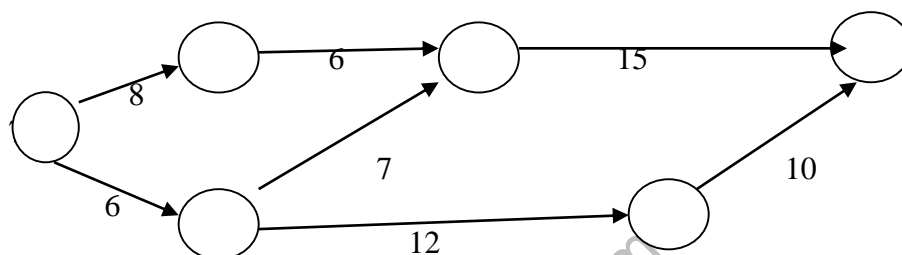


GUJARAT TECHNOLOGICAL UNIVERSITY**BE - SEMESTER-VIII(NEW) EXAMINATION – SUMMER 2019****Subject Code:2180611****Date:09/05/2019****Subject Name:Construction Management****Time:10:30 AM TO 01:00 PM****Total Marks: 70****Instructions:**

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

MARKS

- Q.1** (a) Why Indian construction industry need construction management? **03**
 (b) What is Bar chart? Explain with example of Bar chart. **04**
 (c) Draw a job layout of Road construction. **07**
- Q.2** (a) Define the term 1) Inventory 2) Cost Code 3) revenue **03**
 (b) Prepare a work breakdown structure for Dam construction **04**
 (c) From the following network and find out project duration, critical path, total float and free float. **07**

**OR**

- (c) A) Draw the network from following data also find out critical path, critical activity, project duration **07**

Sr.No	Activity	Duration	Precedence	Successor
1	A	5	---	E
2	B	6	----	C,D
3	C	4	B	F
4	D	9	B	G
5	E	8	A	I
6	F	10	C	H
7	G	5	D	-----
8	H	6	F	-----
9	I	7	E	-----

- Q.3** (a) Define the term 1) Resource allocation 2) Slack 3) Dummy activity **03**
 (b) What is value engineering? Explain in detail. **04**
 (c) What is optimum solution in network analysis? Explain the steps to find an optimum solution. **07**

OR

- Q.3** (a) Define the term 1) Project cost 2) Critical path 3) Float **03**
 (b) What is a time grid diagram explain in detail **04**
 (c) Write a short note on “Precedence Network.” **07**
- Q.4** (a) Enumerate and discuss principles of organization. **03**
 (b) Write down importance of Material Management in Construction Industry **04**
 (c) Write a short note on Ladder network. **07**

- Q.4** (a) Discuss ABC analysis for material management **03**
 (b) State and describe various causes of accidents at the construction site. **04**
 (c) Draw the network from following three time estimate, find out total project duration. **07**

Activity	Optimistic time	Pessimistic time	Most likely time
1-2	2	6	4
1-3	2	10	6
1-4	7	9	6
2-3	4	9	7
3-5	3	12	11
4-5	4	14	10

- Q.5** (a) List out project performance attributes for success of project **03**
 (b) Write short note on Updating. **04**
 (c) Explain the steps to solve linear programming problem by simplex method. **07**
- OR**
- Q.5** (a) What is breakeven point? Where it can be used? **03**
 (b) Differentiate between quality assurance and quality control **04**
 (c) Write steps to solve linear programming problem by graphical method. **07**

www.FirstRanker.com