

- N.B.: 1) Question No 1 is Compulsory.
 2) Attempt any four questions out of remaining six.
 3) Assume suitable data if necessary stating them clearly.
 4) Draw suitable sketches where necessary.
 5) Duration - Four Hours.

M. E (C) Cost Mgt Lec 12 PDC Project monitoring & control.

Q. 1] It is proposed to construct a small bungalow of area 100 sq.m. The total cost is estimated at Rs. 14 Lakhs and the project completion time is targeted at 32 Weeks. The list of works involved is:

- i) Excavation, UG tank etc.
- ii) Providing drainage pipe etc.
- iii) PCC, Footing
- iv) Plinth beams
- v) Refilling and paste control treatment
- vi) GF columns, DPC etc.
- vii) GF beams, slab, staircase etc
- viii) Brickwork at GF level
- ix) Columns at FF level
- x) Beams, slab, staircase at FF level
- xi) Brickwork at FF level
- xii) OH tank, Making of Doors and Windows
- xiii) Fixing Doors and windows
- xiv) Plumbing and Electrical services
- xv) Parapet wall work
- xvi) Internal Plaster
- xvii) Slab water proofing
- xviii) External plaster
- xix) Flooring, finishing items
- xx) Painting.

- a) Prepare a bar chart for the above project. (10)
- b) Monthly cash flow diagram. (10)

Q. 2] a) Prepare details of progress report for the project mentioned in Q. [1] based on time basis and the cost basis for the period at the end of completion of first eight weeks. (10)

b) Update your plans if the availability of concrete mixer for the activity no 7 is delayed by one week. Also the Commencement certificate which is required before starting the work was not obtained for a period of two weeks. (10)

Q. 3] a) Explain the importance of productivity and methods of achieving the same. (10)

b) Explain how projects can be monitored? (10)

Q. 4] a) Discuss the three level system for safety in construction. (10)

b) What safety measures you will suggest for any two activities that are carried out in the project mentioned in Q.[1]. (10)

Q. 5] a) What is PIMS and what are its main functions? (10)

b) What are different stages at which cost control is effected in construction? (10)

Q. 6] a) Discuss the need for a quality management system in construction. (10)

b) Prepare check list for any two important construction activities. (10)

Q. 7] Write note on:

- i) Cost codification
- ii) Factors affecting material productivity
- iii) Causes for accidents on construction site. (20)