internal Assessment: 5

Contact hours per week: 2

**Course Objectives:** This course is designed for practical understanding of commonly used application software and its functioning to the students.

<b>Course Learning Outcomes:</b>
After completing the Course, the student will be able to:
<b>B-PPT-N108.1:</b> Use MS-Word
<b>B-PPT-N108.2:</b> Use MS-Excel
<b>B-PPT-N108.3:</b> Use PowerPoint
<b>B-PPT-N108.4:</b> Create Email account, compose & send emails for personal and professional communication.

**Note:-** The students will do practical assignments assigned by the concerned teacher throughout the whole semester and will submit them in the form of hardcopy/softcopy to the teacher. External Examiner will evaluate the work done by the student, will conduct the practical and viva voce.

<b>List of Practical Exercises:</b>
Starting with basics of Operating Systems and its functionalities
Create and format word documents.
Use tables, word Art and other features in your documents.
Use macros to simplify the tasks in a document.
Use mail merge to write once for many.
Use spreadsheet for basic data handling
Apply formulas to sheet for automation.
Use if-else to make certain decisions in a sheet.
Use Charts & Shapes for better visualization of data.
Use filters and data validation controls for control of data
Prepare and format presentations.
Apply slide transitions, animations and sequencing for slides.
Apply different formatting and insert options to make presentation better.
Use rehearse and timing options for a presentation with handouts.



## **B-PPT-109: ACTIVITY/HOBBY**

Gita-A Manual of Life (Option-i)

Course Credit: 02

Total Marks: 50 Marks

Contact Hours: 02 per week

Teaching will be based on the discussion in the class room

**Note: There will be no written examinations, knowledge and understanding of Gita teachings will be assessed through discussion by the Students describing the knowledge and implementation of Gita's teachings in daily life for the betterment of our day today life.**

### **Course Outcomes:**

Unit-1: After studying the first unit of the course students will be able to understand meaning, background & relevance of Gita's teaching's in contemporary times.

Unit-II: After studying the second unit of the course students will be able to understand benefits of Karma Yoga, Bhakti Yoga and Gyana Yoga in our daily life.

### **Unit-1**

Gita for all: Meaning, background and relevance of Gitaopdesha. Karmayoga as a way to right knowledge; Necessity of Loksamgraha for the service of Humanity.

### **Unit-II**

Gita for Spiritual world: Karm Yogi as an Ideal Man of Gita, Sthitaprajna as a symbol of ideal master in Gita, Swadharma and Pradharna as a secret of Blissful society, Atma Samyama Yoga; a technique for building an ideal person according to Gita.

### **Suggested Books:**

- Swami Ramsukhdas, Gita Sadhak Sanjivani Teeka
- Hnuman Prasad Poddhar, Gita Tattvavivechni Teeka
- Gandhi Gita Matta
- Gurudatta Srimadbhagvadgita Vyakhya
- Satyavarta, Srimadbhagvadgita Vyakhya
- Swami Jyanananda, Gita Prerna
- Paramhamsa Yogananda, Srimadbhagvadgita God-Arjuna, Discourse Aurvind, Essays on Gita.
- S. Radhakrishna, Bhagwadgita Vyakhya
- Jyaneshwar, Jyaneshwari Gita



## **B-PPT-109: ACTIVITY/HOBBY**

### Public Speaking (Option-ii)

Course Credit: 02

Total Marks: 50 Marks

Contact Hours: 02 per week

Teaching will be based on the discussion in the class room

**Note: There will be no written examinations. Understanding and art of Public speaking will be assessed through discussion and presentation by the Students in the class room.**

#### **Course Outcomes:**

Unit-1: After studying the first unit of the course students will be able to understand relevance of Public speaking in their academic and professional life.

Unit-II: After studying the second unit of the course students will be able to write their own speech and analyze the intricacies of speeches of renowned speakers.

#### **Unit-1**

Public speaking: Meaning and relevance, Characteristics of an effective speaker, Power of words, Use of body language, dressing, mannerisms, Use of effective memory techniques, Overcoming the fear of public speaking- Glossophobia

#### **Unit-II**

Speech : Introduction, body and conclusion, Writing your own speeches, famous speeches of World s greatest orators, Case studies of effective public communicators like TED speakers of both Indian and foreign origin

#### **Suggested Books:**

- The Art of Public Speaking author Dale Carnegie, along with J. Berg Esenwein, Rupa Publications, India (English and Hindi)
- Speak with no fear, Mike Acker, Advantage Publishing Group
- TED Talks, Chris Anderson, Headline Publishing Group
- 50 Prernadayak Bhashan, Fingerprint Publishing

## AECC-N200 : Environmental Studies

Time: 3 Hrs.  
Credits: 2

Total Marks: 50  
Theory: 25  
Internal Assessment: 25

**Scheme of paper:** Total number of questions will be nine. Students have to attempt five questions in all. Questions no. 1 is compulsory. All questions carry equal marks. Each question is of 8 marks.

**Course objectives:** The aim of this course is to make the students aware about the environmental problems and current global issues related to environment. It provides knowledge about concepts of ecosystem and biodiversity and develops interest in the students about their role in conservation of environment and reducing pollution and waste generation in their surroundings. By understanding the environmental problems, their causes and solutions, the students can apply these to their daily lives.

### Course Outcomes (COs) for Theory:

COs	On successful completion of the course, the students will be able to:
CO 1	Understand the concept of environmental studies, its scope and importance in the conservation of environment. Understand the concept of ecosystem and different types of natural and artificial ecosystems in the world, the biogeochemical cycling and energy flow in an ecosystem.
CO 2	Describe the various renewable and non-renewable natural resources and their over-exploitation due to increasing demands of rising population. Become aware about biodiversity, its importance and the various threats for biodiversity. Have knowledge of the endangered species and their conservation measures that are needed to be adopted at different levels.
CO 3	Have understanding about the types of pollution and how to reduce pollution levels in air, soil, water, land and from marine bodies, as to develop interest in reducing the solid waste generation as well as its management at household level. Gain knowledge of various global environmental issues like climate change, global warming and ozone depletion and also about different environmental laws implemented to conserve the environment.
CO 4	Understand the concept of population growth, disaster management, impacts of drug abuse and various environmental movements.

### Course outcome for practical/field work:

CO 1	To get practical knowledge of various environmental issues through project file/assignment with case studies.
------	---

**Mode of Paper Setting:** Total number of questions set will be nine. Questions no. 1 is compulsory covering the entire syllabus. Two questions will be set from each unit. Students have to attempt five questions in all, one question from each unit including the compulsory question. Each question is of 5 marks. All questions carry equal marks. Final theory exam time allowed will be of 3 hours.

### Unit I

**Introduction to environmental studies:** Multidisciplinary nature of environmental studies; Scope and importance; Concept of sustainability and sustainable development.

**Ecosystems:** What is an ecosystem? Structure and function of ecosystem; Energy flow in an ecosystem: food chains, food webs and ecological succession. Case studies of the following ecosystems: a) Forest ecosystem, b) Grassland ecosystem, c) Desert ecosystem, d) Aquatic ecosystems (ponds, streams, lakes, rivers, oceans, estuaries) (8 lectures)

### Unit II

**Natural Resources: Renewable and Non-renewable Resources**

- Land resources and land use change; Land degradation, soil erosion and desertification.
- Deforestation: Causes and impacts due to mining, dam building on environment, forests, biodiversity and tribal populations.
- Water: Use and over-exploitation of surface and ground water, floods, droughts, conflicts over water (international & inter-state).
- Energy resources: Renewable and non-renewable energy sources, use of alternate energy sources, growing energy needs, case studies.

**Biodiversity and Conservation**

- Levels of biological diversity: genetic, species and ecosystem diversity; Biogeographic zones of India; Biodiversity patterns and global biodiversity hot spots
- India as a mega-biodiversity nation; Endangered and endemic species of India
- Threats to biodiversity: Habitat loss, poaching of wildlife, man-wildlife conflicts, biological invasions; Conservation of biodiversity: In-situ and Ex-situ conservation of biodiversity.
- Ecosystem and biodiversity services: Ecological, economic, social, ethical, aesthetic and Informational value. (16 lectures)

### Unit III

**Environmental Pollution**

- Environmental pollution: types, causes, effects and controls; Air, water, soil and noise pollution
- Nuclear hazards and human health risks
- Solid waste management: Control measures of urban and industrial waste, Pollution case studies.

**Environmental Policies & Practices**

- Climate change, global warming, ozone layer depletion, acid rain and impacts on human communities and agriculture
- Environment Laws: Environment Protection Act; Air (Prevention & Control of Pollution) Act; Water (Prevention and control of Pollution) Act; Wildlife Protection Act; Forest Conservation Act. International agreements: Montreal and Kyoto protocols and Convention on Biological Diversity (CBD).
- Nature reserves, tribal populations and rights, and human wildlife conflicts in Indian context. (15 lectures)

### Unit IV

**Human Communities and the Environment**

- Human population growth: Impacts on environment, human health and welfare.
- Resettlement and rehabilitation of project affected persons; case studies.
- Disaster management: floods, earthquake, cyclones and landslides.
- Environmental movements: Chipko, Silent valley, Bishnois of Rajasthan.
- Environmental ethics: Role of Indian and other religions and cultures in environmental conservation.
- Environmental communication and public awareness, case studies (e.g., CNG vehicles in Delhi).

Drugs and their effects; Useful and harmful drugs; Use and abuse of drugs; Stimulant and depressant drugs. Concept of drug de-addiction. Legal position on drugs and laws related to drugs.

(6 lectures)

### **Practical/Field work**

- Visit to an area to document environmental assets: river/ forest/ flora/fauna, etc.
- Visit to a local polluted site-Urban/Rural/Industrial/Agricultural.
- Study of common plants, insects, birds and basic principles of identification.
- Study of simple ecosystems-pond, river, Delhi Ridge, etc.

(Equal to 5 lectures)

### **Suggested Readings:**

1. Carson, R. 2002. *Silent Spring*. Houghton Mifflin Harcourt.
2. Gadgil, M., & Guha, R. 1993. *This Fissured Land: An Ecological History of India*. Univ. of California Press.
3. Gleeson, B. and Low, N. (eds.) 1999. *Global Ethics and Environment*, London, Routledge.
4. Gleick, P. H. 1993. *Water in Crisis*. Pacific Institute for Studies in Dev., Environment & Security. Stockholm Env. Institute, Oxford Univ. Press.
5. Groom, Martha J., Gary K. Meffe, and Carl Ronald Carroll. *Principles of Conservation Biology*. Sunderland: Sinauer Associates, 2006.
6. Grumbine, R. Edward, and Pandit, M.K. 2013. Threats from India's Himalaya dams. *Science*, 339: 36-37.
7. McCully, P. 1996. Rivers no more: the environmental effects of dams (pp. 29-64). Zed Books.
8. McNeill, John R. 2000. *Something New Under the Sun: An Environmental History of the Twentieth Century*.
9. Odum, E.P., Odum, H.T. & Andrews, J. 1971. *Fundamentals of Ecology*. Philadelphia: Saunders.
10. Pepper, I.L., Gerba, C.P. & Brusseau, M.L. 2011. *Environmental and Pollution Science*. Academic Press.
11. Rao, M.N. & Datta, A.K. 1987. *Waste Water Treatment*. Oxford and IBH Publishing Co. Pvt. Ltd.
12. Raven, P.H., Hassenzahl, D.M. & Berg, L.R. 2012. *Environment*. 8th edition. John Wiley & Sons.
13. Rosencranz, A., Divan, S., & Noble, M. L. 2001. *Environmental law and policy in India*. Tripathi 1992.
14. Sengupta, R. 2003. *Ecology and economics: An approach to sustainable development*. OUP.
15. Singh, J.S., Singh, S.P. and Gupta, S.R. 2014. *Ecology, Environmental Science and Conservation*. S. Chand Publishing, New Delhi.
16. Sodhi, N.S., Gibson, L. & Raven, P.H. (eds). 2013. *Conservation Biology: Voices from the Tropics*. John Wiley & Sons.
17. Thapar, V. 1998. *Land of the Tiger: A Natural History of the Indian Subcontinent*.
18. Warren, C. E. 1971. *Biology and Water Pollution Control*. WB Saunders.
19. Wilson, E. O. 2006. *The Creation: An appeal to save life on earth*. New York: Norton.
- 1) 20. World Commission on Environment and Development. 1987. *Our Common Future*. Oxford University

## B-HIN-N200 : Communicative Hindi

Time: 2 Hrs.  
Credits: 2  
Contact hours per week: 2

Total Marks: 50  
Theory: 25  
Internal assessment: 25

**Course Objectives:** The Paper is designed to enhance proficiency in Hindi Language. It seeks to develop the basic of Hindi Language through different modules. Each unit will enable the learner to have the communication in Hindi and to share and express ideas and experiences.

<b>Course Learning Outcomes:</b>
After completing the Course, the student will be able to:
<b>B-HIN-N200.1:</b> Develop the knowledge of basics of Hindi language.
<b>B-HIN-N200.2:</b> Improve vocabulary in Hindi language.
<b>B-HIN-N200.3:</b> : Inculcate the knowledge of grammar in Hindi language
<b>B-HIN-N200.4:</b> Learn correct uses of Hindi language in media writing

**Note:-** The question paper will be divided into five Units containing nine questions. Students are required to attempt five questions in all. There will be two questions in each unit from I to IV and students are required to attempt one question from each unit. Unit V will have only one Compulsory question containing six short notes covering the entire syllabus and students are required to attempt any four. All questions will carry equal marks.

### Unit – I

Hkk"kk dh ladYiuk  
Hkk"kkbZ Hksn&ekSf[kd ,oa fyf[kr  
Hkk"kk dk ekudhdj.k&fLFkfr ,oa pqukSfr;kj  
Hkk"kk rFkk lekt dk ikjLifjd vUrIzCU/kA

### Unit – II

fgUnh O;kdj.k 'kCn :i vkSj okD; jpuk  
nsoukxjh fyfi vkSj o`fr  
mPpkj.k vo;o] i;kZ;] foykse] lekukFkhZ] vusdkFkhZ 'kCn  
fgUnh dh iz;ksxkRed =qfV;ka

### Unit – III

fgUnh lkfgR; dk laf{klr bfrgkl  
fgUnh lkfgR; dh vk/kfud izo`fRr;ka  
fgUnh dh lkfgR;d fo/kkvksa dk ifjp;  
fgUnh x| ,oa i|

### Unit – IV

iz;kstu ewyd fgUnh dk vfHkizk; ,oa vko';drk  
tulapkj ek;/e vkSj fgUnh Hkk"kk] ehfM;k dh Hkk"kk dh izd`fr ,oa fopyu  
{ks=h; izHkko ,oa {ks=h; Hkk"kkbZ iz;ksx  
eqfnzr ek;/e vkSj fgUnh  
jsfM;ks ,oa Vsyhfotu dh Hkk"kk

foKkiu ,oa lks'ky ehfM;k dh Hkk"kk

Suggested Readings:

HkkfV;k] MkW- dSyk'kpUn] vuqokndyk % fl)kar vkSj iz;ksx] r{kf'kyk izdk'ku] u;h fnYyhA

'kekZ] j?kquUnu izlkn] iz;kstu ewyd fgUnh % fl)kar vkSj O;ogkj] fo'ofokj; izdk'ku] okjk.klhA

v;~;] fo'oukFk] vuqokndyk] izHkkkr izdk'ku] fnYyh

frokjh] HkksykukFk] fgUnhHkk"kk dh lkekftd Hkwfedk] nf{k.k Hkkjr fgUnh izpkj lfefr] enzkl

>kYVs] MkW- naxy] iz;kstu ewyd fgUnh % fl)kar vkSj iz;ksx] ok.kh izdk'ku] u;hfnYyh

xksnjs] MkW- fouksn] iz;kstu ewyd fgUnh] ok.kh izdk'ku] u;h fnYyh

jk.kk] egsUnz flag] iz;kstu ewyd fgUnh ds vk/kqfud vk;ke] g"kkZ izdk'ku] vkxjkA

dqekj pan] tulapkj ek;/eksa esa fgUnh] Dykfldy ifCyf'kax dEiuh] fnYyh

## B-HIN-N200 : Communicative Hindi

### CO-PO Mapping Matrix

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
B-HIN-N200.1	3	3	3	3	2	2	2	3
B-HIN-N200.2	3	3	3	3	2	2	2	3
B-HIN-N200.3	3	3	3	3	2	2	2	3
B-HIN-N200.4	3	3	3	3	2	2	2	3
Average	3	3	3	3	2	2	2	3

### CO-PSO Mapping Matrix

CO	PSO1	PSO2	PSO3	PSO4	PSO5
B-HIN-N200.1	2	2	2	2	2
B-HIN-N200.2	2	2	2	2	2
B-HIN-N200.3	2	2	2	2	2
B-HIN-N200.4	2	2	2	2	2
Average	2	2	2	2	2

### CO-PO-PSO Mapping Matrix

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5
B-HIN-N200.1	3	3	3	3	2	2	2	3	2	2	2	2	2
B-HIN-N200.2	3	3	3	3	2	2	2	3	2	2	2	2	2
B-HIN-N200.3	3	3	3	3	2	2	2	3	2	2	2	2	2
B-HIN-N200.4	3	3	3	3	2	2	2	3	2	2	2	2	2
Average	3	3	3	3	2	2	2	3	2	2	2	2	2



## **B-PPT-N201– FOOD PACKAGING (THEORY)**

Time: 3 Hrs.

Credits :4

Total Marks: 100

Theory: 50

Internal Assessment : 50

**Course objectives:** This course is designed for theoretical understanding of food packaging, its type, utilization and innovative technique used for development of food packaging.

<b>Course Learning Outcomes:</b> Upon successful completion of this course, the students learned about the Food Packaging Technology and the student will be able to:
<b>B-PPT-N201.1:</b> Develop the knowledge of Food Packaging
<b>B-PPT-N201.2:</b> Understand the function of food package, types of food packaging.
<b>B-PPT-N201.3:</b> Develop the knowledge of sterilization
<b>B-PPT-N201.4:</b> Recognize the Innovative Packaging Techniques.

**Note:-** The question paper will be divided into five Units containing nine questions. Students are required to attempt five questions in all. There will be two questions in each unit from I to IV and students are required to attempt one question from each unit. Unit V will have only one Compulsory question containing six short notes covering the entire syllabus and students are required to attempt any four. All questions will carry equal marks.

### **UNIT-1**

#### **Introduction**

- Food packaging: Definition,
- Functions of food packaging,
- Need of food packaging
- Role of packaging in extending shelf life of foods
- Safety assessment of food packaging materials
- Different forms of packaging.
- Rigid, semi-rigid, flexible forms of packaging in food industries..
- Different packaging system for-Dehydrated foods, Frozen foods, Dairy products, Fresh fruits, Vegetables, Meat, Poultry, Sea foods.

### **UNIT 2**

#### **Aseptic packaging of foods**

- Principles of sterilization,
- sterilization of packaging material,
- verification of sterilization processes,
- aseptic packaging systems: carton systems, can systems,
- bottle systems, sachet and pouch systems, cup systems □

### **UNIT 3**

#### **Active and Smart packaging**

- Definition
- Smart packaging systems
- intelligent packaging systems: Quality Indicators, Time-temperature indicators, gas concentration indicators, RFID;
- Safety and Regulatory issues

#### UNIT 4

#### **Properties & selection of packaging materials**

- Tensile strength, bursting strength, tearing resistance, puncture resistance, impact strength, tear strength,
- Barrier properties of packaging materials,,
- prediction of shelf life of foods,

#### **References :**

Gordon L. Robertson, Food Packaging: Principles and Practice, Third Edition,2013.

Gordon L. Robertson, Food Packaging and Shelf Life: A Practical Guide,2010.

Ruben Hernandez, Susan E. MSeike, John Culter, John D. Culter,

Plastics Packaging: Properties,Processing, Applications, and Regulations,2000.

Walter Soroka, Fundamentals of Packaging Technology-Fourth Edition,



## **B-PPT-N202– FOOD PACKAGING (PRACTICAL)**

**Time: 3 Hrs.**

**Credits: 2**

**Total Marks: 50**

**Practical : 25**

**Internal Assessment : 25**

**Course objectives:** This course is designed for Practical understanding of food packaging material, testing and development.

<b>Course Learning Outcomes:</b> After completing the Course, the student will be able to:
<b>B-PPT-N 202.1:</b> Identify various food packaging material.
<b>B-PPT-N 202.2:</b> Check the strength of packaging material with various testing instrument.
<b>B-PPT-N 202.3:</b> Enhance the practical knowledge about packaging industry.
<b>B-PPT-N 202.4:</b> Use innovative Packaging Techniques.

**Note: - The students will do practical assignments assigned by the concerned teacher throughout the whole semester and will submit them in the form of hardcopy/softcopy to the teacher. External Examiner will evaluate the work done by the student, will conduct the practical and viva voce.**

### **LIST OF EXPERIMENTS**

1. Identification of different types of packaging and packaging materials
2. Determination of tensile strength of given material
3. Determination of tearing strength of paper
4. Determination of bursting strength of packaging material
6. Determination of drop test of food package
7. Visit to relevant industries
- 8 Introducing the students with the latest trends in packaging consulting the web sites and magazines



## B-PPT-N203: GRAPHIC DESIGN (THEORY)

Time: 3 Hrs.  
Credits :4

Total Marks: 100  
Theory: 50  
Internal Assessment : 50

**Course objectives:** This course is designed for thorough understanding of graphic designing concepts and their application in printing & packaging.

<b>Course Learning Outcomes:</b>
<b>Course outcomes:</b> After completing the Course, the student will be able to:
<b>B-PPT-N 203.1:</b> Understand about the basic concepts of graphic elements
<b>B-PPT-N 203.2:</b> Know the functioning of basic colour aesthetics
<b>B-PPT-N 203.3:</b> Develop the capacities to elaborate the process of graphic design
<b>B-PPT-N 203.4:</b> Design various real world graphic applications

**Note:-** The question paper will be divided into five Units containing nine questions. Students are required to attempt five questions in all. There will be two questions in each unit from I to IV and students are required to attempt one question from each unit. Unit V will have only one Compulsory question containing six short notes covering the entire syllabus and students are required to attempt any four. All questions will carry equal marks.

### UNIT –I

#### INTRODUCTION

**Graphic Design,** Visual Art, Communication Art, Graphic Art, Components of Graphic Communication, Functions of Graphic Communication

**Elements of design:** point line, shape, size, tone, value, weight, texture space, etc. Principles of design-balances, proportion, rhythm, unity, contrast.

### UNIT –II

**Types of Letterforms:** Typography- Structure Design and Function, Typefaces, Type families, Function of Type Composition.

**Visual Images:** Functions, Categories of Visuals, Originals, Visuals on Printed page, Editing of Illustrations

**Layout Planning:** Thumbnail Sketches, Rough Layout, Comprehensive Layout

### UNIT –III

**Colour in Design:** Introduction, Functions of Colour, Colour Vision. Colour Combination, Colour Schemes, Colour Perspective, Reproduction of Colour: Fake colours, Spot Colours, Process Colours

**Copy for Printing:** Verbal Copy, Copy Marking, Copy Fitting, Typesetting Proofreading

**Visual Copy:** Cropping and Scaling, Sizing and Marking, Reproduction of Illustrations

### UNIT –IV

#### DESKTOP PUBLISHING

Capabilities, Users of Desktop Publishing System, Equipment Required for Desktop Publishing, Features of Some Specific Software Programmes: Corel Draw, Photoshop, PageMaker, QuarkXpress

Design management: Definitions in advertising art, modern art abstract art, applied art, advertising, publicity, public relations, sale promotion, sales manager

## **References:**

1. The Designer's Handbook by Alistair Campbell
2. Design & Technology by Van No strand
3. Handbook of Advertising Art Production by schelmmmer.
4. Art & Production by Sarkar.
5. Advertising, Art & Production by J. Nath.





## **B-PPT-N 204: GRAPHIC DESIGN (PRACTICAL)**

Time: 3 Hrs.  
Credits :2

Total Marks: 50  
Theory: 25  
Internal Assessment : 25

**Course objectives :** This course is designed for practical understanding of graphic designing and menus, tools and its applications and production formats.

<b>Course Learning Outcomes:</b>
After completing the Course, the student will be able to:
<b>B-PPT-N 204.1:</b> Understand the use of graphic elements
<b>B-PPT-N 204.2:</b> Demonstrate the concept of image retouching, smoothing.
<b>B-PPT-N 204.3</b> Design ad banners for websites and digital campaigning banners.
<b>B-PPT-N 204.4:</b> Design different logos.

**Note:- The students will do practical assignments assigned by the concerned teacher throughout the whole semester and will submit them in the form of hardcopy/softcopy to the teacher. External Examiner will evaluate the work done by the student, will conduct the practical and viva voce.**

### **LIST OF PRACTICALS**

1. Introduction to computers, various software used for designing purpose – Demonstration ( Manipulation of same design)
2. Logo designing
3. Color wheel
4. Designing of visiting card. Letterhead,
5. Envelop, Bill form, Receipt, Invitation card, Posters,
6. Title page of a Book, Magazine Cover page.



## **B-PPT-N 205: SHEET FED OFFSET TECHNOLOGY (THEORY)**

Time: 3 Hrs.  
Credits :4

Total Marks: 100  
Theory: 50  
Internal Assessment : 50

**Course objectives :** This course is designed for theoretical understanding of Sheet fed offset machine with various components and controlling devices.

<b>Course Outcomes:</b> Upon successful completion of this course, the students learned about the sheet fed offset printing process and the student will be able to:
<b>B-PPT-N 205.1:</b> Know about the Sheet Fed Offset Printing Process in printing industry.
<b>B-PPT-N 205.2:</b> Develop the basic knowledge of Sheet fed Offset printing machine various mechanisms.
<b>B-PPT-N 205.3</b> Understand the Feeding units different parts -pile table, pile board, Sucker, separator and double sheet detector,
<b>B-PPT-N 205.4</b> Understand the Printing unit different parts- Plate cylinder, Blanket cylinder and Impression cylinder.

**Note:- The question paper will be divided into five Units containing nine questions. Students are required to attempt five questions in all. There will be two questions in each unit from I to IV and students are required to attempt one question from each unit. Unit V will have only one Compulsory question containing short notes covering the entire syllabus. All questions carry equal marks.**

### **Unit – I**

#### **Basic principles in planography printing:**

Lithography and Offset Printing Process, History, Principle, advantages, limitations, types and their uses. Press configurations. Various Required and auxiliary elements, Requirements and Needs of production room

### **Unit - II**

#### **Infeed unit –**

Function of feeding unit, pile table, air blast nozzles, Sucker, separator brushes & fingers. Sheet control devices-conveyor assemblies, conveyor tape, hold down rods, Sheet feeding system, Sheet register- Front lay & Side lay, Sheet detectors

### **Unit - III**

#### **Printing unit**

Plate Cylinder- parts of plate cylinder, plate punching & mounting Blanket cylinder- Types of blanket cylinder, Care of blanket, blanket cleaning device, Impression cylinder, inking system-Introduction, types of inking system, Dampening system, Types of dampening system, Ingredients of fountain solution, Ph& Conductivity of dampening system,.

### **Unit - IV**

#### **Delivery unit-**

Gripper, Types of gripper, Sheet transfer, Delivery unit components, Anti set-off spray equipment. Extended pile delivery, Continuous pile delivery. Pre make ready, make ready, Sheet control devices.

## **References:**

Manual For Lithographic Press Operation - **A. S. Porter**

Modern Lithography Introduction to Printing Technology - **Hugh M Speirs.**

Sheetfed Press Operation-**GATF.**

Offset Technology – **C.S.Mishra.**

Lithographers Manual Lithographic Technology - **Erwin A Dennis, Olusegun Odesina.**



## **B-PPT-N206: SHEET FED OFFSET TECHNOLOGY (PRACTICAL)**

Time: 3 Hrs.  
Credits :2

Total Marks: 50  
Practical : 25  
Internal Assessment: 25

**Course Objectives:** This course is designed for practical demonstration of Sheet fed offset machine with various components and controlling devices.

<b>Course Learning Outcomes:</b> Upon successful completion of this course, the students learned about the sheet fed offset printing process and the student will be able to:
<b>B-PPT-N206.1:</b> Understand the Delivery units and different components of delivery unit.
<b>B-PPT-N206.2:</b> Develop the practical skill of Sheet fed Offset printing machine.
<b>B-PPT-N206.3:</b> Identify various printing defects
<b>B-PPT-N206.4:</b> Learn various components parts used in sheet-fed offset machine

**Note:-** The students will do practical assignments assigned by the concerned teacher throughout the whole semester and will submit them in the form of hardcopy/softcopy to the teacher. External Examiner will evaluate the work done by the student, will conduct the practical and viva voce.

### **LIST OF PRACTICALS**

1. One colour printing.
2. Four colour printing.
3. Study of the various mechanisms.
4. Study of the fountain solution ingredients
5. Study of the lubrication system.
6. Setting the feeder, feed board, lays and delivery.
7. Identification of printing faults in the given samples-reasons and remedial actions.



## **B-PPT-N207: Human Values & Ethics (Theory)**

Time:2 Hrs.  
Credits: 1  
Contact hours per week:2

Total Marks: 50  
Theory: 25  
Internal Assessment: 25

**Course Objectives:** This paper will help the learners to understand the need and significance of human values and ethics in their life.

<b>Course Learning Outcomes:</b>
After completing the Course, the student will be able to:
<b>B-PPT-N207.1:</b> correlate the need of human values to sustained happiness and prosperity- the core aspirations of human beings.
<b>B-PPT-N207.2 :</b> express the knowledge of human values and analyse their importance in holistic perspective for a peaceful world.

### **Unit -1**

Human Values: Meaning and Definitions

- (a) Understanding the need of human values and value education. Self-exploration, Concept of happiness and prosperity. Right understanding, understanding body as an instrument of I, Living in harmony, reaching highest potential in digital age through care & empathy balancing interests and expectations.
- (b) Basic human values: Honesty, kindness, integrity, courage, co-operation, commitment, cleanliness, spirituality, understanding duties & rights.

### **Unit-II**

Life Values and universal ethics

- (a) Life Values:- Understanding of harmony in yourself family: Trust and respect, society; Co-existence & unity in diversity Nature mutually interacting units and universe.
- (b) Universal Ethics-Loyalty, respect for others, adherence to the law, doing good and avoiding harm to other, accountability, sensitive towards environment. Transparency, impartiality and objectivity.

### **Suggested Books:-**

- 1) Ethics. Integrity and Aptitude (3rd Edition)- M. Karthikeyan Pub: McGraw Hill,
- 2) A foundation course in Human Values and Professional Ethics- RR Gaur. R Sangal. GP Bagaria Pub: abe books
- 3) Ebook-Ig- UGC (26-11-2019)  
PDF- Human Value [www.uge.ac.in](http://www.uge.ac.in) (available on UGC Website)
- 4) Patanjala Yoga Sutra- Samadhi Pada



## **B-PPT-N208: Activity/Hobby**

Photography (Option-i)

Course Credit: 02

Total Marks: 50 Marks

Contact Hours: 02 per week

Teaching will be based on the discussion in the class room

**Note: There will be no written examinations. Understanding of the art of Photography will be assessed through discussion and practical work by the Students in the class room.**

### **Course Outcomes:**

Unit-1: After studying the first unit of the course students will be able to become familiar with camera and related accessories.

Unit-II: After studying the second unit of the course students will be able to click photographs like a professional and may take up freelance photography.

### **Unit-1**

Photography as an art and as a technique, means of self expression and creativity, tool of capturing and recording memories, means of developing curiosity and keen observation, way of exploring the world. Camera and related accessories, different types of camera and their uses

### **Unit-II**

How camera works, focus, shutter speed, aperture, depth of field, white balance.

Understanding lights, lighting techniques, natural vs artificial lights, direction of lights, use of key, fill and back lights. Study of award winning photographs (Pulitzer prize winners)

### **Suggested Books:**

1. Practical Photography Digital Camera School : The Step-by-step Guide to Taking GreatPicture- By Publisher Carlton Books Ltd. (London).
2. Photography Techniques and Uses (Photography Taknik and Pryog) by Narendra SinghYadav and Published by Rajasthan Hindi Granth Academy.
3. The Beginner's Photography Guide, Chris Gatum, DK Publishers

## **B-PPT-N208: Activity/Hobby**

Creative Writing (Option-ii)

Course Credit: 02

Total Marks: 50 Marks

Contact Hours: 02 per week

Teaching will be based on the discussion in the class room

**Note: There will be no written examinations. Understanding of the art of creative writing will be assessed through discussion and practical work by the Students in the class room.**

### **Course Outcomes:**

Unit-1: After studying the first unit of the course students will be able to become familiar with characteristics of creative writing.

Unit-II: After studying the second unit of the course students will be able to write in various genres of creative writing.

### **Unit-1**

Creative writing: meaning and significance, Basic principles of writing, role of research in writing, understanding of language and grammar

### **Unit-II**

Genres of creative writing: short stories, novel, poetry, drama, features, columns, satire, biography, autobiography, travelogues, diaries, blog writing

### **Suggested Books:**

1. Creative Writing: A Beginner's Manual by Anjana Neira Dev, Anuradha Marwah and Swati Pal, Publishers: Pearson India
2. The Cambridge Companion To Creative Writing South Asian Edition Edited by David Morley and Philip Neilson, Cambridge University Press