

B.E. PRINTING ENGINEERING SECOND YEAR FIRST SEMESTER – 2023

PRINTING TECHNIQUES

Time : Three hours

Full Marks : 100

Answer from all the groups.

GROUP – A

- 1.a) How can you classify printing? 5
b) Mention the basic steps in printing process. 5
c) Draw a neat sketch of a hot-metal typeface and identify different parts. 5
- 2.a) Discuss the nomenclature of type. 9
b) Define the following items: 2x3=6
i) Typesetting
ii) Kerning
iii) Runaround copy

GROUP – B

- 3.a) Describe the basic principle of flat bed and rotary letterpress printing with suitable diagrams. 5+5=10

GROUP – C

Answer any *two* questions.

- 4.a) Which factors should one consider for selecting screen printing frames? Make a comparison among different materials used as screen printing frame. 3+8
b) Why coloured dyes are used in synthetic mesh materials? 4
c) Why polyester meshes are preferred for close registration work? 3
d) Why screen pretreatment is necessary in screen process printing? 2

[Turn over

- 5.a) Discuss the various advantages of direct/indirect photostencil making process. How does it differ from other processes? 5+10
- b) How the registration is done in screen process printing? 5
- 6.a) Define make ready. 2
- b) How many types of squeegee blade profiles are available? Discuss briefly. 8
- c) What are the basic ingredients of a solvent-based screen printing ink? Describe briefly. 10

GROUP – D

7. Write short notes on any *five* : 4x5=20
- a) Adhesion failure
 - b) Pinholes
 - c) Early stencil breakdown
 - d) Edge curl
 - e) Veiling
 - f) Sawtoothing