



Roll No.

ANNA UNIVERSITY (UNIVERSITY DEPARTMENTS)

B.E. / B. Tech / B. Arch (Full Time) - END SEMESTER EXAMINATIONS, APR/MAY 2025

PRINTING AND PACKAGING TECHNOLOGY

PP23303 FLEXOGRAPHY PRINTING AND CONVERTING

(Regulation 2023)

Time: 3hrs

Max. Marks: 100

CO 1	State the factors influencing design for flexography.
CO 2	Design and optimize the plate preparation process
CO 3	Apprehend the steps in the image carrier preparation and mounting
CO 4	Report about the working of flexographic press and its control.
CO 5	Implement quality control in flexographic printing workflow

PART - A (10 x 2 = 20 Marks)

(Answer all Questions)

Q. No	Questions	Marks	CO	BL
1	State any two limitations of flexo process.	2	CO1	L1
2	How does preflighting minimizes prepress errors?	2	CO1	L2
3	Write the causes for fish eye problem.	2	CO2	L2
4	Zoning prevents lifting off of flexo plates. Justify.	2	CO2	L2
5	Differentiate between conventional and sleeve mounting.	2	CO3	L2
6	Which screen angle is more suitable for anilox cells? Explain.	2	CO3	L2
7	List the inline converting operations feasible in a flexo press.	2	CO4	L1
8	Outline the need for splicer.	2	CO4	L2
9	Which ISO standard is used for process control in flexo?	2	CO5	L1
10	How will you standardize back exposure?	2	CO5	L2

PART - B (5 x 13 = 65 Marks)
(Restrict to a maximum of 2 subdivisions)

Q. No	Questions	Marks	CO	BL
11 (a)	Examine the factors to be considered while designing for flexo.	13	CO1	L4
OR				
11 (b) (i)	Analyze how various trapping techniques in prepress to minimize print wastage.	7	CO1	L4
(ii)	Explain the salient features of digital screening for flexo.	6	CO1	L4
12 (a)	Compare between sheet and liquid photopolymer platemaking with respect to material, process, equipment and applications.	13	CO2	L4
OR				
12 (b)	How does direct imaging technique improve the quality of flexographic plates? Explain any two techniques.	13	CO2	L4

13 (a) (i)	Illustrate parts of a flexographic printing unit and infer the function of each component.	5	CO3	L4
(ii)	Classify the types of flexographic presses with advantages, disadvantages and applications	8	CO3	L4
OR				
13 (b)	List the types of plate mounting techniques and explain any two technique in detail with diagram.	13	CO3	L4
14 (a)	Compare between the rewinding and unwinding stations with diagram.	13	CO4	L4
OR				
14 (b)	Identify the various web tension zones in flexo press and discuss their significance.	13	CO4	L4
15 (a) (i)	Analyze the variables in flexographic printing process.	3	CO5	L4
(ii)	Develop a standard procedure for fingerprinting in flexographic press.	10	CO5	L3
OR				
15 (b) (i)	Write any two problems in plate exposing with causes and remedies.	3	CO5	L4
(ii)	Plan a quality control test chart for flexo process control.	10	CO5	L3

PART- C (1 x 15 = 15 Marks)

(Q.No.16 is compulsory)

Q. No	Questions	Marks	CO	BL
16.	A flexo printing company is facing frequent rejections due to inadequate binding of ink on substrate. Suggest a solution for treating the printing surface prior to printing in detail with principle, diagram and justification.	15	CO4	L5

