

Register No.: Name:

SAINTGITS COLLEGE OF ENGINEERING (AUTONOMOUS)

(AFFILIATED TO APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY, THIRUVANANTHAPURAM)

SIXTH SEMESTER B.TECH DEGREE EXAMINATION (S), AUGUST 2023**COMMON TO CH,FT,ME,RB****(2020 SCHEME)****Course Code : 20HUT310****Course Name: Management for Engineers****Max. Marks : 100****Duration: 3 Hours****PART A*****(Answer all questions. Each question carries 3 marks)***

1. "Management is multi-disciplinary". Comment on the statement.
2. Why planning is important in professional management?
3. Examine the difference between Mission and Goal with respect to an organization.
4. Discuss about democratic leadership style.
5. Describe the significance of productivity.
6. Discuss briefly about three different models of decision making.
7. Explain critical activity and critical path related to network planning.
8. What are the rules for constructing a project network?
9. What are the responsibilities of an operation manager?
10. List any three marketing mix models.

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

11. Explain Henry Favol's 14 principles of administrative management. (14)

OR

12. a) Explain the three different levels of managers. (8)
b) What are the major skills required by managers and how these skills are related to different levels of managers? (6)

MODULE II

13. a) What is mean by directing? Explain any eight principles of effective directing. (10)
b) "Motivation is the task of every manager and is required at all levels". Justify. (4)

OR

14. Explain about different types of plans based on : i)scope (14)
ii)frequency of use iii)time horizon

MODULE III

15. a) A hospital employs four officers to prepare discharge summary, each working nine hours per day. The hospital's payroll cost for the officers is Rs 640/- per day, and there is a daily overhead expense of Rs 400/-. If each officer deals with an average of eight discharge cases per day, compute: a) Labor productivity b) Multifactor productivity.
- The hospital is considering the purchase of new computer software for the preparation of discharge summary. The software will enable each officer to process fifteen discharge cases per day, although the overhead will increase to Rs 525/-. Calculate:
- c) the new labor productivity.
 d) new multifactor productivity.
 e) Should the hospital proceed with the purchase of new software? Justify your answer.
- b) Explain decision making under uncertainty. (4)

OR

16. a) Discuss various productivity improvement techniques. (4)
- b) A bakery owner buys sandwich for Rs 13/- per piece and sells it for Rs 20/- per piece. At the end of each day, the unsold pieces can be disposed at a salvage price of Rs 2.5/- per piece. Past sales have ranged between 13 and 17 pieces per day; there is no reason to believe that sales volume will take on any other magnitude in future. Find the Expected Monetary Value and Expected Opportunity Loss, if the sales history has the following probabilities: (10)

Market size	13	14	15	16	17
Probability	0.1	0.15	0.15	0.25	0.35

MODULE IV

17. a) The data regarding the activities in a project are given below.

Activity	t_0 (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
3-4	1	4	7
3-5	5	11	17
4-5	2	5	14
6-7	3	9	27
5-8	2	9	8
7-8	7	13	31

It is given that schedule date of completion of project is 38 days.

- i) Draw the PERT network. ii) Find the critical path iii) Find the probability that project can be completed at scheduled time.
b) Compare CPM and PERT. (4)

OR

18. The following table gives data on normal time and cost and crash time and cost for a project.

Activity	Normal duration(days)	Normal cost (Rupees)	Crash Duration (days)	Crash cost (Rupees)
1-2	6	60	4	100
1-3	4	60	2	200
2-4	5	50	3	150
2-5	3	45	1	65
3-4	6	90	4	200
4-6	8	80	4	300
5-6	4	40	2	100
6-7	3	45	2	80

(14)

- i) Draw the network for the project.
ii) Find the total time of project of the crash and corresponding cost, taking into consideration the minimum crash cost.

MODULE V

19. a) What are intellectual property rights? Explain the business importance of patents. (7)
b) What is a financial budget? Describe any three types. (7)

OR

20. a) What is mean by market segmentation? Explain the process of market segmentation. (6)
b) Briefly explain the functions of Human resource management in an organization. (8)
