**P-7507** 

## S.

EAT No.	:	

[Max. Marks :

### [6180]-14 T.E. (Civil)

# ENGINEERING ECONOMICS AND FINANCIAL

(2019 Pattern) (Semester - I) (301004)

Time : 2<sup>1</sup>/<sub>2</sub> Hours

Instructions to the candidates:

- 1) Answer Q1 or Q2, Q3 or Q4, Q5 or Q6, Q7 or Q8.
- 2) Figures to the right indicate full marks.
- 3) Neat diagrams must be drawn, wherever necessary
- 4) Assume suitable data, if necessary.
- 5) Use of non-programmable calculator is allowed.
- *Q1*) a) Who is responsible for Construction Financial Management? State the role of each. [6]

b) How to treat various items in contract account?

- c) What is Contract Costing? State the features of Contract Costing. [5]
- (Q2) a) The following were the expenses on a contract which commenced on  $1^{\text{st}}$  January 2015. [6]

		0
	Particular	Amount (Rs.)
	Material Purchased	1,10,000
<b>O</b> X	Materials at the end	1,250
5	Direct Wages	15,000
	Plant issued	5,000
	Direct Expanses	8,000

The contract price was Rs. 1,50,000. It was duly received when the contract was completed on 31-3-2015 Charge indirect expenses at 15% on wages and provide Rs. 1,000 for depreciation on plant; Prepare the contract account.

*P.T.O.* 

**[6]** 

- b) Explain the role of Financial Management in Construction Project management. [5]
- c) Enlist different Contractors document used on site. Also state various facts and information recorded from these documents. [6]
- Q3) a) Define: Budget Explain the purpose of budget. [6]
  - b) What are different types of Budget? Explain any two in details. [5]
  - c) The initial investment in project A and B is Rs. 3000 lakh each. The present value of cash inflow for both the projects mentioned in the following table [6]

	Sr. No.	Present value of cash inflow for	Present value of cash
	U' a	project A (in lakh Rs.)	inflow for project B
	.6.		(in lakh Rs.)
	1	1181.79	818.10
	$\lambda^2$	908.60	743.40
X 0	3	675.90	675.90
	4	437.12	614.70
	5	397.44	558.90
			1

Using the profitability index method, which project should the company undertake?

#### OR

- Q4) a) What is capital budgeting? Explain aspects of capital budgeting. [
  - b) Write down a detailed note on "Operating Budget".
  - c) A concrete mixer was purchased at Rs. 8,00,000. Assuming Scrap Value to be Rs. 5,50,000 after 10 years. Calculate the depreciation at the end of 5 years by : [6]
    - Straight Line Method
    - ii) Constant Percentage Method

a) Explain in detail "Need of Working Capital in Construction Industry".

b) Explain in details various Financing Resources of Working Capital.

[6]

[6]

c) What are objectives of inventory management and explain Economic Order Quantity. [6]

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i)

### OR

- A construction company purchases 10000 bags of cement annually. **Q6**) a) Each bag cement cost Rs. 500 and cost incurred in procuring each lot is Rs. 150. The cost of carrying is 25%. What are the most EOQ and number of orders? If lead time is 5 days, calculate order point. [6]
  - What is operating cycle? Explain various phases associated with it. [6] b)
  - What is safety stock? Explain the types of cost associated and importance c) of Safety stock. [6]
- What is Goods and Services Tax (GST). Also write down the impact **Q7**) a) of CST on construction industry. [6]
  - Calculate the tax to be paid on property in Delhi, from following data : b) [6]

Covered area = 900 sq. ft.

Unit area value for one month = 6.0 per sq.

Age factor = 1.0

Use factor =1.2

Structure factor = 1.0

Occupancy factor = 1.0

Tax rate = 11%

What is property tax? Explain Annual rental value system of calculation c) of property tax.

OR

- Write down the roles and functions of following financial regulatory **Q8**) a) bodies : [6]
  - ICRA (Information and Credit Rating Agency
  - SEBI (Security and Exchange Board of India) ii)
  - Explain "Capital Value System" for the calculation of property tax. [6]
  - What is Direct Tax? Explain any four types of direct taxes which are ### 6.20 AB.26.29 imposed in India. [6]