



# WEST BENGAL UNIVERSITY OF TECHNOLOGY

HU-601

## PRINCIPLE OF MANAGEMENT

Time Allotted: 3 Hours

Full Marks: 70

*The questions are of equal value.*

*The figures in the margin indicate full marks.*

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

*All symbols are of usual significance.*

### GROUP A

#### (Multiple Choice Type Questions)

1. Answer any ten questions.

10 × 1 = 10

(i) Upward and downward flow of messages constitute \_\_\_\_\_

- (A) diagonal communication (B) written communication  
(C) vertical communication (D) horizontal communication

(ii) Leadership is the process of \_\_\_\_\_

- (A) influencing the customers (B) influencing the group members  
(C) influencing the competitors (D) influencing the creditors

(iii) When authority flows from top executive to lower level employees, it is known as \_\_\_\_\_

- (A) Line Organisation (B) Staff Organisation  
(C) Project Organisation (D) Matrix Organisation

(iv) Narrow span of management leads to \_\_\_\_\_

- (A) Flat Structure (B) Mechanistic Structure  
(C) Tall Structure (D) Organise Structure

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Turn Over

(v) Debt-Equity ratio indicates \_\_\_\_\_

- (A) The proportion of debt with respect to equity  
(B) The proportion of debt with respect to total capital employed  
(C) The proportion of equity with respect to total assets  
(D) None of these

(vi) In Quality Circle \_\_\_\_\_

- (A) Only Top Management is involved  
(B) Only Steering Committee members are involved  
(C) Both (A) and (B) are involved  
(D) Neither (A) nor (B) is involved

(vii) Which one of the following is not an informational role of manager?

- (A) leader (B) monitor  
(C) disseminator (D) spokesperson

(viii) \_\_\_\_\_ Offers creativity and innovation to an organization

- (A) Human resource (B) Time  
(C) Money (D) Information

(ix) All management activities are measured against \_\_\_\_\_ to arrive at efficiency

- (A) money (B) information  
(C) man (D) time

(x) Pfizer, a pharmaceutical company, operates in over 40 countries around the world, and many of the larger-country units enjoy considerable freedom and autonomy. Thus, it can be said that Pfizer exemplifies a(n) \_\_\_\_\_ mode of decision making

- (A) centralized (B) decentralized  
(C) asymmetric (D) none of the above

(xi) Six Sigma is used \_\_\_\_\_

- (A) as a metric (B) as a methodology  
(C) as a management system (D) all of these

(xii) Which one of the following is not a step for DMADV?

- (A) Define (B) Implement  
(C) Measure (D) Design

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**GROUP B**  
(Short Answer Type Questions)

Answer any three questions.

3 × 5 = 15

Find the parabolic trend for the following data

5

Year	2006	2007	2008	2009	2010	2011	2012	2013
Sales('000 units)	5	8	13	11	15	18	17	21

3. A company operating 50 weeks in a year is concerned about its stock of copper cable. This cost is Rs. 240 per meter and there is a demand for 8000 meters a week. Each replenishment cost Rs 1050 for administration and Rs 1650 for delivery, while holding cost are estimated at 25% of the value held a year. Assuming no shortages are allowed, find
- Optimal Order Quantity
  - Total Variable Inventory Cost
  - Total Inventory Cost

5

4. Write down the five steps involved in Monte-Carlo method of Simulation.
5. What is SWOT Analysis?
6. Discuss the significance of Statistical Quality Control.

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**GROUP C**  
(Long Answer Type Questions)

Answer any three questions.

3 × 15 = 45

Year	Expenditure (Rs. in Crores)
2009	20
2010	30
2011	35
2012	45
2013	60

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Project the business expenditure on new plant equipment for the year 2016.

8. (a) Briefly discuss the main techniques of performance appraisal. (10)  
(b) What are the different schools of Management thought? 5
9. (a) What do you mean by business forecasting? What are the 3 distinct levels of modeling assumptions? 5  
(b) Using either Income or Output Method, find the estimate of the following from the given data table :- 10

Items	Rs. (Lacs)
Sales	9,000
Increase in stock	5,000
Cost of Raw Materials	1,700
Rent	1,500
Interest	900
Wages	700
Profit	500
Mixed Income	400
Depreciation	2,100
Net indirect taxes	600
Net factor income from abroad	(250)

10. The following table gives the aptitude test scores and productivity indices of 10 workers selected at random: 7+8

Aptitude Scores	60	62	65	70	72	48	53	73	65	82
Productivity Index	68	60	62	80	85	40	52	62	60	81

- (i) Estimate the productivity index of the worker whose test score is 92.  
(ii) Estimate the test score of the worker whose productivity index is 75.

11. Write short notes on any three of the following: 3×5

- Decision making tools
- Production and Productivity
- Total Quality Management
- Economic Order Quantity
- Corporate Social Responsibility.