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M-TECH
MT326

3rd Semester Regular / Back Examination – 2016-17
Project Planning & Construction Management
BRANCH(S): M Tech
Time: 3 Hours
Max marks: 70
Q.CODE: Y829
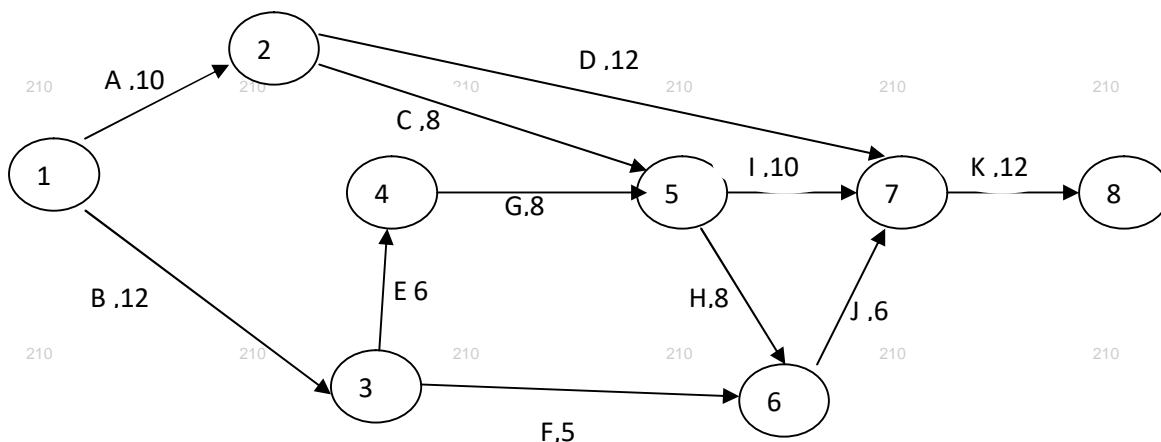### Answer Question No.1 which is compulsory and any five from the rest.
The figures in the right hand margin indicate marks.

Q1   Answer all the questions   (2 x 10)
   a)   What are the objectives of planning?
   b)   What is WBS?
   c)   What do you mean by liquidated damage?
   d)   How useful is resource leveling process?
   e)   Why it is required to maintain Safety records in construction industry?
   f)   What are the factors that affect site layout?
   g)   What do you mean by direct cost and indirect cost?
   h)   What is the difference between security deposit and earnest money?
   i)   What is safety campaign?
   j)   What is Trade union Act-1926?

Q2 a) Write objective of construction management.   (5)
    b) Write importance of project scheduling in brief.   (5)

Q3   For the following network find   (10)
        I. Critical Path
        II. Total Duration Of the Network
        III. Total float, Free float, Independent float and Interfering float for each activity.

Q4   Determine the optimum time and minimum cost for project with the following data: (10)
        The direct cost per day is Rs. 400/-

Activity	Normal		crash	
	Time (Days)	Cost (Rs.)	Time (Days)	Cost (Rs.)
1-2	9	1300	4	2400
1-3	15	1000	13	1380
2-3	7	7000	4	1540
2-4	7	1200	3	1920
2-5	12	1700	6	2240
3-6	12	600	11	700
4-5	6	1000	2	1600
5-6	9	900	6	1200

Q5 a) Briefly discuss the procedure for inviting a bid.   (5)
    b) What is arbitration? What are the advantages and disadvantages of arbitration?   (5)

Q6 a) Describe briefly the safety measures during Formwork and Scaffold operations in   (5)
        construction industry.
    b) Explain causes and prevention of accidents at construction sites.   (5)

Q7 a) What do you understand by site layout? What are the factors affecting the site   (5)
        layout?
    b) Describe briefly about the Supervisor's responsibilities for quality control in   (5)
        construction industry.

Q8   Write short notes of any two: (5 x 2)
    a) PERT
    b) Minimum wage act 1948
    c) Termination of contract
    d) Lump sum contract