



**M.E DEGREE EXAMINATIONS: JUNE 2016**

(Regulation 2015)

Second Semester

**INDUSTRIAL ENGINEERING**

P15IETE04: Industrial Psychology

**Time: Three Hours**

**Maximum Marks: 100**

**Course Outcomes**

CO1: Explain the needs, importance, scope, objectives of industrial psychology.

CO2: Discuss group behavior including norms, communication process and leadership.

CO3: Outline the motivation theories and importance of motivation.

CO4: Recognize the importance of steps in training, evaluation methods.

CO5: Describe industrial fatigue, safety management and hazard control.

**Answer all the Questions:-**

**PART A (10x 1 = 10 Marks)**

1. Attempts to mould individuals by guiding their learning in graduated steps in termed as: CO1[K<sub>1</sub>]
  - a) Behavior molding
  - b) Shaping behavior
  - c) Behavior training
  - d) Grooming behavior
2. The process by which individuals organize and interpret their sensory impressions in order to give meaning to their environment CO1[K<sub>2</sub>]
  - a) Perseverance
  - b) Perception
  - c) Productivity
  - d) Process management
3. Consider the following statement s. CO2[K<sub>2</sub>]
  1. Learning need not be any relative change in behavior that occurs as a result of experience
  2. Change in behavior must be relatively permanent to state that learning has happened
  3. Some form of experience is necessary for learning
  4. Learning takes place when there is change in action

Which of the above statements are correct?

  - a) 1,2,3,4
  - b) 1,3,4
  - c) 2,3,4
  - d) 1,2,4

4. Consider the following statements CO2[K<sub>2</sub>]
1. Downward communication is like swimming against the current.
  2. When information passes between the same levels of organization it is lateral communication.
  3. In communication, “A badly expressed message” falls under “semantic barriers to communication”.
  4. Grape-vine is the communication system of informal organization.

Which of these statements are correct?

- a) 1,2,4 b) 1,3,4  
 c) 2,3,4 d) 1,2,3,4

5. Consider the following statements. CO5[K<sub>2</sub>]
1. Negative appetite for activity
  2. A reduction in ability due to previous work
  3. A feeling of tiredness
  4. Causes physiological change

Which of the above are connected to fatigue?

- a) 1,2,3,4 b) 1,2,3  
 c) 2,3,4 d) 1,3,4

6. The elements of Porter-Lawler motivation theory are provided. CO3[K<sub>2</sub>]
1. Effort
  2. Value of reward
  3. Role perception
  4. Perceived effort reward probability
  5. Ability and traits
  6. Performance

State the correct sequence using the codes below.

- a) 2-3-1-5-4-6 b) 2-4-1-5-3-6  
 c) 1-2-3-4-5-6 d) 5-3-4-2-1-6

7. Match list I with list II, where list I is level in Maslow’s need hierarchy and list II is its equivalent. CO3[K<sub>2</sub>]

List I	List II
A. Physical need	1. Security need
B. Safety need	2. Belongingness need
C. Love need	3. Status need
D. Esteem need	4. Basic need

- a) A-4, B-1, C-2, D-3 b) A-1, B-2, C-3, D-4  
 c) A-2, B-3, C-4, D-1 d) A-3, B-4, C-1, D-2

8. Match list I with list II

CO3[K<sub>2</sub>]

List I	List II
A. McGregor	1. Motivation theory Z
B. Porter – Lawler	2. Effort / performance / satisfaction
C. Adam’s theory	3. Equity / Inequity
D. Urwick, Rangnekar, Ouchi	4. Motivation theory X,Y

- a) A-4, B-2, C-3, D-1                      b) A-1, B-2, C-3, D-4  
c) A-2, B-1, C-4, D-3                      d) A-3, B-4, C-1, D-2

9. The following items consist of two statements, one labeled as the “Assertion (A)” and the other as “Reason (R).                      CO3[K<sub>4</sub>]

Assertion (A): Maslow has placed “self actualization” at the apex of the hierarchy of motivational needs.

Reason (R): Self actualization need comes into existence only for those who have experience and satisfaction through self esteem and other needs below it.

- a) both A and R are individually true and R is the correct explanation of A                      b) both A and R are individually true but R is not the correct explanation of A  
c) A is true but R is false                      d) A is false but R is true.

10. The following items consist of two statements, one labeled as the “Assertion (A)” and the other as “Reason (R).                      CO3[K<sub>4</sub>]

Assertion (A): For people with good skills and maturity, theory Y is suitable.

Reason (R): The average human being does not inherently dislike work.

- a) both A and R are individually true and R is the correct explanation of A                      b) both A and R are individually true but R is not the correct explanation of A  
c) A is true but R is false                      d) A is false but R is true.

**PART B (10x 2 = 20 Marks)**

11. State the three factors that influence the interpretation (perception) of a target.                      CO1[K<sub>2</sub>]  
12. List the four ways (methods) of shaping behavior.                      CO1[K<sub>1</sub>]  
13. State the significance of “grape-vine” in communication.                      CO2[K<sub>3</sub>]  
14. List the drawbacks of group decision making.                      CO2[K<sub>2</sub>]  
15. Draw the block diagram showing Porter-Lawler theory of motivation.                      CO3[K<sub>2</sub>]  
16. How does “participation” serve as a motivational technique?                      CO3[K<sub>4</sub>]  
17. Give an application for job rotation method of training.                      CO4[K<sub>3</sub>]

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| 18. How can fatigue management fit within the existing safety management system? | CO5[K <sub>3</sub> ] |
| 19. State any two hazard control techniques?                                     | CO5[K <sub>3</sub> ] |
| 20. State the relation between training and obsolescence prevention?             | CO4[K <sub>2</sub> ] |

**PART C (5x6=30 Marks)**

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| 21. List and explain the six steps of the rational decision making process.     | CO2[K <sub>2</sub> ] |
| 22. Compare autocratic style of leadership with democratic style of leadership. | CO2[K <sub>4</sub> ] |
| 23. List and explain the barriers to communication.                             | CO2[K <sub>2</sub> ] |
| 24. Draw the Maslow's need hierarchy chart.                                     | CO3[K <sub>2</sub> ] |
| 25. Compare on-the-job training with training-center training.                  | CO4[K <sub>4</sub> ] |
| 26. State any five important effects of fatigue.                                | CO5[K <sub>2</sub> ] |

**PART D (4x10=40 Marks)**

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| 27. Analyze the managerial grid developed by Robert Blake and Jane Mouton for defining leadership styles. | CO2[K <sub>4</sub> ] |
| 28. Compare McGregor's motivational theory X with theory Y.   | CO3[K <sub>4</sub> ] |
| 29. List the common needs for training with suitable examples / applications.                             | CO4[K <sub>3</sub> ] |
| 30. State the main causes of fatigue and the corresponding remedial measures to counter them.             | CO5[K <sub>3</sub> ] |
| 31. Draw the block diagram for the process of communication and explain with suitable applications.       | CO2[K <sub>3</sub> ] |

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