

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.

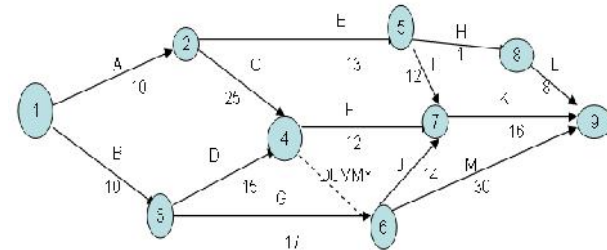
3. Attempt any Two parts: (10 X 2= 20)

(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 depreciation 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.