

**B. E. Printing Engineering 2<sup>nd</sup> Year 2<sup>nd</sup> Semester Examination, 2022****Subject: Digital Printing**

Total marks – 100

Time: 3Hrs

Answer each CO separately in one place and mention the question number clearly.

<b>Answer any 2 questions [CO1: Discuss digital printing technologies (K2)]</b>	<b>40</b>
1. a) Describe the basic electrophotography process with required diagram.	10
b) Describe the need of piezo crystal in inkjet printing.	4
c) Describe the direct thermal printing process.	6
2. a) Describe cascade, magnetic brush and impression cylinder development processes.	10
c) Describe the principle of vibration type inkjet printing process.	10
3. a) Describe the D2T2 process and its applications.	8
b) Describe the deflection type inkjet printing process.	8
c) Describe the advantages of thermal printing over xerography and inkjet printing.	4
<b>Answer any 2 question [CO2: Analyze digital prepress. (K4)]</b>	<b>30</b>
4. a) Analyze the function of halftoning.	7
b) Analyze the cover designing aspect of prepress.	4
c) Analyze the use of raster and vector images.	4
5. a) Analyze the advantages of stylesheet.	4
b) Analyze the concept of AM screening.	5
c) Analyze the function of PostScript.	6
6. a) Analyze the functions registration marks, crop marks and bleed marks.	6
b) Analyze the function of PDF.	6
c) Analyze the need of PMT in scanners.	3

**Answer any 2 question [CO3: Describe digital proofing. (K2)]** **20**

7. Describe the working principle and use of densitometer. **10**
8. Describe the need of preflighting and some of the parameters to be considered while preflighting. **10**
9. Describe the need of calibration and the process of prepress calibration. **10**

**Answer any 1 question [CO4: Evaluate varieties of application (K6)]** **10**

10. Evaluate the need of POD and how digital printers can help to meet those needs. **10**
11. Evaluate the need of Web2Press and how it can be advantageous for print industry. **10**