

# 17603

21415

3 Hours / 100 Marks

Seat No.

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*Instructions* : (1) All Questions are *compulsory*.

(2) Answer each next main Question on a new page.

(3) Figures to the right indicate full marks.

(4) Assume suitable data, if necessary.

(5) Use of Non-Programmable Electronic Pocket Calculator is permissible.

(6) Mobile Phone, Pager and any other Electronic Communication devices are not permissible in Examination Hall.

**Marks**

1. [A] Attempt any THREE :

3 × 4 = 12

(a) State any four functions of superintending Engineer of PWD.

(b) Define a contract and state its objects.

(c) Describe any four requirements of a valid contract.

(d) Define arbitration. State the qualities of arbitrator.

(e) Give the meanings of (i) Earnest money deposit (ii) Security deposit.

[B] Attempt any ONE :

1 × 6 = 6

(a) State different methods of executing a work by PWD and explain anyone in detail.

(b) State the differences between :

(i) Secured advance & advance payment

(ii) Running Account bill and Final bill

**P.T.O.**

**2. Attempt any FOUR :** **4 × 4 = 16**

- (a) Briefly explain administrative approval and technical sanction in connection with government works.
- (b) Mention the method of execution of the following works you would suggest with reasoning.
  - (i) Concrete lining of a canal
  - (ii) WBM road construction
- (c) Explain cost plus percentage rate contract with its advantages and disadvantages.
- (d) State the salient features of BOT project.
- (e) What is a measurement book ? State its importance.
- (f) State the use of (i) Cash book (ii) NMR (iii) Indent & (iv) Imprest cash.

**3. Attempt any FOUR :** **4 × 4 = 16**

- (a) Explain the situations when the lowest tender is rejected.
- (b) What is an unbalanced tender ? Explain with example.
- (c) State the general conditions of contract with respect to defective material & workmanship.
- (d) What is demolition contract ? How is it different from construction contracts ?
- (e) What is meant by negotiated contract ? When is it used ?

**4. [A] Attempt any THREE :** **3 × 4 = 12**

- (a) Define (i) Retention money & (ii) Mobilisation advance.
- (b) Explain the following :
  - (i) Liquidated damages and Unliquidated damages
  - (ii) Schedule A and Schedule B
- (c) Define specification. State and explain the various types of it.
- (d) What is meant by valuation ? State its necessity.

**[B] Attempt any ONE :**

**1 × 6 = 6**

- (a) Compare item rate contract and lumpsum contract with respect to  
(i) Nature of agreement, (ii) Mode of payment, (iii) Contract documents (iv) Merits (v) Demerits & (vi) Suitability.
- (b) State the necessity of interim payments made to contractor. Also mention the modes of making the same. State the necessary form too.

**5. Attempt any TWO :**

**2 × 8 = 16**

- (a) Draft a tender notice for a school building costing 25 lakhs covering all important points.
- (b) (i) Define value of a property. State its characteristics.  
(ii) Explain the factors affecting value.
- (c) A building is newly constructed at the cost of ₹ 15,00,000 on a plot of 1000 m<sup>2</sup>. Fix the monthly rent of this property from the following data :
- Rate of land = ₹ 100/sq.m.  
Retwin expected on cost of building and land = 8%  
Life of building = 50 years  
Rate of interest for sinking fund = 3%  
Scrap value = 10% of construction cost  
Other outgoings = 30% of gross rent

**6. Attempt any FOUR :**

**4 × 4 = 16**

- (a) Draft a detailed specification for external plastering in cm (1 : 4) with 20 mm thickness on a new brick wall.
- (b) Mention the purposes of writing specifications.

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- (c) Define depreciation. State the various methods of calculating it. Explain any one.
- (d) Differentiate between :
- (i) Annuity and Sinking fund
  - (ii) Scrap value and Salvage value
- (e) A property fetches a monthly rent of ₹ 6000/-. The outgoings including sinking fund are upto 25% of gross income. If the rate of interest is 12% p.a., calculate, years purchase and capitalized value.
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