

B.E. PRINTING ENGINEERING FIRST YEAR FIRST SEMESTER (Old) –
2019

PRINTING TECHNIQUES

Time : Three hours

Full Marks : 100

Answer any *FIVE* questions.

1.a) Classify the printing and publishing industry into different segments with example.

10

b) Discuss the nomenclature of type.

10

2.a) Describe the general work flow of a printed product.

6

b) Draw a neat sketch of a hot-metal typeface and identify different parts.

6

c) Define the following items:

2x4=8

i) Typesetting

ii) Font

iii) Kerning

iv) Mark up

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.

Gutenberg's invention of the printing press is widely thought of as the origin of mass communication. A closer look at the history of print, however, shows that the invention of the printing press depended on a confluence of both cultural and technological forces that had been unfolding for several centuries.

After composing, it appears like following.

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Correct the above composed matter using standard Proofreaders' marks.

10

[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 direct 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.

10

c) What are the basic ingredients of a solvent based screen printing ink?

5

8. Write short notes on any *four* :

5x4=20

- a) Offset
- b) Flexography
- c) Gravure
- d) Ink jet printing
- e) Hot foil stamping