Roll No. Total No. of Pages :

Total No. of Questions: 09

B.Tech.(CE) (2011 onwards) (Sem.-6) PROFESSIONAL PRACTICE

Subject Code : BTCE-605 Paper ID : [A2292]

Time: 3 Hrs. Max. Marks: 60

INSTRUCTION TO CANDIDATES:

- SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
- 2. SECTION-B contains FIVE questions carrying FIVE marks each and students have to attempt any FOUR questions.
- 3. SECTION-C contains THREE questions carrying TEN marks each and students have to attempt any TWO questions.
- 4. Assume any data suitably.

SECTION-A

Q1. Write briefly:

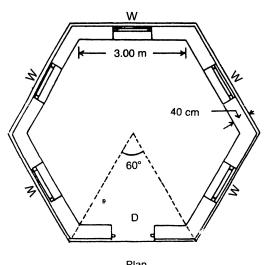
- a) What is meant by 'Lay out plan'?
- b) What is meant by item rate contract?
- c) What is a 'petty work'? How does it differ from minor work?
- d) List any two approximate methods of building estimation.
- e) What is meant by schedule of rates?
- f) What are 'transfer entries'?
- g) How is material at site account differ from stock account?
- h) Differentiate between 'lead and lift'.
- i) What is a 'cash book'?
- j) What is meant by physical verification of stores?

SECTION-B

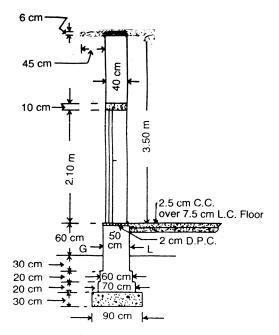
- Q2 What is a lump sum contract? What are its essential characteristics? How are the payments under such contracts adjusted?
- Q3 Calculate the quantity of earth work for 500 m length of a road in a uniform ground the heights of banks at the two ends being 1.00 m and 1.50 m. The formation width is 10 m and side slopes 2:1 (H:V). Assume there is no transverse slope.
- Q4 List any five checks applied to muster rolls.
- Q5 What documents are submitted by the SDE to divisional office every month? What action is taken on these in the divisional office?
- Q6 Explain the major items of construction work which require quality control.

SECTION-C

- Q7 From the plan and part cross section of the hexagonal compound wall given in the figure below, estimate the quantities of :
 - i) Earth work in foundation
 - ii) Lime concrete foundation
 - iii) I Class brick work in foundation and plinth in lime mortar
 - iv) I class brick work in superstructure in lime mortar
 - v) 12 mm cement plastering 1 : 6 inside and outside walls. Also, prepare an Abstract of the quantities



SCHEDULES:-D-120 cm × 210 cm(1.20 m × 2.10 m) W-110 cm × 150 cm(1.10 m × 1.50 m)



CROSS SECTION OF WALL THROUGH DOOR

- Q8 Prepare an analysis of rates for an RCC Column work excluding cost of steel including centering, shuttering, bending and binding. Use Concrete mix 1:3:6. Use any rate (CPWD/PPWD) as applicable. Calculate the rate per m³. Give the specifications.
 - Q9 Differentiate clearly between the following:
 - i) Piece work agreement and work order
 - ii) General and retailed specification
 - iii) Road metal account and material at site
 - iv) Technical sanction and administrative approval