



Name :

Roll No. :

Invigilator's Signature :

CS/B.Tech (CHE)/SEM-7/HU-715/2010-11

2010-11

INDUSTRIAL MANAGEMENT

Time Allotted : 3 Hours

Full Marks : 70

The figures in the margin indicate full marks.

*Candidates are required to give their answers in their own words
as far as practicable.*

GROUP – A

(Multiple Choice Type Questions)

1. Choose the correct alternatives for the following : $10 \times 1 = 10$
 - i) Financial management deals with
 - a) planning and controlling the firm's financial resources
 - b) budgeting of resources
 - c) dividend decision
 - d) all of these.
 - ii) Capital structure is
 - a) the responsibilities of different finance managers to allocate funds
 - b) right mix of equity and debt
 - c) expenditure towards cost of raw materials, labour, machines in preferential order
 - d) none of these.



- iii) One of the primary goals of business firms is maximizing EPS which is
- a) gross profit/number of shares
 - b) operating profit/number of shares
 - c) net profit/number of shares
 - d) PBIT/number of shares.
- iv) Current ratio is
- a) total debt/current liability
 - b) current assets/current liabilities
 - c) current worth/capital employed
 - d) current sales/net assets.
- v) Gross profit margin is
- a) gross profit/sales
 - b) profit after tax/sales
 - c) EBIT/sales
 - d) both (b) & (c).
- vi) Risk is measured by
- a) standard deviation
 - b) variance
 - c) expected return
 - d) normal deviation.
- vii) Preference shareholders
- a) receive dividends at a fixed rate
 - b) don't guarantee receipt of dividends
 - c) don't receive any dividends
 - d) may get depending on the discretion of management.
- viii) $x + y \geq 5$ to $x + y + z = 5$, z is a
- a) slack variable
 - b) surplus variable
 - c) artificial variable
 - d) both (b) & (c).

- GROUP – B**

Answer any *three* of the following. $3 \times 5 = 15$

- 7412



GROUP – C

(Long Answer Type Questions)

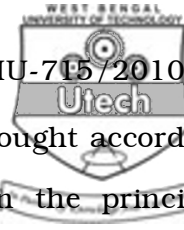
Answer any *three* of the following. $3 \times 15 = 45$

7. a) What do you mean by Economic Order Quantity ?
Establish the EOQ Model when unit price of a given item is fixed.
- b) A chemical firm buys 2500 units annually of a particular item from a vendor at a cost of ₹ 3 per unit. It has now received a revised price schedule from the vendor which is as follows :

Order Quantity	Price per unit
Less than 500 units	₹ 3.00
500 to 1250 units	₹ 2.90
1250 units or more	₹ 2.85

The cost of placing an order and executing the delivery once is ₹ 25 and the inventory carrying cost as a percentage of average inventory investment is 20%. Determine the economic ordered quantity of the item.

7 + 8



8. Discuss different Schools of Management Thought according to F. W. Taylor and Henry Fayol. Explain the principal functions of Management. 8 + 7

9. a) What do you mean by the term “Acceptance Sampling” and what are the four parameters of an OC curve ?
- b) From the following data observed during inspection of dimensions of an item determine the following :
- i) Mean/average dimension
 - ii) Upper control limit
 - iii) Lower control limit
 - iv) Plot the dimensions to see whether process is under control or not.

Data :

1.65	1.50
1.70	2.00
2.00	1.70
1.65	2.25
2.50	2.50
2.25	1.50
1.70	2.25
1.60	1.60
	1.65
	1.60

7 + 8



10. The following table gives dividend and share price data of Hind Manufacturing company :

Year	Dividend per share	Closing share price
1994	2.50	12.25
1995	2.50	14.20
1996	2.50	17.50
1997	3.00	16.75
1998	3.00	18.45
1999	3.25	22.25
2000	3.50	23.50

Calculate :

- i) Annual rate of return
- ii) The expected rate of return
- iii) The variance
- iv) The standard deviation of return.



11. The production manager of XYZ Co. desires to maintain an inventory of raw materials equal to the budgeted production needs for the next two months. Each unit of product takes 10 kg of raw material. Inventory of finished goods is usually maintained at one and half times of the following month's sales. The forecast sales of next 6 month's in units are as follows :

Jan.	Feb.	Mar.	Apr.	May	June
3600	4200	3200	4800	5600	3800

On 31st December, last year there were 80,000 kg of raw material on hand and 5600 units on finished goods.

Prepare —

- i) budget for production
- ii) budget for purchase of raw material in units as many month's possible.

7 + 8

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