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M.Tech. (EE) / (ECE)   (Sem.–3)

COST MANAGEMENT OF ENGINEERING PROJECTS

Subject Code : MTOE-301D-18

M.Code : 76546

Date of Examination : 12-12-22

Time : 3 Hrs.   **Max. Marks : 60**

INSTRUCTIONS TO CANDIDATES :
1.Attempt any FIVE questions out of EIGHT questions.
2.Each question carries TWELVE marks.

1. Name and explain different types of costs involved in decision-making.

2. Explain in detail various stages of project execution.

3. a) Explain in detail mechanical and process project commissioning.

    b) Write a note on project team.

4. a) Distinguish between marginal and absorption costing.

    b) Explain in detail Break-Even Analysis.

5. Explain any three:

    a) MRP

    b) JIT

    c) ERP

    d) TQM.

6. **a) Solve using Big M**

    Minimise $Z = 4a + 2b$

    $3a + 1\ b \geq 27;$

    $-1a - 1\ b \leq -21;\ 1a + 2\ b \geq\ 30;$ and both a and b are ≥ 0.

    b) Write a detailed note on Budgetary control?

7. a) Explain different types of Budgets?

   b) Solve the transportation problem :

   (Cost in Rs. per unit)

   Destinations

Origins	A	B	C	Available capacity	Row number u_i
X	2	1	2	20	
Y	3	4	1	40	
Requirement	20	15	25	60	
Column element v_j					

8. Steps involved in executing an older for a large engine generator set are given below in a jumbled manner. Arrange them in a logical sequence, draw a PERT network and find the expected execution time period

Activities (not in logical order)	Time in weeks		
	t_0	t_1	t_p
Order and receive engine	1	1	3
Prepare assembly draining	1	1	1
Receive and study order	1	2	3
Apply and receive impost license for generator	3	5	7
Order and receive generator	2	3	5
Study enquiry for engine generator set	1	2	3
Fabricate switch board	2	3	5
Import engine	1	1	1
Assemble engine generator	1	2	3
Subunit quotation with drawing and full	1	2	3
Prepare base and completing	2	3	4
Import generator	1	1	1
Order and receive tasters, switch GEARS for switch board	2	3	4
Test assembly	1	1	1

NOTE : Disclosure of Identity by writing Mobile No. or Marking of passing request on any paper of Answer Sheet will lead to UMC against the Student.