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ADITYA INSTITUTE OF TECHNOLOGY AND MANAGEMENT, TEKKALI
(AUTONOMOUS)
IV B.Tech II Semester Regular Examinations, September, 2020

MANAGERIAL ECONOMICS AND MANAGEMENT SCIENCE
(Common to CSE & IT)

Time: 3 Hours   **Max Marks: 70**

Answer ONE Question from each Unit
All Questions Carry Equal Marks
All parts of the Question must be answered at one place

UNIT-I

1. a) Managerial Economics is the discipline which deals with the application of Economic theory. Discuss   7 M
   b) What is demand? State and explain the law of demand.   7 M

(OR)

2. a) What do you understand by Elasticity of demand? What are the various degrees of elasticity of demand?   7 M
   b) Enumerate the factors involved in demand forecasting. State the purpose of forecasting.   7 M

UNIT-II

3. a) Explain how production function is valuable to a manufacturer? Explain.   7 M
   b) Discuss the equilibrium of the firm with the technique of Isoquant.   7 M

(OR)

4. a) Distinguish between production function and cost function.   7 M

   b) What is Break Even Analysis? What are its limitations?   7 M

UNIT-III

5. a) What are the main features of pure competition?   7 M

   b) What is perfect competition? How is market price determined under conditions of perfect competition?   7 M

(OR)

6. a) Define 'Oligopoly'. Explain how price and out decisions are taken under conditions of Oligopoly. **7 M**

   b) What is meant by Price discrimination? Explain the conditions which make it possible, profitable and desirable. **7 M**

UNIT-IV

7. a) What do you mean by management? Discuss its characteristics. **7 M**

   b) Explain the scientific management principles developed by F.W.Taylor. **7 M**

(OR)

8. a) Discuss the Maslow's theory of human needs hierarchy for motivation. **7 M**

   b) Define leadership. What are the different leadership styles? **7 M**

UNIT-V

9. a) Define marketing. Explain the major functions of marketing. **7 M**

   b) What are the various stages of product life cycle? Discuss. **7 M**

(OR)

10. a) Distinguish between Human Resource Management and Personnel Management and Industrial Relations. **7 M**

    b) What do you mean by performance appraisal? Explain different methods in performance appraisal. **7 M**

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WIRELESS COMMUNICATIONS
(Electronics and Communication Engineering)

Time: 3 Hours   **Max Marks: 70**

Answer ONE Question from each Unit
All Questions Carry Equal Marks
All parts of the Question must be answered at one place

UNIT-I

1. Discuss the following Examples of Wireless Communication Systems in detail.   14M
   a) Paging Systems
   b) Cordless telephone Systems
   c) Cellular Telephone Systems.

   (OR)

2. Explain the evolution of mobile radio communications   14M

UNIT-II

3. Compare the performance of TDMA, FDMA, CDMA, SDMA techniques   14M

   (OR)

4. a) Draw the block diagram of OFDM transmitter and receiver. Explain them in detail.   7M
   b) If GSM uses a frame structure where each frame consists of eight time slots ,and each time slot contains 156.25 bits, and data is transmitted at 270.833kbps in the channel , find (i) the time duration of a bit (ii) the time duration of a slot (iii) the time duration of a frame, and (iv) how long must a user occupying a single time slot wait between two successive transmissions.   7M

UNIT-III

5. Discuss the 4G evolution, objectives, advantages, applications and limitations.   14M

   (OR)

6. a) Discuss the evolution from 1G to 2G, 2.5G in case of cellular network based on TDMA. Discuss the strategies adopted by different network operators while migrating towards third generation system   7M
   b) Discuss about 3G spectrum and limitations..   7M

UNIT-IV

7. a) Mention the advantages and disadvantages of WLANs.   7M
   b) Explain different WLAN topologies.   7M

   (OR)

8. a) Explain about WLL in detail.   7M
   b) Explain about Hyper LAN.   7M

UNIT-V

9. Explain the Protocol layers and network topology of Bluetooth.   14M

   (OR)

10. a) Explain about IEEE 802.15.4   7M
    b) Explain about MANETs.   7M