Registration No :

4th Semester Reg /Back Examination: 2023-24
Engineering Economics
ELECTRICAL & C.E,ELECTRONICS & C.E, AE,AEIE,AG,AUTO,BIOMED,BIOTECH,CIVIL,CSE,
CSEAIME,CSEDS,CSIT,CST,ECE,EEE,EIE,ELECTRICAL,ENV,ETC,IT,MECH,METTA,MINERAL,MINING,MME,
AE,AEIE,AG,AUTO,BIOMED,BIOTECH,CIVIL,CSE
Time : 3 Hour
Max Marks : 100
Q. Code : P484
Answer Question No.1 (Part-1) which is compulsory, any eight from Part-II and any two from Part-III.
The figures in the right hand margin indicate marks.

Part-I

Q1 **Answer the following questions:** (2 x 10)
  a) What are the three basic problems of an economy?
  b) Define elasticity of demand
  c) Define total, average and marginal costs.

  d) Distinguish between 'short-run' and 'long run' in the context of production.
  e) What do you mean by the perfectly competitive market?
  f) How do you calculate "Break-even Point"?
  g) Distinguish between an annuity due and deferred annuity
  h) What do you mean by depreciable property?
  i) What are the two essential functions of a bank?
  j) What is demand-pull inflation?

Part-II

Q2 **Only Focused-Short Answer Type Questions- (Answer Any Eight out of Twelve)** (6 × 8)

  a) Distinguish between a change in demand and change in quantity demanded. Explain the concept with the help of diagrams.
  b) Suppose that demand is given by the equation QD=500 – 50P, where QD is the quantity demanded, and P is the price of the good. Supply is described by the equation QS= 50 + 25P where QS is quantity supplied. What is the equilibrium price and quantity?
  c) Explain three stages of production in the short-run
  d) What is the relationship between average cost and marginal cost? If the marginal cost is rising does it mean that the average cost must also be rising?
  e) What is the P/ V ratio? What are the various applications of P/V ratio?
  f) Differentiate between perfect competition and monopoly form of market.
  g) A project has an initial cost of Rs.100, 000 and uniform annual benefits of Rs.12, 500. At the end of its 8-year useful life, its salvage value is Rs. 30,000. What is the net present worth of the project at an interest of 10 percent compounded annually?

h) A company has borrowed Rs.200,000 to purchase equipment. The loan carries an interest rate of 5% per year and is to be repaid in equal installments over the next 7 years. What is the amount of the annual installment?

i) Distinguish between SL method and DDB methods of depreciation.

j) What are the various causes of depreciation?

k) Define central banking and distinguish this concept from that of commercial banking.

l) Discuss the various measures to control Inflation?

Part-III
Only Long Answer Type Questions (Answer Any Two out of Four)

Q3 State and explain with suitable diagrams the law of demand. What are the reasons for the downward slope of the demand? **(16)**

Q4 The following data are obtained from ABC Co. Ltd. **(16)**
Sales = Rs. 1,00,000
Variable Cost= Rs. 60,000
Fixed Cost = Rs. 30,000
You are required to calculate:
(i) P/V ratio
(ii) Break-even point
(iii) Margin of Safety
(iv) Break-even point when there is 20 per cent increase in selling price.
(v) Break-even point when there is 10% decrease in Fixed Costs.

Q5 An engineer has two bids for an elevator to be installed in a new building. The details of the bids for the elevators are as follows: **(16)**

	Initial Cost(Rs.)	Service Life(years)	Annual Operation Cost(Rs.)
Alpha Elevator	4,50,000	15	27,000
Beta Elevator	5,40,000	15	28,500

Determine which bid should be accepted, based on the present worth method of comparison assuming a 15% interest rate, compounded annually.

Q6 Explain the different functions of commercial banks **(16)**