

B. PRINTING ENGINEERING 1ST YR 1ST SEM. SUPPLEMENTARY EXAM., 2017

PRINTING TECHNIQUES

Time : Three hours

Full Marks : 100

Answer any *FIVE* questions.

- 1.a) How can you classify printing? 5
b) Mention the basic steps in printing process. 5
c) Classify the printing and publishing industry into different segments with example. 10

- 2.a) Discuss the nomenclature of type. 10
b) Draw a neat sketch of a hot-metal typeface and identify different parts. 6
c) Define the following items: 2x2=4
i) Font
ii) Kerning

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

b) The original matter is given below. 10

Continuous-tone art has a range of tones from light to dark. The 'Lighest Areas' are called highlights, the 'Darkest' are called shadows, & the areas in between are called middletones.

After composing, it appears like following.

Contnuous tone art has a range of tones from light to dark the Lihest Areas' are called highlights, the 'darkest' are called shadows, & the area between are called midletones.

Correct the above composed matter using standard proofreaders' marks.

[Turn over

4.a) Why synthetic fibres are preferred to silk as mesh materials in screen process printing? 7

b) Make a comparison 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? 2+2

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

b) Discuss different problems faced in indirect photostencil making process. 8

6.a) How direct/indirect photostencil making process differs from other processes? 7

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

c) How the registration is done in screen process printing? 5

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

b) Which factors should one consider during screen ink formulation? Discuss. 8

c) What are the basic ingredients of a solvent based screen printing ink? Give one example of each ingredient. 7

8. Write short notes on any *four* : 5x4=20

a) Offset

b) Gravure

c) Flexography

d) Ink jet printing

e) Hot foil stamping