

B.TECH SEM – VIII (2007 COURSE) (CIVIL ENGG.) :
WINTER - 2017

SUBJECT: QUANTITY SURVEYING AND VALUATION

Day: **Thursday**
Date: **23/11/2017**

W-2017-2658

Time: **02.30 PM TO 06.30 PM**
Max. Marks: **80**

N.B.;

- 1) Q. No. **1** and **5** are **COMPULSORY**. Out of remaining attempt **ANY TWO** questions from each section.
- 2) Figures to the right indicate **FULL** marks.
- 3) Answer to both the section should be written in **SEPARATE** answer book.
- 4) Assume suitable data if necessary.
- 5) Use of non-programmable **CALCULATOR** is allowed.

SECTION – I

- Q.1**
- a) Draft a detailed specification for U.C.R. masonry in 1:6 cement mortar in foundation. (05)
 - b) Write down the rules for deduction of openings for brickwork and plastering. (04)
 - c) Prepare the rate analysis for 1:2:4 cement concrete floor. (05)
- Q.2**
- a) Draft a detailed specification for R.C.C. work in 1:2:4 cement concrete for slab. (07)
 - b) Explain one following terms: (04)
 - i) Day work
 - ii) Schedule of rates
 - c) Give the units of measurement for plastering, electrification, water tank, pointing. (02)
- Q.3**
- a) Determine the quantities of marble flooring, brickwork in 1:6 cement mortar, internal and external plastering with centre line method with following data. (08)
 - i) Room size 5.5 m x 4.5 m
 - ii) Size of B.M. walls 300 mm thick
 - iii) R.C.C. slab 1:2:4 cement mortar 120 mm thick
 - iv) Door opening 1m x 2.1 m – 1 No.
 - v) Window opening 3m x 4 m – 2 No.
 - b) Determine quantities of steel and concrete for rectangular footing with following details. Prepare bar bending schedule. (05)
 - i) Size of footing 1.8 m x 2m x 0.45 m
 - ii) 1:2:4 cement concrete
 - iii) 10mm dia. tor Steel in both directions at 120 mm centre to centre in both directions.
- Q.4**
- a) Prepare rate analysis for R.C.C. slab in M₂₀ concrete. (06)
 - b) Estimate the quantity of earthwork for road in tabular form method with following data.
 - i) Formation width of road 12 m.
 - ii) Side slopes 1.5:1
 - iii) R.L. of formation 103.50 m and in an downward gradient of 1 in 100 at 0m change.

Chainage (m)	0	50	100	150	200	250	300	350
R.L. of ground (m)	102.35	101.80	102.50	102.50	103.15	103.45	103.00	103.85

P.T.O.

SECTION - II

- Q.5** a) Explain PWD procedure of execution of work. (05)
- b) Explain tender notice and particulars to be covered in a tender notice. (05)
- c) Define Arbitration and explain necessity of it in construction industry. (04)
- Q.6** a) Determine the standard rent of a building with following details: (10)
- i) Cost of building 5 lacks.
 - ii) Future life of building 50 years.
 - iii) Plot Area – 500sqm and costing Rs. 200/- per sqm
 - iv) Yield on investment and on land 11% and 8%.
 - v) Outgoings about 30% of gross income.
 - vi) Redemption of capital @ 6% per year.
- b) Enlist different methods of depreciation and explain any one in detail. (03)
- Q.7** a) Explain various situations leading to confiscation of SD and EMD. (05)
- b) List the advantages and disadvantages of BOT tenders. (04)
- c) Explain contract agreement and its content. (04)
- Q.8** a) What is meant by subletting of contract? (04)
- b) Explain Negotiated contract. (04)
- c) Explain different types of contracts. (05)

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