

BACHELOR OF PRINTING ENGINEERING EXAMINATION, 2010
(1st Year – 1st Semester Supplementary)

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) Describe the general flow of a printed product. 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: 2x2=4

- i) Typesetting
- ii) Leading
- iii) Kerning

- c) The original matter is given below. 7

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.

[Turn over

- 3.a) Describe the basic principle of Letterpress Printing with a suitable diagram. 5
b) How many different types of Letterpress machine designs are available? Explain with diagrams. 15
- 4.a) Why synthetic fibres are preferred to silk as mesh materials in Screen Process Printing? 9
b) Why coloured dyes are used in synthetic mesh materials? 4
c) What factors should one consider for selecting Screen Printing Frames? 3
d) Why screen pretreatment is necessary in Screen Process Printing and how? 2+2
- 5.a) Which type of coating is used in indirect stencil making film? Explain. How this photostencil is made? Describe in details. 2+11
b) How many types of squeegee blade profiles are available? Discuss briefly. 7
- 6.a) How direct/indirect photostencil making process differs from other processes? 7
b) Discuss different problems faced in indirect photostencil making process. 8
c) Why screen fillers are used and how? 1+4
- 7.a) How the registration is done in Screen Process Printing? 5
b) Which factors should one consider during screen ink formulation? Discuss. 10
c) UV curing system has certain merits for screen inks - Discuss. 5
8. Write short notes on any *four*: 4x5=20
- a) Offset
 - b) Flexography
 - c) Gravure
 - d) Ink Jet Printing
 - e) Laser Printing