18CV51

USN

Fifth Semester B.E. Degree Examination, July/August 2021
Construction Management and Entrepreneurship

Time: 3 hrs.   Max. Marks: 100

Note: *1. Answer any FIVE full questions.*
2. Assume the factors accordingly.

1 a. Explain in brief the types of plans based on various factors. **(08 Marks)**
   b. What are the characteristics of management? **(08 Marks)**
   c. What is Gantt chart? Explain with its significance. **(04 Marks)**

2 a. What is project organization? Explain with a typical project organization chart. **(08 Marks)**
   b. Differentiate between AOA and AON. **(04 Marks)**
   c. Draw the network from the following activity and find critical path and total project duration:

Activity	A	B	C	D	E	F	G
Predecessor	-	-	A	A	B	B	D, F
Duration days	10	9	9	8	7	11	5

(08 Marks)

3 a. Classify the construction equipments based on different functions. **(08 Marks)**
   b. Determine the output of a Bulldozer having 215 HP engine, fitted with '5' blade rated capacity 4.4m³. The dozer is employed for excavating a hard clayey soil with average ranking of 50mts with an ideal output of 160LCM (approx) on a downhill with slope 20%. It has direct drive transmission and its expected performance is 55 minutes per hour. Assume the correction factors accordingly. **(08 Marks)**
   c. Write a note on labour productivity rates and its measurement. **(04 Marks)**

4 a. Explain in brief the different types of constructing equipment maintenance methods. **(08 Marks)**
   b. A company has purchased a construction equipment for Rs.2,00,000/- with an estimated life of 5 years and its resale value after the estimated life is 10% of the cost of equipment. Determine the depreciation charge and book value at the end of each year. Also calculate the hourly depreciation if the equipment is planned to operated 1500 hours per year. **(08 Marks)**
   c. Explain in brief the inventory control techniques used in material management. **(04 Marks)**

5 a. Explain the dimensions of quality in a construction project. **(08 Marks)**
   b. Explain the significance of TQM in the project. **(08 Marks)**
   c. List out the benefits of ethics at work place. **(04 Marks)**

6 a. Explain the different types of conflict of interest. **(08 Marks)**
   b. Explain the safety procedure to be adopted during demolition of RCC structure. **(08 Marks)**
   c. Write a note on ISO standards for construction process. **(04 Marks)**

7 a. Explain the benefit of engineering economy in construction management. **(08 Marks)**

   b. A firm invest in one of the two mutually exclusive alternative. Determine the best alternative based on annual equivalent method with the given details. **(12 Marks)**

i = 20%

Alternative	Investment (Rs)	Annual equal return (Rs)	Salvage value (Rs)
A	2,50,000	90,000	20,000
B	2,75,000	1,00,000	50,000

8 a. Differentiate between Micro and Macro economics. **(08 Marks)**

   b. Determine the effective interest rate for a nominal rate of 6 percent that is compounded
      i) Daily   ii) Monthly   iii) Quarterly   iv) Half yearly   v) Annually. **(12 Marks)**

9 a. Explain the stages of entrepreneurial process. **(08 Marks)**

   b. What is MSME? Explain its significance. **(04 Marks)**

   c. Explain the role and scope of i) TECSOK   ii) SIDBI. **(08 Marks)**

10 a. Explain the business planning process. **(08 Marks)**

    b. Mention the mode of non-equity arrangement for international entrepreneurial entry with its benefit. **(04 Marks)**

    c. Explain the concept of feasibility study and its report for starting a project. **(08 Marks)**

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