Bachelor of Electrical Engineering Examination, 2022
(4th Year, 2nd Semester)
Economics & Industrial Management

Time: Four Hours

Full Marks: 70

Different parts of the same question should be answered together

---

Answer any five questions.

1.
(a) What are the features of a partnership company? — **3**
(b) Enumerate advantages and disadvantages of joint stock organizations. — **4**
(c) Explain forms of Public-Private Partnership. — **5**
(d) What is the difference between acquisitions and takeovers? — **2**

2.
From the following balances extracted from the books of Agni Co., **prepare a trading account, a profit and loss account** for the year ending 31st December, 2021, and a **balance sheet** as on 31st December, 2021.

5 + 4 + 5

	Rs.		Rs.
Stock on 1st January, 2021	11,000	Returns outwards	500
Bills receivables	4,500	Trade expenses	200
Purchases	39,000	Office fixtures	1,000
Wages	2,800	Cash in hand	500
Insurance	700	Cash at bank	4,750
Sundry debtors	30,000	Rent and taxes	1,100
Carriage inwards	800	Carriage outwards	1,450
Commission (Dr.)	800	Sales	60,000
Interest on capital	700	Bills payable	3,000
Stationary	450	Creditors	19,650
Returns inwards	1,300	Capital	17,900

Note: The stock on 31st December, 2021 was valued at Rs.25,000.

3.
From the following list of transactions prepare appropriate journal entries, ledger entries and the relevant month- end trail balance

4 + 7 + 3

(i)   On 2/1/22, Lakshmi Narayanan started a business called, Maha Laxmi Traders, with an investment of Rs.50 lakh and another Rs. 50 lakh as short term loan.
(ii)   On 5/1/22, acquired building properties (Fixed Assets) for Rs. 50 Lakh in cash.
(iii)   On 10/1/22, purchased inventories of Rs. 20 Lakh in cash.
(iii)   On 31/1/22, made sales of Rs 20 Lakh on credit.
(iv)   On 31/1/22, converted 40 % of the short-term loan into long-term loan.

4.
Write short notes on any four of the following:

(a) Production possibility frontier; (b) Law of demand and determinants of demand; (c) Cobb-Douglas production function, (d) Price controls; (e) Law of returns   **4 x 3.5 = 14**

5.
From the following data draw out a network diagram, calculate the critical path by activity on arrow method, find the project completion time. How much is the float time of activities A, B and C?   **6 + 3 + 2 + 1 + 1 + 1**

Activity	Immediate Predecessor(s)	Activity time (weeks)
A	--	4
B	--	3
C	--	25
D	A	30
E	A, B	4
F	C	25
G	C, E	8
H	C, E	6
I	D, G	3
J	F, H	3

6.
(i) What are the assumptions of EOQ model? Derive simple EOQ model without back order and without quantity discount. Use calculus.   **3 + 5**

(ii) An item has a yearly demand of 4000 units. The different costs in respect of make and buy options are as follows. Determine the best option.   **6**

	Buy(Rs.)	Make (Rs.)
Item cost / unit	16.00	15.00
Ordering cost / order	480.00	
Set up cost / set up		240.00
Annual carrying cost / unit / year	3.20	2.80
Production rate per year		6000 units

7.
(a) Classify and summarise functions of Management.   **2 + 6**
(b) Explain with an illustration cellular layout.   **6**