

GUJARAT TECHNOLOGICAL UNIVERSITY

BE- SEMESTER-VII (NEW) EXAMINATION – WINTER 2024

Subject Code:3170615

Date:07-12-2024

Subject Name: Engineering Economics, Estimation and Costing

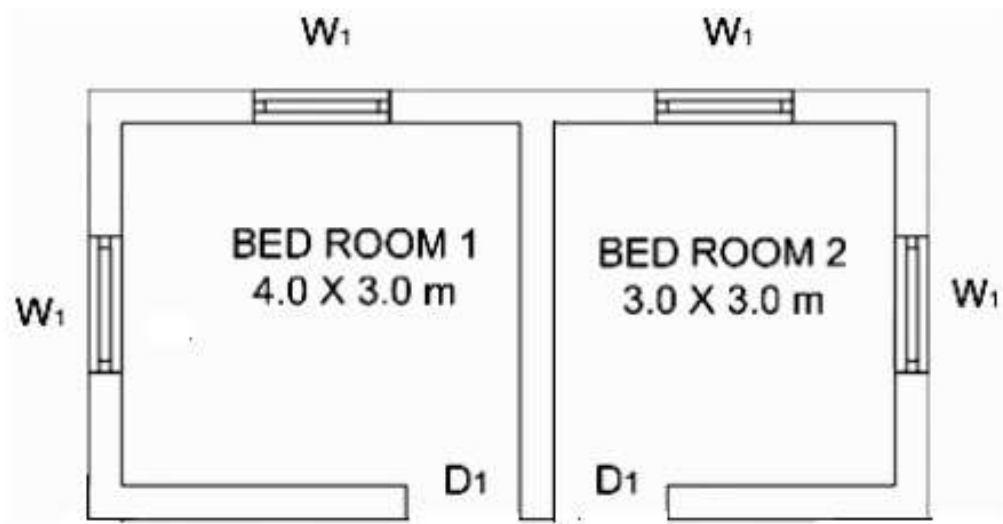
Time:10:30 AM TO 01:00 PM

Total Marks:70

Instructions:

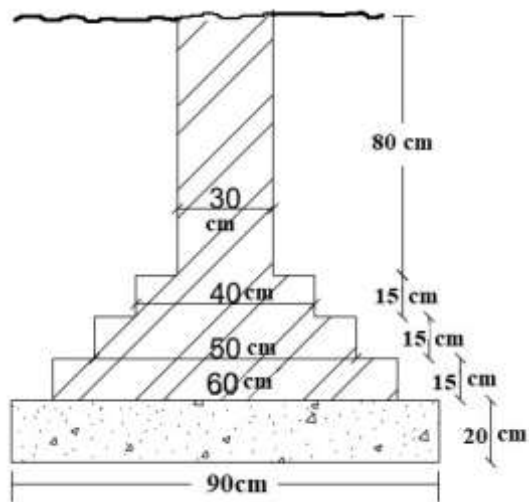
1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.
4. Simple and non-programmable scientific calculators are allowed.

- Q.1** (a) State units of measurement of following items : **03**
Random Rubble Masonry, Iron grill in windows, Skirting, , Brick bats, Boundary (wire) fencing, Brick Jalli-work.
- (b) Explain types of detailed estimate. **04**
- (c) Refer drawing – 1 and answer following: **07**
1. Workout quantity of Excavation.
2. Workout quantity of Brickwork in foundation (up to ground level)
3. Foundation concrete
- Q.2** (a) Explain effect of inflation on cash flow. **03**
(b) Write short note on (i) Contingencies (ii) Work charged establishment **04**
(c) Define the Terms: Value, cost, price, monopoly value, potential value, accommodation value, distress value **07**
- OR**
- (b) Write short note on (i) Prime cost (ii) Day work (iii) Provisional quantities **07**
- Q.3** (a) Explain free hold property and lease hold property. **03**
(b) Distinguish between the terms: (1) Scrap value and salvage value **04**
(2) Book value and Market value
(c) Write a short note on break even analysis. **07**
- OR**
- Q.3** (a) Define the Terms: Obsolescence, Depreciation, Years purchase. **03**
(b) What is sinking fund? How it calculated? Give its formula. **04**
(c) Explain the concept of time value of money with suitable example. **07**
- Q.4** (a) What is the importance of specifications in construction? **03**
(b) What is Rate analysis. Explain factors affecting rate analysis of an item. **04**
(c) Explain the calculation of materials required for single coat and Double coat Plastering. **07**
- OR**
- Q.4** (a) Explain specifications. What care should be taken while drafting specification? **03**
(b) Compute the material Required for 75 Cu.M cement concrete (1:2:4). **04**
(c) Write detailed specifications for the First class brickwork in CM (1:6). **07**
- Q.5** (a) Define Tender. Enlist different types of tender. **03**
(b) Explain Revocation of Tender. **04**
(c) Draft a tender notice for construction of School building and Hostel building on behalf of government of Gujarat having a cost of Rs.26,00,00,000/- at Ahmedabad city. **07**
- OR**
- Q.5** (a) Distinguish Promise, Agreement & Contract. **03**
(b) Write a note on Liquidated Damages and Unliquidated Damages. **04**
(c) Describe the various reason for termination of contract. **07**



Drawing - 1

D1 = 1.2 m X 2.1 m
W1 = 1.2 m X 1.2 m



TYPICAL FOUNDATION DETAILS
