

Reg. No.

Question Paper Code

13262

B.E. / B.Tech. - DEGREE EXAMINATIONS, NOV / DEC 2024

Seventh Semester

Electronics and Communication Engineering

(Common to Electrical and Electronics Engineering, Mechanical Engineering, Artificial Intelligence and Data Science, Computer and Communication Engineering, Electronics and Instrumentation, Instrumentation and Control Engineering, Mechanical and Automation Engineering & Sixth semester Information Technology)

20HSMG601 – PRINCIPLES OF ENGINEERING MANAGEMENT

Regulations - 2020

Duration: 3 Hours

Max. Marks: 100

PART - A (MCQ) (20 × 1 = 20 Marks)

Answer ALL Questions

- | | <i>Mark
s</i> | <i>K-
Level</i> | <i>CO</i> |
|---|-------------------|---------------------|-----------|
| 1. Which of the following is a key factor in organizational culture?
(a) Employee turnover (b) Leadership style
(c) Industry type (d) Profit margins | 1 | K1 | CO1 |
| 2. Who is known as the "Father of Scientific Management"?
(a) Max Weber (b) Elton Mayo (c) Frederick Taylor (d) Henry Fayol | 1 | K1 | CO1 |
| 3. What approach to management emphasizes the use of scientific methods to solve problems?
(a) Contingency approach (b) Human relations approach
(c) Scientific approach (d) System approach | 1 | K1 | CO1 |
| 4. Which form of business organization is owned by a single individual?
(a) Sole proprietorship (b) Partnership (c) Corporation (d) Cooperative | 1 | K1 | CO1 |
| 5. A well-formulated objective should be:
(a) General and vague (b) Specific and measurable
(c) Open to interpretation (d) Easy to achieve | 1 | K2 | CO2 |
| 6. Which step in the planning process involves assessing future conditions that could affect the plan?
(a) Setting objectives (b) Developing premises
(c) Decision-making (d) Controlling | 1 | K2 | CO2 |
| 7. Which planning process focuses on setting long-term goals and determining how to achieve them?
(a) Tactical planning (b) Strategic planning
(c) Operational planning (d) Project planning | 1 | K1 | CO2 |
| 8. Which is a short-term plan typically lasting a year or less?
(a) Strategic plan (b) Tactical plan
(c) Operational plan (d) Long-range plan | 1 | K1 | CO2 |
| 9. What is the primary purpose of an organizational structure?
(a) To increase employee motivation
(b) To define roles, responsibilities, and hierarchy
(c) To improve customer satisfaction
(d) To control company finances | 1 | K2 | CO3 |
| 10. Line authority refers to the power to:
(a) Provide advice
(b) Directly oversee subordinates and make decisions
(c) Monitor compliance
(d) Coordinate activities across departments | 1 | K2 | CO3 |

11. Which method is commonly used to appraise employee performance? 1 K1 CO3
 (a) SWOT analysis (b) 360-degree feedback
 (c) Financial audit (d) Market analysis
12. Delegation of authority helps to: 1 K2 CO3
 (a) Strengthen central control
 (b) Empower subordinates and improve decision-making efficiency
 (c) Reduce employee responsibilities
 (d) Decrease work delegation
13. Which theory focuses on the hierarchy of human needs? 1 K1 CO4
 (a) Herzberg's Two-Factor Theory (b) Maslow's Hierarchy of Needs
 (c) Vroom's Expectancy Theory (d) McGregor's Theory X and Y
14. In leadership, which style is often associated with quick decision-making and clear direction? 1 K1 CO4
 (a) Democratic (b) Autocratic (c) Laissez-faire (d) Transformational
15. The final step in the communication process is: 1 K1 CO4
 (a) Encoding (b) Decoding (c) Feedback (d) Noise
16. In the context of IT, communication primarily aims to: 1 K1 CO4
 (a) Simplify decision-making (b) Automate complex processes
 (c) Enable quick information sharing (d) Monitor employee performance
17. Disruptive innovation typically targets which market segment? 1 K2 CO5
 (a) High-end customers (b) Established markets
 (c) Underserved or niche markets (d) Luxury goods market
18. Which of the following is a modern approach in engineering management? 1 K1 CO5
 (a) Traditional management (b) Agile management
 (c) Bureaucratic management (d) Autocratic management
19. One primary challenge of implementing green management is 1 K2 CO5
 (a) High employee engagement (b) Initial costs of sustainable technologies
 (c) Increased production (d) Simplified processes
20. Managing diversity in an organization primarily enhances: 1 K2 CO5
 (a) Employee salaries (b) Creativity and innovation
 (c) Company profits (d) Office decor

PART - B (10 × 2 = 20 Marks)

Answer ALL Questions

21. What is the significance of Industry 4.0 in modern business? 2 K1 CO1
22. List out four differences between a manager and an entrepreneur. 2 K1 CO1
23. What is a Gantt chart, and how is it used in planning? 2 K1 CO2
24. What are planning premises? 2 K1 CO2
25. Differentiate between centralization and decentralization. 2 K2 CO3
26. What is departmentalization? 2 K1 CO3
27. State Vroom's expectancy theory. 2 K1 CO4
28. Define transformational leadership. 2 K1 CO4
29. What is incremental innovation? 2 K1 CO5
30. Define the term "sustainability" in the context of green management. 2 K1 CO5

PART - C (6 × 10 = 60 Marks)

Answer ALL Questions

31. a) Explain the types of business organizations with their advantages and disadvantages. 10 K2 CO1

OR

- b) Discuss the current issues and future trends in management, focusing on the digital transformation of businesses and sustainability. 10 K2 CO1

32. a) Explain the concept of Management by Objectives (MBO) with its benefits and challenges. 10 K1 CO2
- OR**
- b) Discuss the decision-making process in detail. How can managers make effective decisions to improve organizational outcomes? 10 K2 CO2
33. a) Explain the different types of organizational structures and their impact on organizational efficiency. 10 K1 CO3
- OR**
- b) Describe the concept of job design and its impact on employee motivation and productivity. 10 K2 CO3
34. a) Explain the key principles of Maslow's Hierarchy of Needs. 10 K1 CO4
- OR**
- b) Explain the barriers to effective communication in organizations. How can managers overcome these barriers to improve workplace communication? 10 K2 CO4
35. a) Discuss the importance of sustainable practices in modern engineering management. 10 K2 CO5
- OR**
- b) Describe the principles of lean management with suitable examples. 10 K2 CO5
36. a) i) Explain the concept of non-verbal communication and its importance in effective leadership. 5 K3 CO4
- ii) What is Intellectual Property Rights (IPR), and why is it important for innovation management? 5 K3 CO5
- OR**
- b) i) What is Herzberg's Two-Factor Theory of motivation, and how can it be applied in the workplace? 5 K3 CO4
- ii) Explain the role of Research and Development (R&D) in entrepreneurship. 5 K3 CO5