

Seat No. : \_\_\_\_\_

**NR-127**

**December-2015**

**B.Arch., Sem.-VII**

**AR-704 : Construction Project Management**

**Time : 3 Hours]**

**[Max. Marks : 50**

- Instructions :**
- (1) Figures to the right indicate full mark.
  - (2) Write answer to the point.
  - (3) Assume suitable data if required and scientific calculator is permitted.

1. (A) Answer the following : (any **two**) **8**
- (1) What is Project Management organization and staffing ? Draw a tree structure / organization set of big construction co. having head office at Dubai and site at Vadodara.
  - (2) Explain rules for network diagram.
  - (3) Explain procedure of CPM.
- (B) Select the correct answer : **2**
- (1) Construction project management is accomplished successfully by the project manager if it is completed :
    - (a) within time.
    - (b) within time and cost.
    - (c) within time, cost and quantity.
    - (d) within time, cost, quality, performance to the satisfaction of the client.
    - (e) within time, cost, quality, performance and with a close up report to the satisfaction of the client where the project manager can quote the client for reference.
  - (2) Communication barriers include which of the following :
    - (a) Words that means different things to different people
    - (b) Different perceptions of receiver and sender
    - (c) Faulty listening
    - (d) Communication distortions
    - (e) All of the above.

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2. Answer the following :

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(1) Write short note : (any **three**)

- (a) Post-tender stages
- (b) Retention amount
- (c) Project supervision
- (d) Mobilization advance
- (e) Head event

**OR**

In a factory shed construction 1, 2, 3 represent the block masonry work for three bays of wall and a, b, c represent corresponding mala plaster work, assume that in each case masonry has to precede plaster, only one gang for masonry and another gang for plaster is available. Using dummy, show the network representing the restraint and the consequent

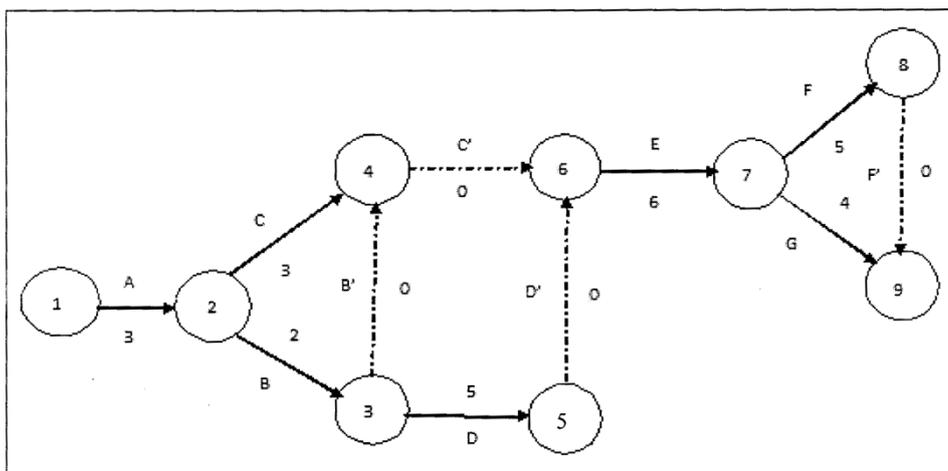
(2) What are causes of construction accident ? Also write classification of construction accidents. 2

(3) Give the difference between PERT and CPM in brief. 2

3. Answer the following :

(1) Enlist resources for construction and explain detail management of the same. 2

(2) Project involves 9 activities; duration is also given in the figure, determine critical path with the help of EFT and LFT. Also prepare table showing scheduling of activity including total float, free float and interfering float. 8



4. Solve the following :

- (1) A typical house construction project consists of the following operations along with the time set for its completion. Arrange the operation in sequential order required for construction.

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SR.NO.	OPERATION	TIME (DAYS)
1	Survey, design and layout	05
2	Roofing	07
3	Construction of foundations	06
4	Construction of boundary wall and other minor items	07
5	Carpentry work	06
6	Flooring	06
7	Plastering	06
8	Electric fitting	05
9	Plumbing and house drainage	04
10	Fixing doors and window frames	03
11	Construction of superstructure	11
12	Land shaping and clearing	03
13	White Washing of walls and painting of doors	04
14	Inaugurations	02

The project commences on Tuesday, 1<sup>st</sup> December 2015. Assume six working days in a week and one holiday on Saturday and Sunday in one month.

Prepare bar chart of the project :

- (A) State the assumption made.  
(B) Total time and completion of project.  
(C) Expected progress by 15<sup>th</sup> December 2015.

- (2) Explain project planning, scheduling and controlling in detail.

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**OR**

Define project and explain characteristics of the project.

5. Answer the following :

(1) Attempt : (any **two**)

**6**

- (a) Enlist key area of project management and explain any one in detail.
- (b) Explain method of checking final bill of contractors and different points to be taken care while checking final bill.
- (c) Write various steps involved in completion of project.

(2) Select the correct answer :

**4**

(1) Barriers that can influence data reported at higher level include

- (a) Perception
- (b) Prejudices
- (c) Personality
- (d) Personal interest
- (e) All of the above

(2) Feedback can serve the following purposes except :

- (a) ensure instructions are understood.
- (b) ensure instructions are implemented.
- (c) improve effectiveness.
- (d) motivate the supervisor.
- (e) reflect on performance.

(3) What should be the preferred methods of feedback communication ?

- (a) Written Communication
- (b) Informal discussion
- (c) Verbal Communication
- (d) Daily formal meetings
- (e) None of the above

(4) Project Management Software supports the management with the following except :

- (a) Developing and scheduling project network.
- (b) Guarantee of on time completion.
- (c) Forecasting cashflow
- (d) Monitoring time, cash and resource performance.
- (e) None of the above