

BIRLA INSTITUTE OF TECHNOLOGY, MESRA, RANCHI  
(MID SEMESTER EXAMINATION SP/2023)

CLASS: BTECH/BARCH  
BRANCH : BT/BARCH

SEMESTER : VI  
SESSION : SP/2023

SUBJECT: CL328 PAINTS AND SURFACE COATING TECHNOLOGY  
TIME: 02 Hours

FULL MARKS: 25

**INSTRUCTIONS:**

1. The question paper contains 5 questions each of 5 marks and total 25 marks.
2. Attempt all questions.
3. The missing data, if any, may be assumed suitably.
4. Tables/Data handbook/Graph paper etc., if applicable, will be supplied to the candidates

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Q.1(a)	Illustrate the parameters needed for paint applications	[2] 3	3
Q.1(b)	Describe the different functions of additives in paint formulations. Classify the oils based on drying mechanism.	[3] 2	2
Q.2(a)	Discuss the hiding power of pigments	[2] 1	2
Q.2(b)	Explain the main purpose of pigments	[3] 2	2
Q.3(a)	Describe the oil absorption of pigments.	[2] 2	1
Q.3(b)	Discuss the advantage and disadvantages of TiO <sub>2</sub>	[3] 2	2
Q.4(a)	Differentiate tonners and lakes	[2] 2	4
Q.4(b)	Discuss the functions of extenders	[3] 3	2
Q.5(a)	Write the Industrial approach to reduce emission of solvent into the atmosphere.	[2] 5	5
Q.5(b)	Classify the solvent based on flammability	[3] 4	2

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