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MANIPAL INSTITUTE OF TECHNOLOGY
MANIPAL
(A constituent unit of MAHE, Manipal)

V SEMESTER B.TECH. (PRINT AND MEDIA TECHNOLOGY)

END SEMESTER EXAMINATIONS, NOVEMBER 2018

SUBJECT: DIGITAL AND SECURITY PRINTING [PMT 3102]

REVISED CREDIT SYSTEM
(21/11/2018)

Time: 3 Hours

MAX. MARKS: 50

Instructions to Candidates:

- ❖ Answer **ALL** the questions.
- ❖ Missing data may be suitable assumed.

1A. Write a note on following: **a.** Soft Proof **b.** Remote Proof

1B. Explain the scanning factors that affect the image quality.

1C. Explain the parameters considered for hybridization.

[02 + 04 + 04]

2A. Explain the following security features with respect to their printing, design and protection against photocopying.

- a.** Logo-Dot **b.** Micro text Printing
- c.** Metameric ink pairs **d.** IR barcode printing inks

2B. Explain the steps involved in Raster Image Processing.

2C. Explain how Color Management Architecture influences the prepress.

[02 + 04 + 04]

3A. Explain the role of Preflighting.

3B. Explain the factors that distinguishes digital printing process from conventional printing.

3C. With neat diagrams, explain color printing systems based on Ionography.

[02 + 04 + 04]

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4A. Give the steps involved in creating Input Profile for:

a. Scanner

b. Camera

4B. With a neat flowchart, explain the possible approval points for proofing in a production cycle.

4C. With a neat diagram, explain the DCP/32 electrophotographic printing system.

[02 + 04 + 04]

5A. How variable data printing is an integral part of security printing process? Explain.

5B. Explain the criteria for selecting the appropriate inks and coatings for any specific job in hybridization.

5C. With a neat diagram, explain the working of Truepress 544.

[02 + 04 + 04]