

B.PRINTING ENGINEERING EXAMINATION 2019  
(FOURTH YEAR FIRST SEMESTER)  
SUBJECT: NEWS PAPER PRINTING TECHNIQUES

Time: Three hours

Full Marks: 100

Answer all questions from Group-A and  
any two questions from Group-B and any two questions from Group-C

Group-A

1. a) Discuss in brief, the working principle of Optical Character Recognition.
- b) Discuss in brief, the working principle of Telecommunication System.
- c) Discuss in brief, the problems occurred in sending data through Telecommunication System. 5+5+10=20

Group-B

2. a) Compare between Image Scanner and Text Scanner.
- b) What are the basic differences between Post Script file and Raster Image File.
- c) Laser Printers are often referred to as intelligent copiers. Why?
- d) The resolution of laser printed image is lower than that of the image-setter or computer-to-plate output. Discuss the reason. 5+3+2+10=20
3. a) What are the benefits of CTP?
- b) Discuss in brief, "The Digital Front End" and "Post Script Interpreter" of the CTP.
- c) i) Internal Drum Type CTP is more suitable to thermal ablative type plates. Why?  
ii) Hybrid type CTP plates need two different exposures for processing. What are those?  
What are the purposes of these two distinct exposures? 5+(5+5)+(2+3)=20
4. a) Discuss in brief, the Internal Drum type CTP and External Drum type CTP.
- b) Discuss in brief about the silver halide type CTP and photopolymer type CTP. (5+5)+(5+5)=20

Group-C

5. a) Discuss with neat sketch, the basic configurations of the Blanket-to-Blanket and CIC type Web Offset Presses.
- b) What do you mean by "Double Ending"?
- c) How can you print bi-colour job on one side of the web using a single mono Blanket-to-Blanket type web offset press. 12+5+3=20

6. a) Discuss in brief, the different types of web turning devices used in web offset presses.

b) Basement type reel stand is preferred in comparison with inline reel stand. Why?

c) How is the reel splicing system actuated?  $15+3+2=20$

7. a) Discuss with sketch, Zero Speed reel splicing system used in Web Offset Presses.

b) Discuss with neat sketch, Harris Cottrell Brush dampening system used in Web Offset Presses.  $10=10=20$