

**V SEMESTER B.TECH. (PRINT AND MEDIA TECHNOLOGY)****END SEMESTER EXAMINATIONS, NOV 2018****SUBJECT: FLEXOGRAPHY, GRAVURE AND SCREEN PRINTING****[PMT 3101]****REVISED CREDIT SYSTEM****(19/11/2018)**

Time: 3 Hours

MAX. MARKS: 50

Instructions to Candidates:

- ❖ Answer **ALL** the questions.
- ❖ Missing data may be suitable assumed.

1A. With neat diagram, explain the carbon bed method of solvent recovery used in gravure industries.

1B. Write notes on the following in screen printing:

- a) Wicket dryer b) Calendered mesh c) Vertical lift press

1C. i) Discuss dot dipping and dot starvation problems in flexo with its cause and remedy.

ii) Compare publication and packaging flexographic press.

[03 + 03 + (02+02)]

2A. With neat diagrams, explain the features of

- a) Fountainless gravure inking system b) Web turner bar

2B. i) Explain the procedure for determining optimum exposure time for the stencil.

ii) Explain the features of 3 types of liquid direct photo emulsions.

2C. With neat diagrams, explain the working of 4 types of shafted single position unwinders.

[03 + (1.5+1.5) + 04]

3A. Explain the construction, working and advantages of transducer tension control system.

3B. Explain the features and applications of 3 types of textile presses in screen printing.

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- 3C.** i) Identify the doctor blade wiping system for Gravure. Discuss its features, its advantages and disadvantages.
- ii) How can you determine optimum frame size for a particular image size? Describe.

[03 + 03 + (02+02)]

- 4A.** Explain the components and working of web guide system.
- 4B.** Describe 3 types of sheeters used in inline gravure presses with neat diagrams.
- 4C.** i) With neat diagram, describe plate staggering and its purpose in flexo.
- ii) Explain the following anilox roller cleaning methods;
- a) Ultrasonic b) Bead blast

[03 + 03 + (02+02)]

- 5A.** With neat sketches, explain the 3 types of Gravure dryers using vertical air flow systems.
- 5B.** Explain the procedure of pin registration mounting system for sheet photopolymer plate.
- 5C.** Define and identify the causes and remedies for the following printing problems in gravure:
- a) Blocking b) Ink mottle c) Strike-through d) Cell plugging

[03 + 03 + 04]