



Printed Pages : 3

TCE – 604

(Following Paper ID and Roll No. to be filled in your Answer Book)

PAPER ID : 0060

Roll No.

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B. Tech.

(SEM. VI) EXAMINATION, 2006-07

ESTIMATION & CONSTRUCTION MANAGEMENT

Time : 3 Hours]

[Total Marks : 100

- Note :*
- (i) Attempt **all** questions.
 - (ii) In case of numerical problems assume data wherever not provided.
 - (iii) Be precise in your answer.

- 1** Attempt any **four** parts of the following: **5×4=20**
- a) Discuss different types of estimates in short.
 - b) Write general specifications of 1st class building.
 - c) Write detailed specifications of 1:4:8 cement concrete in foundation.
 - d) What are different methods of estimation? Which method you adopt for octagonal bay front building ?
 - e) Calculate the earthwork in excavation of foundation for a room of internal size 5m × 4 m with 300 mm thick walls, the width and depth of the foundation being 700 mm and 900 mm respectively.
 - f) Enumerate general items of work and mention their units of measurement for building construction.

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2 Attempt any **four** parts of the following : **5×4=20**

- a) What do you understand by ‘analysis of rates’. Discuss its importance.
- b) What is a ‘work charged establishment’ ? Discuss its importance with respect to regular establishment.
- c) Work out analysis of rates for 1:2:4 R.C.C work in slab.
- d) Discuss the procedure followed regarding adoption of market rates and cost indices with reference to P.W.D schedule of rates.
- e) Discuss briefly the relative merits and demerits of different methods of valuation.
- f) Work out analysis of rates for 25 mm thick D.P.C

3 Attempt any **two** parts of the following: **10×2=20**

- a) What are main advantages the network method have over the conventional methods of planning and scheduling?
- b) The network for a certain project is shown in **fig.1**. Determine the expected time for each of the path. Which path is critical ?

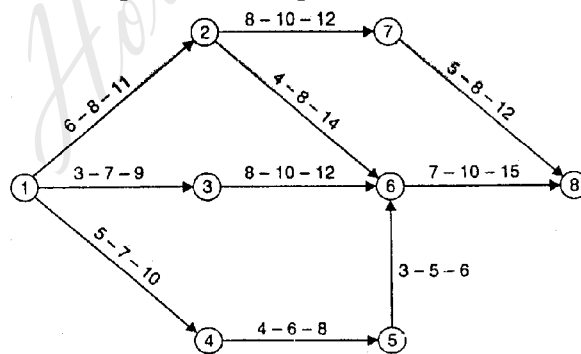


Fig. 1

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- c) Explain in brief of the following :
- i) AOA diagram
 - ii) Standard deviation
 - iii) Most likely time estimate
 - iv) Latest allowable occurrence time.
- 4** Attempt any **two** parts of the following : **10×2=20**
- a) Explain the methods of time cost optimization of project network.
 - b) What is need of financial management? Describe in short different types of financing.
 - c) Explain the following in brief :
 - i) Project monitoring
 - ii) Time value of money
 - iii) Depreciation
 - iv) Equivalence concept.
- 5** Attempt any **two** parts of the following : **10×2=20**
- a) What are the different types of engineering contracts? What are the essential documents required in a contract?
 - b) Write a suitable tender notice for the construction of an office building for the value of rupees 130 lakhs.
 - c) Explain the following :
 - i) Earnest money
 - ii) Work order
 - iii) Evaluation of tender
 - iv) Legal aspects of contracts.