

**B.E. / B.Tech. - DEGREE EXAMINATIONS, NOV / DEC 2025**

Seventh Semester

**Electronics and Communication Engineering**

(Common to Electrical and Electronics Engineering, Electronics and Instrumentation Engineering, Instrumentation and Control Engineering, Mechanical Engineering, Mechanical and Automation Engineering, Compute and Science Engineering (AIML) & Artificial Intelligence and Data Science)

**20HSMG601 - PRINCIPLES OF ENGINEERING MANAGEMENT**

Regulations - 2020

Duration: 3 Hours

Max. Marks: 100

**PART - A (MCQ) (10 × 1 = 10 Marks)**

Answer ALL Questions

	<i>Marks</i>	<i>K- Level</i>	<i>CO</i>
1. Which of the following approaches focuses on worker–management relationships? (a) Scientific approach (b) Human relations approach (c) System approach (d) Contingency approach	1	K1	CO1
2. Which type of enterprise is owned and operated by the government? (a) Private sector (b) Public sector (c) Partnership (d) Proprietorship	1	K1	CO1
3. Which type of plan defines broad guidelines for decision-making? (a) Strategy (b) Policy (c) Procedure (d) Budget	1	K1	CO2
4. MBO stands for (a) Management by Options (b) Management by Objectives (c) Management by Organization (d) Management by Output	1	K1	CO2
5. The process of grouping activities and assigning duties is called (a) Planning (b) Organizing (c) Directing (d) Controlling	1	K1	CO3
6. Which organization exists based on personal relationships? (a) Formal (b) Informal (c) Line (d) Staff	1	K1	CO3
7. Motivation is concerned with (a) Recruitment (b) Inspiring employees to perform (c) Training (d) Communication system	1	K1	CO4
8. Level 5 leadership emphasizes (a) Ego and control (b) Humility and professional will (c) Authority and punishment (d) Motivation and reward	1	K1	CO4
9. Lean management mainly focuses on (a) Reducing waste (b) Increasing inventory (c) Hiring more workers (d) Expanding hierarchy	1	K1	CO5
10. IPR refers to (a) International Product Regulation (b) Intellectual Property Rights (c) Industrial Project Review (d) Internal Process Report	1	K1	CO5

**PART - B (12 × 2 = 24 Marks)**

Answer ALL Questions

11. Differentiate between Manager and Entrepreneur.	2	K2	CO1
12. Why management is considered both a science and an art?	2	K1	CO1
13. Distinguish between short-term and long-term planning.	2	K2	CO2
14. How technology planning supports business growth?	2	K1	CO2
15. Explain the term “Organizing”.	2	K2	CO3
16. Describe the importance of job design in management.	2	K2	CO3

- |  |   |    |     |
|--|---|----|-----|
| 17. Explain the need for an organization chart.                | 2 | K2 | CO3 |
| 18. Summarize any one leadership theory.                       | 2 | K2 | CO4 |
| 19. Differentiate between budgetary and non-budgetary control. | 2 | K2 | CO4 |
| 20. How HR planning and recruitment are related to directing?  | 2 | K1 | CO5 |
| 21. Explain the concept of green management.                   | 2 | K2 | CO5 |
| 22. Summarize the importance of IPR in innovation.             | 2 | K2 | CO5 |

**PART - C (6 × 11 = 66 Marks)**

Answer ALL Questions

- |           |  |    |    |     |
|-----------|--|----|----|-----|
| 23. a)    | Explain the evolution of management thought with reference to scientific, human relations, system, and contingency approaches. | 11 | K2 | CO1 |
| <b>OR</b> |  |    |    |     |
| b)        | Describe the impact of Industry 4.0 on engineering management and organizational performance.                                  | 11 | K2 | CO1 |
| 24. a)    | Explain the process of planning and discuss its importance in achieving organizational goals.                                  | 11 | K2 | CO2 |
| <b>OR</b> |  |    |    |     |
| b)        | Elaborate the steps involved in decision-making and its importance in planning.  | 11 | K2 | CO2 |
| 25. a)    | Discuss about the different types of organization structures and their suitability for various business scenarios.             | 11 | K2 | CO3 |
| <b>OR</b> |  |    |    |     |
| b)        | Analyze the principles of departmentation and delegation of authority in an organization.                                      | 11 | K2 | CO3 |
| 26. a)    | Define leadership and explain any 2 leadership theories relevant to engineering managers.                                      | 11 | K2 | CO4 |
| <b>OR</b> |  |    |    |     |
| b)        | Summarize the importance of communication in management and explain barriers to effective communication.                       | 11 | K2 | CO4 |
| 27. a)    | Explain the role of R&D and innovation in entrepreneurship and business growth.  | 11 | K2 | CO5 |
| <b>OR</b> |  |    |    |     |
| b)        | Examine the ethical principles engineers should follow in technology management and innovation.                                | 11 | K2 | CO5 |
| 28. a)    | Analyze the various types of business organizations and their merits and demerits.   | 11 | K2 | CO1 |
| <b>OR</b> |  |    |    |     |
| b)        | Evaluate the current issues and future trends in management in the context of globalization.                                   | 11 | K2 | CO1 |