



CBCS SCHEME

18CV51

USN

Fifth Semester B.E. Degree Examination, Jan./Feb. 2021 Construction Management and Entrepreneurship

Time: 3 hrs.

Max. Marks: 100

Note: Answer any FIVE full questions, choosing ONE full question from each module.

Module-1

- 1 a. Discuss the ideal characteristics that a Management should exhibit. (07 Marks)
- b. Briefly explain the key steps involved in Construction planning. (06 Marks)
- c. What are the principles based on which organizational structure has to be framed? (07 Marks)

OR

- 2 a. What is Work break down structure? Mention its significance in Construction project. (06 Marks)
- b. Discuss suitability, advantages and disadvantages of Autocratic and Democratic style of Management (06 Marks)
- c. Draw the network diagram and identify critical path using CPM for the following activity data :

Activity	1-2	2-3	2-4	3-5	3-6	4-5	4-7	5-8	6-8	7-8
Duration (Days)	5	2	6	4	4	2	3	7	8	2

(08 Marks)

Module-2

- 3 a. What is the purpose of having material management system in construction? (04 Marks)
- b. Enumerate the factors to be considered for selection of construction equipments. (07 Marks)
- c. Explain different class of labour employed in construction project. (09 Marks)

OR

- 4 a. What are the factors influencing Inventory Management? (05 Marks)
- b. Estimate the hourly production of a Shovel with bucket capacity of 0.96m^3 and cycle time of 30 seconds. Shovel is used to excavate hard soil in an open area. Excavated earth is to be loaded in waiting dump truck, positioned at 60° . Equipment is utilized for 50 minutes in one hour. (07 Marks)
- c. List the factors affecting labour productivity. Briefly discuss any three factors. (08 Marks)

Module-3

- 5 a. Define Engineering Ethics. Mention the duties of Engineers, with respect to ethical practices. (06 Marks)
- b. Discuss the importance of Inspection in Construction. (08 Marks)
- c. Highlight the common causes of accident in Construction site. (06 Marks)

OR

- 6 a. Explain the safety measures to be adopted for excavation. (06 Marks)
- b. With reference to profession practice, discuss i) Conflict of Interest ii) Gifts and Bribes. (06 Marks)
- c. Explain the concept of Total Quality Management. (08 Marks)

1 of 2

Important Note : 1. On completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages.
2. Any revealing of identification, appeal to evaluator and /or equations written eg, $42+8=50$, will be treated as malpractice.

Module-4

- 7 a. Define the following terms : i) Principal Amount ii) Rate of Interest (04 Marks)
 iii) Interest Amount iv) Interest Period. (06 Marks)
 b. Discuss the principles of Engineering Economics. (06 Marks)
 c. There are two alternatives for purchasing a concrete mixer and details are as follows. Choose best alternative using PW method @ 10% rate of interest. (10 Marks)

Parameter	Alternative - 1	Alternative - 2
Purchase cost (Rs)	3,00,000/-	2,00,000/-
Annual Operating and Maintenance cost (Rs)	20,000/-	35,000/-
Expected Salvage value (Rs)	1,25,000/-	70,000/-
Useful life (years)	05	05

OR

- 8 a. Briefly explain the concept of Minimum Cost Analysis. (06 Marks)
 b. A Construction Company is planning to invest Rs 8,00,000/- for purchase of construction equipment with useful life of 10 years. Equipment is expected to generate net annual profit of Rs 1,40,000/- with expected salvage value of Rs 2,00,000/-. Compute the Rate of Return and comment on the investment if Company's MARR is 10%. (06 Marks)
 c. Initial cost of an infrastructure project, expected to serve perpetually is Rs 1,50,00,000/-. Annual maintenance cost is Rs 8,00,000/- Renovation cost at end of every 15 years is Rs 18,00,000/-. Find the capitalized cost at an interest rate of 8% per year. (08 Marks)

Module-5

- 9 a. Enumerate services offered by TECSOK. (06 Marks)
 b. Discuss the characteristics of MSME's. (06 Marks)
 c. Explain different concept of Entrepreneurship. (08 Marks)

OR

- 10 a. List the benefits for investors and host country in Direct Foreign Investment. (04 Marks)
 b. Briefly discuss challenges in International Entrepreneurship. (08 Marks)
 c. What are the different sources of Finance for Entrepreneur? Explain. (08 Marks)
