

Register No.: Name:

SAINTGITS COLLEGE OF ENGINEERING (AUTONOMOUS)

(AFFILIATED TO APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY, THIRUVANANTHAPURAM)

SIXTH SEMESTER B.TECH DEGREE EXAMINATION (R,S), MAY 2024**COMMON TO CH,FT,ME,RB****(2020 SCHEME)****Course Code : 20HUT310****Course Name: Management for Engineers****Max. Marks : 100****Duration: 3 Hours*****Students may be permitted to use Statistical Table for obtaining values from Normal Distribution Table*****PART A*****(Answer all questions. Each question carries 3 marks)***

1. Explain the significance of the systems approach in management.
2. Explain the various levels of management.
3. What is the difference between vision and mission? Give an example.
4. Define span of control. List the factors affecting it.
5. Illustrate the difference between programmed and non-programmed decisions by highlighting suitable examples.
6. Describe about decision making under certainty, uncertainty and risk conditions.
7. What is meant by network? Mention various types of networks used in project management.
8. Define the following: i) Event ii) Activity.
9. Explain the classification of budgets according to function.
10. Distinguish the following: Recruitment, Selection and Induction.

PART B***(Answer one full question from each module, each question carries 14 marks)*****MODULE I**

11. a) Critically examine the contribution of F. W. Taylor to the development of management thought. (10)
b) List and elaborate four important roles of a manager. (4)

OR

12. a) With suitable examples, illustrate the Planning, Organizing, Staffing, Leading and Controlling functions of management. (10)
b) Describe the philosophy of Scientific Management. (4)

MODULE II

13. a) Differentiate Trait approach with Contingency approach. (8)
b) Explain any three types of planning. (6)

OR

14. a) Describe the matrix organization in detail and comment on its (7)

merits and demerits.

- b) Distinguish between feedback and feed forward control mechanisms. (7)

MODULE III

15. a) Explain productivity and describe its various measurement techniques. (9)
- b) Distinguish between critical activity and dummy activity. (5)

OR

16. a) A glass firm developing a substantial backlog of orders is considering three courses of action (i) Arrange for subcontracting (ii) Begin overtime production (iii) Construct new facilities. The correct choice depends largely on future demand, which may be low, medium or high. By consensus, management ranks the respective probabilities as 0.10, 0.50 and 0.40. A cost analysis reveals the effect on profits as shown below.

Course of action	Low (P = 0.1)	Medium (P = 0.5)	High (P = 0.4)
1. Arrange for subcontracting	10	50	50
2. Begin overtime	- 20	60	100
3. Construct new facilities	- 150	20	200

(10)

Show this decision situation in the form of a decision tree and indicate the most preferred decision and the corresponding expected value.

- b) Describe the controllable and noncontrollable factors of productivity. (4)

MODULE IV

17. a) A project has the following list of activities and time estimates.

Activity	Time (Days)	Immediate predecessors
A	1	-
B	4	A
C	3	A
D	7	A
E	6	B
F	2	C, D
G	7	E, F
H	9	D
I	4	G, H

(10)

- i) Draw the network. ii) Show the early start and early finish times. iii) Show the critical path.
- b) Differentiate between CPM and PERT. (4)

OR

18. The data regarding the activities in a project are given below. It is given that the schedule date of completion of project is 38 days. Draw the network diagram, find the critical path and find the probability that project can be completed at schedule time.

Activity	t_o (Optimistic time)	t_m (Most likely time)	t_p (Pessimistic time)
1-2	2	5	14
1-6	2	5	8
2-3	5	11	29
2-4	1	4	7
3-5	5	11	17
4-5	2	5	14
6-7	3	9	27
5-8	2	2	8
7-8	7	13	31

(14)

MODULE V

19. a) Explain the functions of a marketing manager. (7)
- b) Explain the functions of financial management. (7)

OR

20. a) What is Manager inventory chart? List the advantages and disadvantages of manager inventory chart. (8)
- b) List out important characteristics of entrepreneurs. (6)
