

Printed Pages:02

Paper Id:

Sub Code: NEV 053

Roll No. **B TECH****(SEM VIII) THEORY EXAMINATION 2018-19
CONSTRUCTION TECHNOLOGY AND MANAGEMENT****Time: 3 Hours****Total Marks: 100****Note:** Attempt all Sections. If require any missing data; then choose suitably.**SECTION A****1. Attempt all questions in brief. 2 x 10 = 20**

- a. What are the necessary data required for updating?
- b. What is meant by work breakdown structure?
- c. What are the uses of scrapers?
- d. Write about the Event and Activity.
- e. Differentiate between salvage value and scrap value.
- f. Write the salient features of Break Even Chart.
- g. What are essentials of a contract?
- h. Differentiate between cost plus contract and turnkey contract.
- i. What is the effect of freezing of fresh concrete?
- j. What is the purpose of curing?

SECTION B**2. Attempt any three of the following: 10 x 3 = 30**

- a. Describe the salient features of various activities and resources involved to be planned for a new project. What are the roles of planning techniques to make the decisions for a new project?
- b. Draw a bar chart and compute the total duration of the project from the data given below :

Task (1)	7 days (Duration)
Task (2)	5 days
Task (3)	9 days
Task (4)	4 days
Task (5)	6 days
Task (6)	9 days

Task (1) and (4) will be started together. Task (2) will start after completion of Task (3) and Task (3) will take place after Task (1). Task (5) and (6) will be taken up together but only after completion of Task (3).
- c. An engineer sold his patent to a corporation and is offered a choice of Rs 12500 now or Rs 1650 per year for the next 10 years. The money worth is 12 %. Find the desirable choice for the engineer.
- d. What is a bid? How is it submitted? What are the various stages and types? How do the presentation of bid and its evaluation take place?
- e. What are the various operations associated with the earth work for providing basement and raft foundation for constructing a multi storied building. Describe the various equipments which shall be deployed for carrying out these operations.

SECTION C

3. Attempt any *one* part of the following: **10 x 1 = 10**
- What are the objectives and functions of construction management?
 - Explain in detail project management constructions.
4. Attempt any *one* part of the following: **10 x 1 = 10**
- Explain about Resource Analysis and Resource Allocation.
 - Explain the concept of float and slack. Distinguish between the free, independent and interfering floats.
5. Attempt any *one* part of the following: **10 x 1 = 10**
- The fixed costs for the year 1994-95 are Rs 60000. The estimated sales for the period are valued at Rs 200000. The variable cost per unit for the single product made is Rs 5/-. If each unit sells at Rs 25 and the no. of units involved coincide with the expected volume of output. Construct the break even chart and determine the followings:
 - The break even point
 - The profit earned at a turnover of Rs 125000
 - Margin of safety
 - Angle of incidence.
 Verify the results algebraically.
 - Discuss ant three methods depreciation for an equipment which is likely to be obsolete before its normal life.
6. Attempt any *one* part of the following: **10 x 1 = 10**
- Write short notes on CPWD contract conditions and special conditions of contract.
 - What are the contents of a tender document? Enumerate the complete tendering procedure with illustrations.
7. Attempt any *one* part of the following: **10 x 1 = 10**
- What are different types of crane? Explain briefly.
 - Discuss the different types of equipments used for concreting operations.