A **Reg. No. :** | | | | | | | | | | |

Question Paper Code: 56102

B.E. / B.Tech. DEGREE EXAMINATION, MAY 2018

Sixth Semester

Civil Engineering

15UCE602-CONSTRUCTION MANAGEMENT AND FINANCE

(Regulation 2015)

Duration: Three hours Maximum: 100 Marks

PART A - (10 x 1 = 10 Marks)

1. Bar charts are suitable for_____ CO1- R

(a) Minor works (b) Major works (c) Large projects (d) All the Above

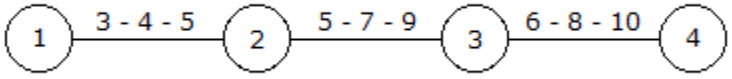
2. The first method invented for planning projects was_____. CO1- R

(a) Bar chart method (b) Milestone chart (c) CPM (d)PERT

3. Which of the following does not represent an activity? CO2- R

(a) Site located (b) Foundation is being dug (c) The office area is being cleaned (d) The invitations are being sent

4. For the network shown in the given figure, the expected time for the activity_____ CO2- R



(a) 1-2 is 4 (b) 2-3 is 7 (c) 3-4 is 8 (d) All the above

5. The direct cost of a project with respect to normal time is_____ CO3- R

(a) minimum (b) maximum (c) zero (d) infinite

6. Site order book is used for recording_____ CO3- R

(a) instructions by the executive engineers (b) construction measurements

(c) issue of store equipments (d) names of the casual labour

7. _____is used to describe a unit of product or service containing at least one non conformity. CO4- R

(a) non-conforming unit (b) defective unit

(c) conformity unit (d) non-defective unit

8. _____is a team formed in the organization with an objective of building quality into the culture of the organization. CO4- R

(a)Project council (b) Quality council (c) Quantity council (d)Cost council

9. A financial statement that shows the inflows and outflows of cash during a particular period of time is known as_____ CO5- R

(a) income statement (b) statement of retained earnings

(c) balance sheet (d) statement of cash flows

10. The term 'Fund flow' or 'Flow of funds' may thus mean transport of_____ CO5- R

(a) One asset to another (b) One liability to another

(c) Assets to liabilities or vice versa (d) All the above

PART – B (5 x 2= 10Marks)

11. What is the significance of coding systems? CO1- U
12. Define time /cost trade-offs. CO2- R
13. Differentiate duties and responsibilities. CO3- U
14. What are the purpose of statistical quality control charts? CO4- U
15. Define Capital budgeting. CO5- R

PART – C (5 x 16= 80Marks)

16. (a) What is construction Planning? Explain the basic concepts in the development of construction plans. CO1- U (16)

Or

(b) For the construction of a guest house, certain activities are to be performed which are as given below: CO1- App (16)

Activity	1	2	3	4	5	6	7
No. Duration (in weeks)	2	3	5	4	2	3	5

Activity 2 and 3 can be performed simultaneously and can start only when activity 1 is completed. Activity 4 can start only after activity 2 ends. Activity 5 cannot begin until activities 2 and 3 are completed. Activity 6 can start only after activities 4 and 5 are completed. Activity 7 is the last activity and this can commence only after the completion of activity 5.

(i) prepare a bar chart for the project

(ii) What is the total time taken for the completion of the project?

17. (a) With the following data of activities of a project, cast a suitable network for programming by CPM CO2- App (16)

Activity	A	B	C	D	E	F	G
Predecessors	-	A	B	B	D	C,E	F
Time(Days)	5	6	14	8	5	9	6

F and G are terminal activities.

Determine

(i) Project Completion time

(ii) The critical path.

(iii)The total float for each activity

Or

(b) In a project consisting of two activities each activity has duration of 5days. Activities 1 and 2 have a start to start precedence relationship with 2days lead. Calculate the project duration. If activities 1 and 2 have finish to finish constraint with a 2 days lag what is the project duration? CO2- App (16)

18. (a) Explain the following

(i) Cost control system — CO3- U — (8)

(ii) Cost Control code — CO3- U — (8)

Or

(b) (i) What are the advantages of accounting? — CO3-U — (5)

(ii) What are the types of accounting? — CO3-U — (5)

(iii) Discuss the maintenance of cash book. — CO3-U — (6)

19. (a) Explain the use of documentation and quality control circles in construction quality management. — CO4- U — (16)

Or

(b) The values of sample mean y and the range R for 10 samples consisting of 5 items in each sample are given below: — CO4- Ana — (16)

Sample No.	1	2	3	4	5	6	7	8	9	10
$\bar{y}$	43	49	37	44	45	37	51	46	43	47
R	5	6	5	7	7	4	8	6	4	6

Draw the mean and range charts and comment on the state of quality control.

20. (a) With the help of an example, explain in detail about balance sheet. — CO5- U — (16)

Or

(b) Briefly explain the capital budgeting methods. — CO5- U — (16)