



# UNITED INSTITUTE OF TECHNOLOGY

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Periyanaickenpalayam, Coimbatore – 641020



## **DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING**

# QUESTION BANK

## **VII SEMESTER**

**ACADEMIC YEAR 2024 – 2025**

# INDEX

Sl.No	Subject Code	Subject Name
1	GE3751	Principles of Management
2	OEN351	Drinking Water Supply and Treatment

**GE3751**  
**PRINCIPLES OF MANAGEMENT**

## UNIT I

### INTRODUCTION TO MANAGEMENT AND ORGANIZATIONS

Definition of Management – Science or Art – Manager Vs Entrepreneur- types of managers- managerial roles and skills – Evolution of Management –Scientific, human relations, system and contingency approaches– Types of Business organization- Sole proprietorship, partnership, company-public and private sector enterprises- Organization culture and Environment – Current trends and issues in Management.

Q.No	Question	CO	BTL	Marks
<b>PART A</b>				
1.	Define Management	1	1	2
2.	Distinguish between Manager and Entrepreneur.	1	2	2
3.	What are the stages in evolution of management thought?	1	1	2
4.	What is meant by Globalization?	1	1	2
5.	State your understanding of the term gang plank.	1	1	2
6.	Write your understanding on Organizational Culture.	1	1	2
7.	How does effectiveness differ from efficiency?	1	2	2
8.	What is meant by Esprit de corps?	1	1	2
<b>PART B</b>				
1.	(i) Explain the various managerial roles and skills required for a successful manager. (ii) Discuss the evolution of management thought with examples.	1	2	16
2.	Elaborate the fourteen principles of management as advocated by Henry Fayol.	1	2	16
3.	Explain the concept of gradient, divergence, and curl of a Categorize the types of business organizations in detail.	1	2	16
4.	Enumerate the trends and challenges of Management in globalized era.	1	2	16

## UNIT II

### PLANNING

Nature and purpose of planning – Planning process – Types of planning – Objectives – Setting objectives – Policies – Planning premises – Strategic Management – Planning Tools and Techniques – Decision making steps and process.

Q.No	Question	CO	BTL	Marks
<b>PART A</b>				
1.	Explain the objectives of Planning?	2	2	2
2.	Explain the different types of Planning.	2	2	2
3.	List the forecasting technique used for decision-making.	2	1	2
4.	Explain the steps involved in decision making	2	2	2
5.	Distinguish between formal and informal organization	2	2	2
6.	What is meant by Strategy?	2	1	2
7.	List the forecasting technique used for decision-making	2	1	2
8.	Define MBO in Planning	2	1	2
<b>PART B</b>				
1.	What is planning? Explain the steps involved in Planning and different types of plans.	2	2	16
2.	Define MBO. With the help of block diagram, explain the process of MBO.	2	2	16
3.	Explain the process of Decision-Making with the help of an example.	2	2	16
4.	Rana group has set its objectives of doubling its objectives of doubling profit every three years and sales revenue every four years. Answer the following questions: i)      What do you think would be the employee's reaction to this Objective? ii)     Give your comment on objectives of Rana group. Give guidelines for Objective settings	2	2	16

### UNIT III

#### ORGANISING

Nature and purpose – Formal and informal organization – Organization chart – Organization structure – Types – Line and staff authority – Departmentalization – delegation of authority – Centralization and decentralization – Job Design - Human Resource Management – HR Planning, Recruitment, selection, Training and Development, Performance Management, Career planning and management.

Q.No	Question	CO	BTL	Marks
<b>PART A</b>				
1.	Define Organizing.	3	1	2
2.	Distinguish between formal and informal organization	3	1	2
3.	Mention the three categories of Span of Management.	3	1	2
4.	Compare on the job and off the job training.	3	1	2
5.	Conclude your understanding on benefits of decentralization	3	1	2
6.	List down the different types of training.	3	1	2
7.	Explain benefits of decentralization	3	2	2
8.	What is a Matrix Structure?	3	1	2
<b>PART B</b>				
1.	Explain the process of Human Resource Planning and its importance.	3	2	16
2.	A MNC company setting shop in India is in a dilemma to decide whether to adopt a line or a line and staff organisation structure. Highlight the advantages of line and line and staff organisation structure. According to you, which structure would be suitable for a huge MNC?	3	3	16
3.	Explain the procedures involved in the selection process.	3	2	16
4.	Discuss in detail the various types of training. Employees prefer off the job training to on-the-job training. Why?	3	2	16

## UNIT IV

### DIRECTING

Foundations of individual and group behaviour– Motivation – Motivation theories – Motivational techniques – Job satisfaction – Job enrichment – Leadership – types and theories of leadership – Communication – Process of communication – Barrier in communication – Effective communication – Communication and IT.

Q.No	Question	CO	BTL	Marks
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#### PART A

1.	Define the term Motivation.	4	1	2
2.	Compile the various forms of communication.	4	2	2
3.	List out the organizational culture.	4	1	2
4.	What do you understand by non-verbal communication?	4	1	2
5.	Mention the various elements in the process of communication.	4	1	2
6.	Compare motivation and satisfaction.	4	1	2
7.	Can you explain the concept of grape vine communication?	4	2	2
8.	Explain goal setting theory.	4	2	2

#### PART B

1.	Explain four traditional theories of motivation.	4	2	16
2.	Discuss the communication process and methods to overcome communication barriers.	4	2	16
3.	Analyze the various leadership behaviour and styles ranging from maximum to minimum.	4	2	16
4.	The country head of Z InfoTech finds it difficult to communicate to his boss in California. Sometimes it is due to difference in timings, sometimes due to difference in meanings of words. Phone lines are noisy and signal breaks sometimes. What do you think would be the type of barriers faced by him while communication takes place between people of different countries?	4	3	16

**UNIT V**  
**CONTROLLING**

System and process of controlling – Budgetary and non - Budgetary control techniques – Use of computers and IT in Management control – Productivity problems and management – Control and performance – Direct and preventive control – Reporting.

Q.No	Question	CO	BTL	Marks
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**PART A**

1.	Differentiate between production and productivity	5	2	2
2.	Write a short note on the purpose of reporting.	5	1	2
3.	Compare feed forward and feedback control.	5	2	2
4.	Define budgetary control	5	1	2
5.	Define productivity. List the types of productivity.	5	1	2
6.	Mention any two non – budgetary control techniques.	5	1	2
7.	What is quality control	5	1	2
8.	What are the factors affecting productivity?	5	1	2

**PART B**

1.	What is meant by Controlling? Explain the process of controlling.	5	2	16
2.	Explain the usage of Break-Even Analysis. Summarize the aspects of Ratio Analysis.	5	2	16
3.	Explain the concept of MIS and the stages involved in establishing MIS.	5	2	16
4.	Explain direct and preventive control techniques.	5	2	16

**\*\*\*END\*\*\***



**OEN351 – DRINKING WATER SUPPLY AND TREATMENT**

## **UNIT – I**

### **PART – A**

1. List the significance of impounding reservoirs in water storage.
2. Enumerate the components of water supply system?
3. What is an intake? Mentions its types.
4. What is per capita water demand?
5. What is meant by shallow well?
6. Define the term design period.
7. What are the factors affecting per capita demand?
8. What are the impurities present in water?

### **PART-B**

1. What do you mean by design period? Explain its importance in design of different components of water supply scheme.
2. Summarize the various sources of water and describe their characteristics.
3. Explain the factors affecting the per capita demand of a town.
4. Compare the surface and underground sources of public water supply

## **UNIT – II**

### **PART-A**

1. What is the function of an intake structure in a water supply system.
2. What is an infiltration well? Mentions its types.
3. Mention the factors governing location of intake structures
4. What is head loss in pipes?
5. What are the types of gravity conduits?
6. List the types of conduits.
7. What are canals?
8. What are the points to be considered while selecting pumps and pipes?

### **PART -B**

1. With neat sketch, explain river intake and canal intake towers.
2. Illustrate the different types of pumps used in water supplies with a neat sketch.
3. What are the pipe materials used in water transmission?
4. Apply the principles for selecting suitable pumps and pipe materials for a conveyance system.

## **UNIT – III**

### **PART-A**

1. What is meant by pipe appurtenances and mention their role?
2. Explain the term coagulation.
3. Write the nature of any four coagulants.
4. Illustrate the mechanism of disinfection process.
5. List out the advantages of rapid sand filter.

6. Enumerate the mechanism of disinfection process.
7. What are tests to be done to find the residual chlorine in water?
8. What is the significance of velocity gradient in flash mixer?

#### **PART-B**

1. Identify various unit operations and unit processes involved in water treatment. Explain how each operation and process contributes to the overall treatment of water in a water treatment plant.
2. Explain about slow sand filter and rapid sand filter with suitable diagram and also write their advantages over them.
3. Explain conventional method used to disinfect water in detail.
4. Briefly explain the sedimentation process and write a note on the types of sedimentation tanks.

### **UNIT –IV**

#### **PART-A**

1. Outline the principle of demineralization by ion-exchange.
2. Define reverse osmosis.
3. List any four effects of hardness in water.
4. Define Defluoridation.
5. Name the effects of excess fluoride content in drinking water
6. State the factors affecting the aeration process
7. What is reverse osmosis?
8. What are the methods for demineralization?

#### **PART- B**

1. Describe in detail about the principle and mechanism of desalination process.
2. Elaborate, how are defluoridation and demineralisation carried out in the advanced water treatment process.
3. Explain in detail with neat sketches about the Membrane Bioreactor (MBR) process.
4. Explain the Zeolite process for the removal of permanent hardness from water.

### **UNIT –V**

#### **PART-A**

1. Explain why uniform pressure is essential in a water distribution system.
2. Describe about air valves. Mention the different types of air valves.
3. List out the components of service connection pipe.
4. What is an equivalent pipe?
5. How do you identify leakage in pipelines?
6. Write down the methods of distribution of water?
7. What are the layouts of water distribution system?
8. What is ferrule in house service connection?

#### **PART – B**

1. Apply the distribution networks in water supply to buildings. Organize the factors contribute to the overall effectiveness of the water distribution system.
2. Explain in detail about the appurtenances in water distribution system.

3. Explain about the distribution networks in water distribution and supply to buildings with neat sketch.
4. Explain in detail about the surface water resources.

**\*\*\*END\*\*\***