

**MAULANA ABUL KALAM AZAD UNIVERSITY OF TECHNOLOGY, WEST BENGAL**

Paper Code : CE(PC)602 Engineering Economics, Estimation &amp; Costing

UPID : 006732

Time Allotted : 3 Hours

Full Marks : 70

*The Figures in the margin indicate full marks.**Candidate are required to give their answers in their own words as far as practicable***Group-A (Very Short Answer Type Question)**

1. Answer any ten of the following :

[ 1 x 10 = 10 ]

- (I) What is percentage rate of contract?
- (II) What is the deferred income?
- (III) Which right is not an easement right?
- (IV) What is Market Structure?
- (V) What is cost control?
- (VI) What is full form of BIM?
- (VII) What is meant by Payback period.
- (VIII) Write down the measurement unit of E/W in excavation, PCC & BFS.
- (IX) What is quality of aggregates?
- (X) What is the measurement unit of rate & rate of 1st class brick work?
- (XI) What is LCC?
- (XII) What is percentage break of cost?

**Group-B (Short Answer Type Question)**

Answer any three of the following :

[ 5 x 3 = 15 ]

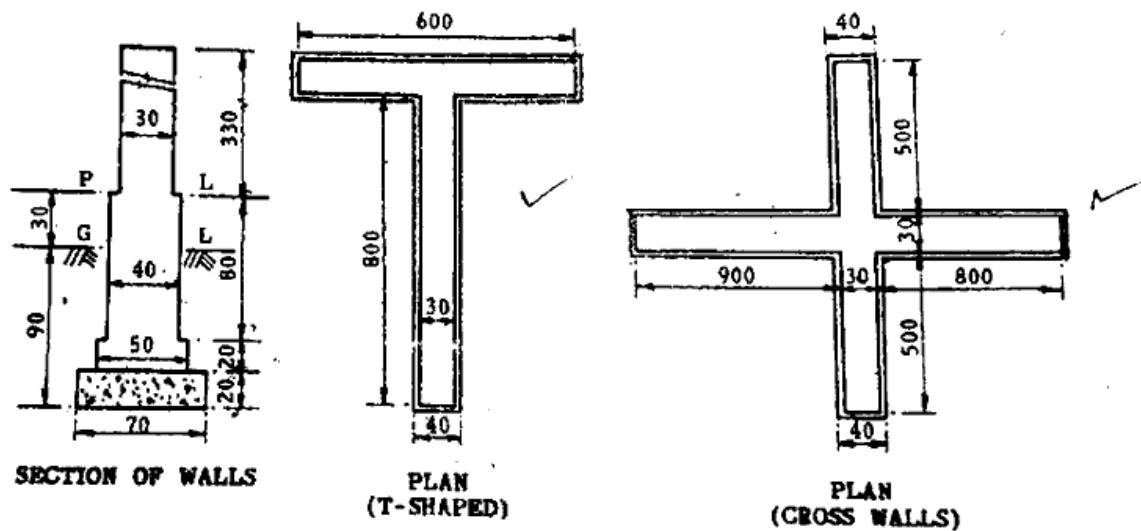
2. what is the importance of cost control? [5]
3. What are the types of estimate? [5]
4. What types of techniques of forecasting are used in the field of business? [5]
5. What are the methods of building estimate? Discuss with suitable example. [5]
6. What is price elasticity of demand? [5]

**Group-C (Long Answer Type Question)**

Answer any three of the following :

[ 15 x 3 = 45 ]

7. 1) What is the IS-LM Model? [5+5+5]  
2) What is the Wholesale Price Index?  
3) What are the difference between Direct and Indirect Taxes?
8. Write down the definition of: [ 3+3+4+5 ]  
A) Internal Rate of Return(IRR).  
B) Net present Value(NPV).  
C) Return on investment(ROI).  
D) Which is better: NPV or IRR?
9. Calculate the quantity of following item from the given figure: [ 4+3+4+4 ]  
1) E/W in excavation, 2) Cement concrete(1:3:6) in foundation, 3) 1st class B/W(1:6) in foundation & plinth, 4) 1st Class B/W in superstructure.



10. Prepare an estimate of the given figure by Long wall & Short wall method. 1) E/W in excavation, 2) Lime concrete in foundation,, 3) 1st class B/W(1:4) in foundation & plinth, 4) 1st class B/W(1:6) in 2+1+3+4+5 superstructure, 5) Cement Plaster in inside & outside both. Take any suitable data if required.

1st class brickwork in cement mortar (1:6) in superstructure.

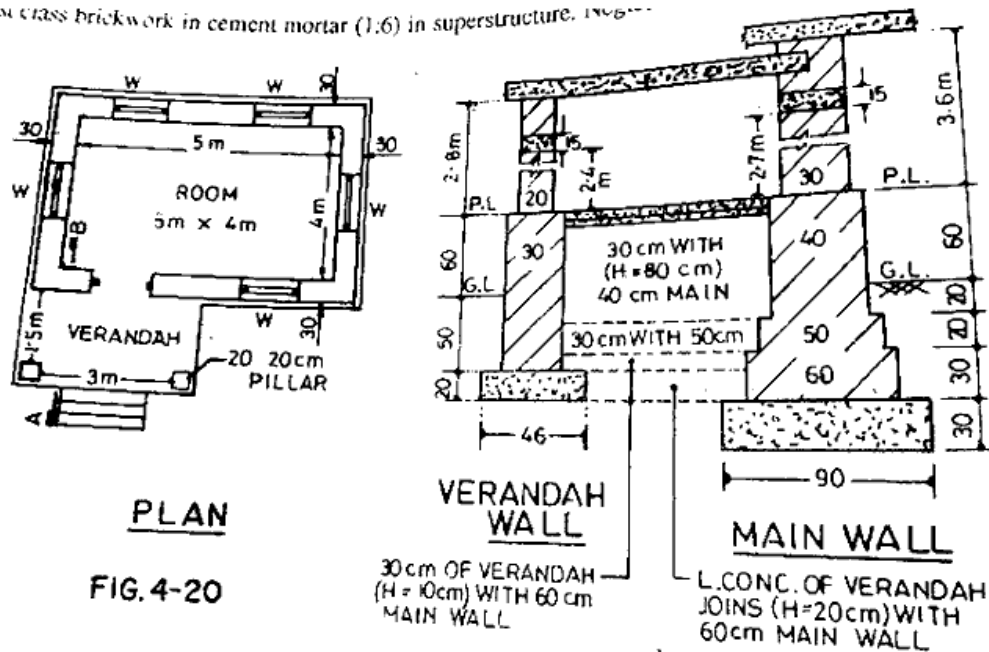


FIG. 4-20

11. A) what is sinking fund?  
B) Write down the method of determination sinking fund.  
C) what annul sinking fund at 4.5% must be invested to produce Rs.1/- at the end of 20 years?

[ 5+5+5 ]

\*\*\* END OF PAPER \*\*\*