

**BACHELOR OF PRINTING ENGINEERING EXAMINATION 2018**

**(Third Year, Second Semester )**

**Planning and Finishing**

Time: Three hours

Full Marks: 100

Answer **all** questions from Group A and one question from Each of Other Groups .

**Group-A**

1. (a) What are the purposes of sewing the sections of the book?  
(b) What are the purposes of applying the cords or tapes during the sewing of the sections of the book?  
(c) What are the purposes of back-lining ?  
(d) The grain direction of paper used for book publication purpose should be parallel to the spine of the book as well as to the axis of the sheet fed offset machines used for printing. Why?  
(e) Define Pamphlet stitch.  
(f) Any job planned for hand folding should not be used for machine folding whereas any job planned for machine folding may be used for hand folding. Why?  
(g) After sewing of the assembled sections of the books, it has been found that there is a difference in thickness between the fore edge and the spine of the book. Why?  
How can it be eliminated?  $2+2+2+4+2+4+(2+2)=20$

2. (a) Define “ folding to Paper” and “folding to print”.  
(b) How many pages a section should have, should be decided in the planning stages. Why ?  
(c) Discuss with neat sketches the working principle of knife folder.  $(3+3)+3+7=16$

**Group-B**

2. Discuss in brief with Scheme on any Two: 8+8=16
  - (a) Work and Back Imposition Scheme
  - (b) Work and Turn Imposition Scheme
  - (c) Work and Tumble Imposition Scheme
3. Draw the imposition Scheme of a 64 pages Demy Quarto Magazines (excluding cover page) to be printed by sheetfed offset on 70gsm maplitho paper. The magazine is to be bound by tough stitching. Number of copies to be printed 30000. Presses available for printing are Demy, Double Demy and Quad Demy. 16

**Group-C**

4. (a) What are the basic differences between loose leaf and mechanical binding?  
(b) Discuss the different types of mechanical binding systems. 8+8=16
5. (a) Define Loose leaf and Mechanical binding.  
(b) Discuss in brief with sketch the different types of Post Binders. 2+2+12=16

**Group-D**

6. (a) What do you mean by gathering? 3+3+10=16  
(b) What are basic differences between gathering and collating?  
(c) Discuss with neat sketch the working principle of Sewing-in arm gathering unit.

7. Discuss in brief the different methods of loom sewing used for conventional binding.

16

**Group-E**

8. (a) Discuss how rounding, backing, back lining and head bands increase the constructional strength of a book bound by conventional method.

(b) Discuss in brief the method of attaching the cover boards with the book. 10+6

9. (a) Perfect binding is not usually used in Magazine Production. Why?

(b) How the grain direction of Paper affects the perfect binding?

(c) Discuss how the type of paper influences the perfect binding.

(d) Discuss the functional parts of the perfect binding machines. 2+4+4+6=16