MANIPAL INSTITUTE OF TECHNOLOGY
MANIPAL
A Constituent Institution of Manipal University

IV SEMESTER B.TECH (MEDIA TECHNOLOGY)
END SEMESTER EXAMINATIONS, JUNE 20221

SUBJECT: DIGITAL PRINTING SYSTEMS [MED 2253]
REVISED CREDIT SYSTEM

Time: 3 Hours   MAX. MARKS: 50

Instructions to Candidates:

❖ Answer **ANY FIVE FULL** the questions.
❖ Missing data may be suitable assumed.

1A. Explain the possible hybridization for the following printing requirements: **04**

1B. Explain the following print deterioration forces with test methodologies in detail: **04**

1C. Explain the common digital file problems and their possible solutions found in preflighting. **02**

2A. With neat sketches, explain the four different types of 'singlepass' multicolor printing systems under computer to print technology. **04**

2B. Explain the stages of Raster Image Processing in detail. **04**

2C. Explain the procedure of producing digital proofs using color management. **02**

3A. An old printed material in a very poor condition is to be digitized. The print on the paper has deteriorated over time. It has both text and images. With respect to the image, explain the various factors that can affect the scanning process for this job and how can the same be enhanced for better quality? **04**

3B. What are the reasons for making a proof? Explain the requirements of a proofing system. **04**

3C. With a neat flowchart, explain the color management architecture using color look-up table. **02**

4A. What is workflow integration? What are the driving factors that motivates workflow integration in a digital system? Explain. **04**

4B. A job for printing Revels poster requires hybridization of conventional and digital processes. It is a last-minute order requiring the print to be completed within 24 hours. The poster will have a single base design and a variable QR code (which can be scanned by QR scanner). Poster will be displayed on notice boards and display walls of MIT. **04**

    a.   Identify the different printing process for the said requirements and justify.

    b.   Explain the parameters for hybridization to complete the job.

    c.   What factors affect the display requirements mentioned above. Explain.

4C. "Computer to press system has revolutionized the modern-day printing". Justify this statement with reasons. **02**

5A. Explain the following with neat diagrams: **04**

    a. Single color Ionographic press with Dielectric belt and Intermediate carrier belt.

    b. Four color satellite design printing directly on paper.

5B. State the advantages and disadvantages of Digital Printing. **04**

5C. Explain the parameters considered for hybridization. **02**