

**BIRLA INSTITUTE OF TECHNOLOGY, MESRA, RANCHI
(END SEMESTER EXAMINATION)**

**CLASS: BARCH
BRANCH: ARCHITECTURE**

**SEMESTER : VI
SESSION : SP/2025**

SUBJECT: AR351 SPECIFICATION ESTIMATION AND COSTING

TIME: 3 Hours

FULL MARKS: 50

INSTRUCTIONS:

1. The question paper contains 5 questions each of 10 marks and total 50 marks.
 2. Attempt all questions.
 3. The missing data, if any, may be assumed suitably.
 4. Before attempting the question paper, be sure that you have got the correct question paper.
 5. Tables/Data hand book/Graph paper etc. to be supplied to the candidates in the examination hall.
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		CO	BL
Q.1(a)	What happens to the earnest money of an unsuccessful tender?	[5]	1
Q.1(b)	Discuss piece-work agreement under the type of contract?	[5]	1
Q.2(a)	Elaborate earthwork is a main item of work in excavation. Mention the unit of calculation of earthwork?	[5]	2
Q.2(b)	Prepare a preliminary estimate of the building project with a total plinth area of all buildings of 1500 sq m. Given that ----- a) Plinth area rate - Rs. 950 per sq m b) Extra for special architectural treatment - 1.5% of the building cost c) Extra for water supply and sanitary installations - 5% of the building cost d) Extra for internal installation, 14% of the building cost. e) Extra for service - 6% of the building cost f) Contingencies - 3% g) Supervision charges - 8%	[5]	2
Q.3(a)	Define the two categories in the Individual Wall Method.	[5]	2
Q.3(b)	Explain the centerline method of measurement.	[5]	2
Q.4(a)	Steel reinforcement is determined from which drawing?	[5]	2
Q.4(b)	Reinforced cement concrete is usually estimated under which two items? Write with units.	[5]	2
Q.5(a)	What is the analysis of the rate?	[5]	3
Q.5(b)	Under which heads are the miscellaneous expenses and overheads categorised?	[5]	3

:::28/04/2025:::M