

00925

**B.Tech. Civil (Construction Management) /  
B.Tech. Civil (Water Resources Engineering)**

**Term-End Examination  
June, 2010**

**ET-524(B) : CONSTRUCTION MANAGEMENT-I**

*Time : 3 hours*

*Maximum Marks : 70*

---

*Note : Answer any five questions. All questions carry equal marks.*

---

1. (a) What do you understand by Work Breakdown Technique ? What are the broadly classification levels and significance of Work Breakdown Structure ? 7+7
- (b) Show a Work Breakdown Structure of Primary Health Centre with five bed ward facility.
2. (a) Explain the commonly used Budget Monitoring Parameters. 8+3+3
- (b) Explain the terms 'Cost Variance' and 'Schedule Variance'. How are these computed ? Explain graphically the actual performance for two projects, one with favourable and other with unfavourable variance.

3. The duration and predecessors of activities for a project are as given below :

<u>Activity</u>	<u>Predecessor(s)</u>	<u>Duration(s)</u>
A	—	9
B	—	5
C	—	11
D	A, B	6
E	C, D	8
F	C, D	10
G	E, F	4
H	G	8

- (a) Draw the network showing EOT and LOT of all the events. 9+5
- (b) Give Critical Path and duration of the project.
4. Make the symbols for the following : 2x7=14
- (a) Single swing door
  - (b) Side hung folding door
  - (c) Water meter
  - (d) Fuse board
  - (e) Rain water outlet
  - (f) Wall hung urinal
  - (g) Exhaust fan

5. (a) Prepare the preliminary estimate of a Hospital Building with a total Plinth area of all buildings of 1500 sqm having the following given details : 9+5=14
- (i) Plinth area rate = Rs. 950/- per sqm
  - (ii) Extra for special architectural treatment = 1.5% of building cost
  - (iii) Extra for water supply and sanitary installation = 5% of building cost
  - (iv) Extra for internal installations = 14% of building cost
  - (v) Extra for services = 6% of the building cost
  - (vi) Contingencies = 3%
  - (vii) Supervision charges = 8%
- (b) Explain the causes of Depreciation.
6. Fill in the blanks :
- (a) The minimum safety distance from overhead power lines shall be \_\_\_\_\_ m for upto 11 kV, \_\_\_\_\_ m for above 11 kV and below 33 kV and \_\_\_\_\_ m for above 33 kV and below 132 kV. 3
  - (b) Containers shall be stacked \_\_\_\_\_ on their bottoms in upto \_\_\_\_\_ tiers. 2
  - (c) Straight length of pipes shall be stored \_\_\_\_\_ in rocks by giving \_\_\_\_\_ support and temperature above \_\_\_\_\_ to be avoided. 3
  - (d) Flammable material to be kept in \_\_\_\_\_ container in well \_\_\_\_\_ storage space having a layer of \_\_\_\_\_ Loose Sand on the floor with no \_\_\_\_\_ electric wiring. 4
  - (e) Glass sheets are stored on their \_\_\_\_\_ edges into stack of \_\_\_\_\_ panes each. 2

7. (a) Explain the various modes of resolving disputes. 8+6
- (b) What are the advantages of Arbitration over litigation ?
-