## CRCS SCHEME

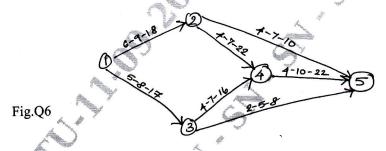
| USN  |      | 15                                                                                                                                  | SARC86     |
|------|------|-------------------------------------------------------------------------------------------------------------------------------------|------------|
|      |      | Eighth Semester B.Arch. Degree Examination, Aug./Sept.202                                                                           | n          |
|      |      |                                                                                                                                     | U          |
|      |      | Project and Construction Management                                                                                                 |            |
| æ.   |      | 2.1                                                                                                                                 | -1100      |
| 1 in | ne:  | 3 hrs. Max. Ma                                                                                                                      | rks:100    |
|      |      | Note: Answer any FIVE full questions, choosing ONE full question from each m                                                        | odula      |
|      |      | 110te. Answer any 111 L jun questions, choosing 011L jun question from each m                                                       | ounic.     |
|      |      | MODULE - 1                                                                                                                          |            |
| 1    | W    | rite short notes on :                                                                                                               |            |
|      | a.   |                                                                                                                                     | 10 Marks)  |
|      | b.   | Phases of Project Management.                                                                                                       | 10 Marks)  |
|      |      | Ó.D.                                                                                                                                |            |
| 2    | a.   | OR  Explain in detail the different types of construction companies.                                                                | (10 Marks) |
| 2    | b.   |                                                                                                                                     | ,          |
|      |      |                                                                                                                                     | (10 Marks) |
|      |      | MODULE 1                                                                                                                            |            |
| 3    | 9    | MODULE - 2 Elaborate on the need for computerization for construction and management.                                               | 05 Marks)  |
| 3    |      |                                                                                                                                     | 05 Marks)  |
|      |      |                                                                                                                                     | 10 Marks)  |
|      |      |                                                                                                                                     |            |
|      | T.I  | OR                                                                                                                                  | 20.14 1 1  |
| 4    | Ela  | laborate the different phases of Construction Management.                                                                           | (20 Marks) |
|      |      | MODULE - 3                                                                                                                          |            |
| 5    | a.   | Define the following:                                                                                                               |            |
|      |      | i) Tail event.                                                                                                                      |            |
|      |      | ii) Activity.                                                                                                                       |            |
|      |      | iii) Parallel activity. iv) Serial activity.                                                                                        |            |
|      | gia. |                                                                                                                                     | (10 Marks) |
|      | b.   | Construct the network diagram for a project whose activities are given below:                                                       |            |
|      |      | i) A is the first operation.                                                                                                        |            |
|      |      | <ul><li>ii) B &amp; C can be performed in parallel and are immediate successors to A.</li><li>iii) D, E &amp; F follow B.</li></ul> |            |
|      |      | iv) G follows E.                                                                                                                    |            |
|      |      | v) H follows D, but it cannot start until E is complete.                                                                            |            |
|      |      | vi) I & J succeed G.                                                                                                                |            |
|      | ,    | vii) F & J precede K.                                                                                                               |            |
|      |      | viii) H & I precede L. ix) M succeeds L & K.                                                                                        |            |
|      |      |                                                                                                                                     | (10 Marks) |
|      |      | .,                                                                                                                                  |            |

OR

- The following Fig. Q6, shows a network for a construction project with the three time estimates of each activity marked. Determine
  - i) Critical path and its standard deviation.
  - ii) Probability of completion of project in 35 days.
  - iii) Time duration that will provide 95% probability of its completion in time.

Z values give as follows:

| Z+  + 1.0                  | +1.1  | + 1.6   + 1.7 |
|----------------------------|-------|---------------|
| Probability (Pr) (%) 84.13 | 86.43 | 94.52 95.54   |



(20 Marks)

## MODULE - 4

- 7 Write short notes on:
  - a. Defect liability period.
  - b. Bill of materials.
  - c. Security deposit.
  - d. Interim and final certificates.

(20 Marks)

OR

8 a. What are the health and safety measures to be followed during construction?

(10 Marks)

b. Write a short note on Quality Management in construction.

(10 Marks)

**MODULE-5** 

- 9 a. Explain various considerations involved in selecting the equipment for construction projects.
  (10 Marks)
  - b. Identify and explain any 4 standard equipment used in construction of a high rise building.
    (10 Marks)

OR

10 a. What are the advantages of mechanization in the Construction Industry?

(10 Marks)

b. What are the ways in which one can procure equipment?

(10 Marks)

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