

17603

11819

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 of the following: 12
- (i) Draw standard organization chart of PWD.
 - (ii) Define tender and state necessity of tender.
 - (iii) Describe in brief 'Schedule A'.
 - (iv) State requirements of valid contract.
 - (v) Explain in brief cost plus fixed fee contract.
- b) Attempt any ONE of the following: 6
- (i) Describe in brief rate day's work method and piece work method for carrying out works of PWD.
 - (ii) Explain in brief NMR. Draw standard format of NMR.

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- 2. Attempt any FOUR of the following: 16**
- a) Describe in brief administrative approval and technical sanction.
 - b) Describe in brief rate list method of construction used in PWD to carry out the work.
 - c) Enlist various documents required for registration of contractor in PWD.
 - d) State limitations of BOT project. Give two examples of BOT project.
 - e) State necessity of interim payment made to contractor.
 - f) Describe in brief mobilization advance.
- 3. Attempt any FOUR of the following: 16**
- a) Describe in brief defect and liability clause of conditions of contract.
 - b) Enlist the points to be observed by contractor while filling tender.
 - c) Describe in brief unbalanced tender.
 - d) State any two advantages and two disadvantages of Lump sum contract.
 - e) Differentiate between Item rate contract and Percentage rate contract.
- 4. a) Attempt any THREE of the following: 12**
- (i) Define and state use of indent and invoice.
 - (ii) Describe the procedure for scrutiny of tender.
 - (iii) Work out sinking fund installment per year for collecting sinking fund of Rs 2,00,000/- in total 50 years of life of building at a rate of interest of 4% per annum.
 - (iv) State points to be observed in framing specifications.

- b) **Attempt any ONE of the following:** **6**
- (i) (1) State any four objectives of BOT project.
(2) Write any two disadvantages of BOT project.
- (ii) State the precautions to be taken while making entries in measurement book. Also run out format of Measurement Book.
- 5. Attempt any TWO of the following:** **16**
- a) A building is constructed at a cost of Rs 10,00,000/- on a plot of 100 m². Fix monthly rent of this property from following data.
- (i) Rate of land = 100/m²
(ii) Return expected on land and building = 6%
(iii) Life of building = 60 yrs
(iv) Scrap value = 10% of construction cost
(v) Other outgoings = 20% of gross rent
- b) A property gives monthly rent of Rs. 4,000. The outgoings are :
Sinking fund installment = Rs. 1,000 per annum
Repairs cost = Rs. 10,000/-
Other outgoings = 20% of gross income
Calculate capitalized value if rate of interest of bank is 9%.
- c) Draft a tender notice for construction of library building of polytechnic college costing 2 crore. Assume all necessary information.
- 6. Attempt any FOUR of the following:** **16**
- a) Enlist the types of specifications and explain any one in brief.
b) Describe in brief legal aspect of specification.
c) Draft detailed specification for RCC slab 1:2:4.
d) Define speculative value and distress value.
e) Enlist methods of calculating depreciation and explain any one in brief.
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