

19

Q.P. Code: 25846

(3 hours)

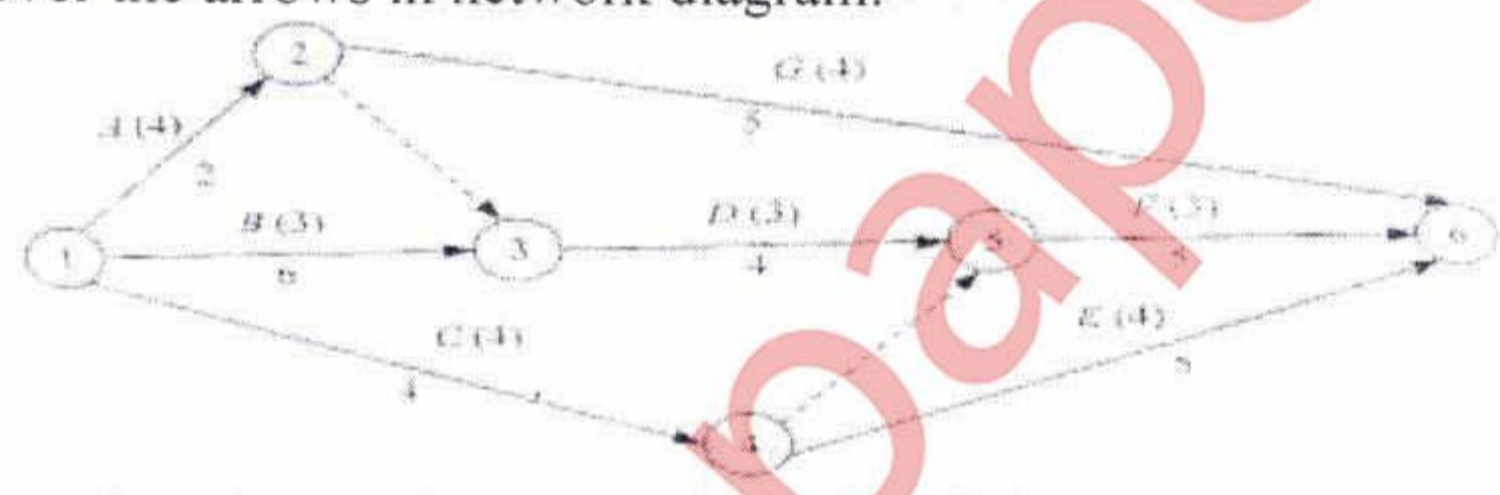
[Total Marks :80]

- NB:**
- 1) Attempt any 4 Questions
  - 2) All questions carry equal (20) marks
  - 3) Assume suitable data wherever necessary

1. a. Discuss Henry Fayol's principles of management. Describe Maslow's need hierarchy theory. 10
- b. Followings are the Construction Activities. Draw Project Network and Compute Total Float.& Free Float, Independent Float & Interfering Float 10

Activity	Duration	Activity	Duration
1-2	40	2-4	24
1-3	50	3-4	12
2-3	20	4-5	20

2. a. The Network for a project is shown below. The requirement of mason for each of the activities, has been shown over the arrows in network diagram. 12



Level out the requirement of the resource, if maximum number of mason, on any day, has to be limited to 7.

- b. Define Organization & Explain Functional organization. 4
- c. Write short note Job evaluation. 4
3. a. The following data refers to time motion study of a dumper loader operation for earth hauling: 10

Obs No	Time reqd for adjustment (sec.)	Time reqd to excavate and fill bucket (sec.)	Time reqd for swing (sec.)	Time reqd for lifting, positioning (sec.)	Time reqd to fill the dumper (sec.)
1	55	61	35	16	132
2	35.5	56	20.5	24.5	126.5
3	42.5	42	19.5	26.5	155
4	32	41.5	26	36	134.5
5	48	40	15.5	24.5	142

Based on statistical analysis (measures of dispersion), determine which sub-activity is most efficiently performed and which is least consistently performed. Comment on what may be the possible reasons for the poor performance of the sub-activity



- b. Draw a Job Layout for High-rise Building project. 05
- c. Discuss the factors affecting site mobilization 05
- 4. a. Write a short note on administration of incentive schemes 06
- b. A Construction company has an opportunity to submit a bid for the construction of new apartment building. From the Specification provided by the developer, the PERT network along with the three time estimate (in week) for each activity are shown in figure. 08

