

CODE NO: 07A40101

R07

IV B.TECH - II SEMESTER EXAMINATIONS, APRIL/ MAY, 2011
BUILDING PLANNING AND DRAWING
(CIVIL ENGINEERING)

Time: 3hours**Max. Marks: 80**

Answer any FIVE questions
All Questions Carry Equal Marks

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PART - A

Note: Answer any THREE questions from Part – A (3 X 16 = 48)

1. a) What are the objectives of building bylaws. (8)
b) Write briefly about Open Space Requirements of buildings. (8)
2. a) List out different purposes of rooms in a residential building? (6)
b) Explain the standard requirements of the following in a residential building.
i) Bed Room
ii) Drawing cum Dining Room. (10)
3. Design/Plan a college Canteen building for the following requirements. Draw a line Diagram. (16)
a) Entrance with foyer with cashier's desk-15 Sq.m.
b) Dining Hall of-120 Sq.m
c) Kitchen and Pantry -60 Sq.m
d) Store-20 Sq.m
e) Provision for Xerox Machine -10 sq.m
f) Open space for dining and washing etc.
g) Toilets as required.
4. a) What are the short comings of Bar charts? How are these removed? (6)
b) Draw the bar chart for finalization of designs and work order for a building project? (10)

Activity	Description	Time for completion
A	Site selection and survey	4 weeks
B	Design	5 weeks
C	Preparation of drawings	3 weeks
D	Preparation of specifications and tender document	2 weeks
E	Tendering	4 weeks
F	Selection of Contractor	1 week
G	Award of work order	1 week

5. The network for a construction project is shown below (Figure 1). The three time estimates for each activity is given along each activity arrow. Compute
a) Expected time of completion of each activity

b) Earliest Expected time for each event. (16)

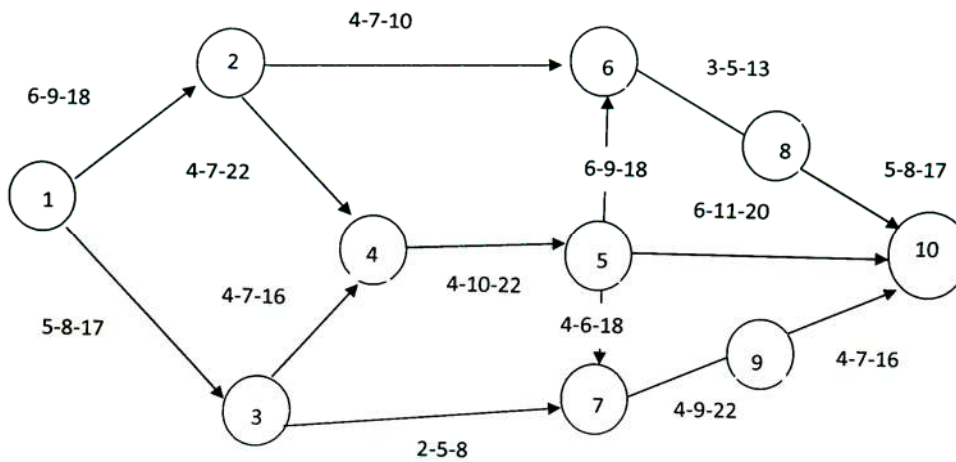


Figure 1

PART-B

Answer any one question from Part –B

(1 X 32 = 32)

6. Draw the King Post Truss of 6.00 m clear span with all required elements like Purlins, rafters and battens. The cross sectional details are as follows.

King post: 10cm × 10cm -1.8 m Height

Principal Rafter: 12cm × 10cm -3.5m long

Common Rafter: 10cm × 6cm - 80cm spacing

Eave Board: 10cm × 8cm

Cleats: 8cm × 8cm - 15cm long

Purlins: 12cm × 8cm

Battens: 4cm × 4cm

Assume cross section of any other connection elements if required.

7. Draw the plan and sectional elevation along AB for the LINE diagram given below (Figure 2). Assume suitable Foundation details.

