

Reg No.: _____

Name: _____

APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY

B.Tech Degree S5 (S,FE) (FT/WP/S5PT/S3PT) Examinations May/June 2026 (2019 Scheme)



Course Code: HUT310
Course Name: MANAGEMENT FOR ENGINEERS

Max. Marks: 100

Duration: 3 Hours

(Use of Normal Distribution Tables may be permitted)

PART A

(Answer all questions; each question carries 3 marks)

Marks

- | | | |
|----|--|---|
| 1 | Define management and explain its importance in organizational success | 3 |
| 2 | What are the different levels of management? | 3 |
| 3 | Describe the planning process in management, including types of plans | 3 |
| 4 | Explain the process of delegation | 3 |
| 5 | How can we improve the productivity of an organisation? | 3 |
| 6 | Describe the decision tree model and its application in decision making | 3 |
| 7 | Explain the difference between CPM and PERT networks | 3 |
| 8 | What is Fulkerson's rule? | 3 |
| 9 | Define operations management and explain its key activities | 3 |
| 10 | Explain the role of marketing management in achieving organizational goals | 3 |

PART B

(Answer one full question from each module, each question carries 14 marks)

Module -1

- | | | |
|----|---|----|
| 11 | a) Explain the systems approach to management with a block diagram. | 10 |
| | b) Explain Task and Responsibilities of a professional Manager | 4 |
| 12 | a) Explain the 14 principles of administrative management? | 10 |
| | b) What are the skills required in different levels of management. | 4 |

Module -2

- | | | |
|----|---|---|
| 13 | a) Explain the mission, goals, strategy, programmes and procedures of an organisation with suitable examples. | 7 |
| | b) Illustrate the different types of organisation structures. | 7 |
| 14 | a) Explain the role of leadership in directing organizational activities. Discuss the different leadership styles and their impact on organizational performance. | 7 |

- b) Differentiate between strategic and tactical planning.

7

Module -3

- 15 a) Explain different steps in decision tree analysis with an example. 7
 b) Explain in detail different productivity measurement indexes 7
 16 a) An investor has to make a choice between a Bike shop and Clothing store. There is a 50% chance of success for both alternatives. The financial outcomes for both alternatives are as follows :

<i>Decision</i>	<i>Success or Failure</i>	<i>Probability</i>	<i>Profit (₹)</i>
Bike Shop	Success	0.5	4000
	Failure	0.5	-1500
Clothing Store	Success	0.5	6000
	Failure	0.5	-2000

Construct the decision tree and suggest the decision to take for maximum profit.

- b) Discuss controllable and non-controllable factors affecting productivity

7

Module -4

- 17 a) The following details are available regarding a project. Determine the earliest and latest times, the total float for each activity, the critical activities and the project completion time. 14

Activity	Predecessor	Duration (Weeks)
A	-	12
B	A	7
C	A	11
D	A	8
E	A	6
F	B	10
G	C	9
H	D, F	14
I	E, G	13
J	H, I	16

- 18 a) The following table shows the various activities for construction of a house. Find the critical path and optimal project duration. Also calculate total float for each activity. 14

Activity	Description	Immediate Predecessor	Duration (Weeks)
A	Site Preparation	-	2
B	Laying Foundation	A	6
C	Carpentry Work for Frames	-	4
D	Super-structure	B, C	12
E	Roofing	D	6
F	Electrification	E	4
G	Plumbing	E	3
H	Flooring and Plastering	F, G	10
I	Remaining Carpentry Works	H	5
J	Painting	I	8

Module -5

- 19 a) Discuss the importance of financial management in organizational success 7
 b) Explain the marketing mix (4Ps) and its importance in marketing management 7
 20 a) Elaborate different market segmentation strategies 7
 b) What are intellectual property rights? Explain the business importance of patents. 7
