

Ex/PRN/PC/B/T/213/2024

B.E. PRINTING ENGINEERING SECOND YEAR FIRST SEMESTER – 2024

PRINTING TECHNIQUES

Time : Three hours

Full Marks : 100

Answer from all the groups.

GROUP – A

- 1.a) Write down the classification of the printing and publishing industry into different segments with example. 10
- b) Draw the general work flow of a printed product. 5
- 2.a) Write down the nomenclature of type. 10
- b) Draw a neat sketch of a hot-metal typeface and identify different parts. 5

GROUP – B

3. Describe the basic principle of platen type and rotary letterpress printing with suitable diagrams. 5+5=10

GROUP – C

Answer any *two* questions.

- 4.a) Discuss why synthetic fibres are preferred to silk as mesh materials in screen process printing. 7
- b) Discuss and compare among different materials used as screen printing frame. 9
- c) Why degreasing is at all required in screen process printing and how it is done? Discuss. 2+2

[Turn over

5.a) Discuss the type of coating used in indirect photostencil making process. How this photostencil is made? Discuss in details. 2+10

b) How many types of squeegee blade profiles are available? Discuss briefly. 8

6.a) Why screen fillers are used and how? Discuss 1+4

b) Which factors should one consider during screen ink formulation? Discuss. 10

c) Discuss the basic ingredients of a solvent based screen printing ink. 5

GROUP – D

7. Assess screen printing problems and solutions on any *five* : 4x5=20

a) Early stencil breakdown

b) Pinholes

c) Adhesion failure

d) Sawtoothing

e) Veiling

f) Curling