Printed pages:3						EEV 602					
(Following paper code and roll no. to be filled in your answer book)											
Paper Id: 197602	Roll No.										

B TECH

(SEM. VI) THEORY EXAMINATION 2014-15 Estimation and Project Management

TIME: 3 Hours Total Marks: 100

Note: (1) Attempt all questions.

(2) All questions carry equal marks. Assume data not given

1. Attempt any four parts:

(5x4=20)

- (a) Explain individual wall method of estimating along with its merits and demerits.
- (b) What are general specifications of Type-I building.
- (c) Calculate the quantities of a brick built partition wall of dimensions 10 m x 3.2 m x 0.3 m of which 0.20 m is in foundation with 10 cm concrete block 1:3:6.
- (d) Give detailed specifications of plastering work in a building.
- (e) Calculate the quantities of Arch Masonry work and cement plastering in the soffit of arch. The arch subtends an angle of 60° at the centre. The span of arch is 3.2 m and its thickness as 0.30 m. The length of arch is 6.0 m from face to face.
- (f) Calculate the earth work in excavation of foundation for a room of internal dimensions 5 m x 4 m with 30 cm thick walls, the width and depth of the foundation being 0.8 m and 0.9 m respectively.
 - 2. Attempt any four parts:

(5 X 4= 20)

- (a) Analyze the rates for 20mm thick Cement Concrete 1:2:4 DPC per square meter for 100 sq.metres.
- (b) The cost of an old building is Rs. 100,000/- excluding the cost of the land. Calculate the amount of annual sinking fund @ 5% interest assuming the future life of the building as 20 years and the scrap value @ 1/10 of the cost of purchase.

- (c) What is capitalized value? Estimate the capitalized value of a building with net annual rent of Rs.36, 000 /-@ Rs 8% per annum?
- (d) Work out the analysis of rates for 12 mm thick, 1:6 cement sand plaster. Take quantity 100 sq. m.
- (e) Prepare the material statement for a 1:3:6 RCC plat form 10x10x0.4m.
- (f) Define Salvage value, Book value.
- 3. Attempt any Two parts:

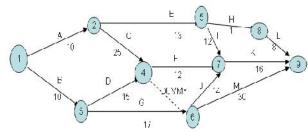
(10 X 2 = 20)

(a) Develop the CPM network with following hints.

A to B, A to C, A to D, B to E, C to F, C to G, D to H, E to I, F to J, G to K, H to K.

If the duration for above activities be 1,2,3,4,5,6,7,8,9,1,2 days respectively. Schedule it.

(b) Schedule the following CPM network.



- (c) Explain and compare PERT and CPM with their significance.
- 4. Attempt any Two parts:

(10 X 2 = 20)

- (a) What is the difference between deprecation and obsolescence? The initial cost of a machine is Rs.2100, salvage value is Rs. 100. The life of machine is 5 years. The rate of interest for sinking fund is 10% pa. Calculate the yearly depreciation and book values at the end of each year by Sinking fund and Sum of years' digit method.
- (b) Write short notes on "the time value of money& "cash flow diagram".
- (c) What is engineering economics? What are the principles of engineering economics?

5. Attempt any Two parts

- (10 X 2= 20)
- (a) Write down the particulars required for the notice inviting tender. Also describe the situations for termination of a contract.
- (b) What are essentials of a contract? Discuss contract document.
- (c) Write short notes on: Contract, Tender, Arbitration, Work charged establishment.