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B TECH
(SEM-V) THEORY EXAMINATION 2020-21
QUANTITY ESTIMATION AND CONSTRUCTION MANAGEMENT

Time: 3 Hours

Total Marks: 100

Note: 1. Attempt all Sections. If require any missing data; then choose suitably.

SECTION A

1. Attempt all questions in brief.

2 x 10 = 20

Q no.	Question	Marks	CO
a.	Enlist the main items of work used in estimation of buildings.	2	1
b.	Name any four earth moving equipment's.	2	3
c.	What is break-even cost analysis?	2	5
d.	What do you mean by Land Acquisition?	2	2
e.	What is Arbitration?	2	5
f.	Define interest rate. How interest rate can be classified?	2	5
g.	Define most likely time and mean time.	2	3
h.	What are the various types of cranes?	2	4
i.	What is the Labour welfare fund Act, 1965?	2	2
j.	Define Retention Money.	2	5

SECTION B

2. Attempt any three of the following:

Q no.	Question	Marks	CO
a.	The initial cost of equipment is Rs.1100 and salvage value is Rs.100. Life of equipment is 5years. The rate of interest for sinking fund is 8%. Calculate the yearly depreciation and the book value at the end of each year by all the five methods.	10	5
b.	Explain in detail about various types of earthwork equipment's with special purpose usage for each equipment's.	10	4
c.	What are different types of construction contracts and state their main attributes.	10	2
d.	Illustrate the CPM techniques as used in scheduling a construction project. Also give the difference between PERT and CPM system.	10	3
e.	Discuss the purpose of analysis of rates.	10	1

SECTION C

3. Attempt any one part of the following:

Q no.	Question	Marks	CO
a.	Explain the procedure of opening the tenders, acceptance of tenders and the execution of agreement for carrying out a work.	10	2
b.	What are the plans for labour safety on construction site?	10	2

4. Attempt any one part of the following:

Q no.	Question	Marks	CO
a.	Explain the various conveying equipments in detail.	10	4
b.	Explain in detail factors affecting the economic life of an equipment.	10	4



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5. Attempt any one part of the following:

Q no.	Question	Marks	CO
a.	Explain the causes for replacement of assets in details with examples. The cost of a machine is Rs. 1,60,000 and its scrap value is Rs.40,000. Estimated life is 5 years. Using the appropriate method, determine the depreciation charges for each year.	10	5
b.	What do you mean by cash flow diagram? How is it classified?	10	5

6. Attempt any one part of the following:

Q no.	Question	Marks	CO
a.	Explain bar chart. What were the problems in the bar charts that lead to development of network technique?	10	3
b.	Explain the principles of planning. State their advantages and limitations.	10	3

7. Attempt any one part of the following:

Q no.	Question	Marks	CO
a.	Describe the various types of estimation that are used in estimation of building.	10	1
b.	Estimate the quantities of brickwork and plastering required in a wall 5 m long, 4m high and 35cm thick. Also calculate the cost if the rate of brickwork is Rs. 320.00 per cu.m. and of plastering is Rs. 8.50 per sq.m.	10	1