

AR18

CODE: 18IET443

SET-2

**ADITYA INSTITUTE OF TECHNOLOGY AND MANAGEMENT, TEKKALI
(AUTONOMOUS)**

IV B.Tech I Semester Supplementary Examinations, May-2022

ENTREPRENEURIAL DEVELOPMENT

Time: 3 Hours

Max Marks: 60

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. | Define Entrepreneur? Explain the qualities of Entrepreneur | 12M |
| (OR) | | |
| 2. | Explain the role of Entrepreneurship in Economic Development. | 12M |

UNIT-II

- | | | |
|-------------|--|-----|
| 3. | Explain the factors effecting Entrepreneurship. | 12M |
| (OR) | | |
| 4. | Explain the institutions supporting for Entrepreneurship development programmes. | 12M |

UNIT-III

- | | | |
|-------------|---|-----|
| 5. | Explain the sources for planning for Business ideas. | 12M |
| (OR) | | |
| 6. | Briefly write about report writing? Explain the contents of a Project report. | 12M |

UNIT-IV

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|-------------|--|-----|
| 7. | Explain the different sources of long term and short term capital. | 12M |
| (OR) | | |
| 8. | Explain the role of Export and Import Bank of India. | 12M |

UNIT-V

- | | | |
|-------------|---|-----|
| 9. | Define Marketing Management? Explain the importance of Marketing Management in an MSME. | 12M |
| (OR) | | |
| 10. | Explain the problems and prospects of MSMEs in India. | 12M |

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**ADITYA INSTITUTE OF TECHNOLOGY AND MANAGEMENT, TEKKALI
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IV B.Tech I Semester Supplementary Examinations, May-2022

GEOGRAPHICAL INFORMATION SYSTEMS

Time: 3 Hours

Max Marks: 60

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) Illustrate different scales of representations 6M
b) Explain which spatial reference system used in GIS ? 6M
(OR)
2. a) Explain about cylindrical projection? 6M
b) Explain about UTM projection? 6M

UNIT-II

3. a) Explain vector overlay operations in GIS? 6M
b) Give various functionalities of GIS? 6M
(OR)
4. a) Differentiate between raster data and vector data? 6M
b) How the spatial data can be input in to GIS? 6M

UNIT-III

5. a) Draw the schematic diagram to represent the DBMS components 6M
b) Write the advantages of DBMS 6M
(OR)
6. a) Write about hierarchical data model for education 6M
b) Write about network data model 6M

UNIT-IV

7. a) List out types of raster data and give abbreviate different file extentions 6M
b) List out types of raster data structure and give an example 6M
(OR)
8. a) Explain about vector data types and illustrate features representation 6M
b) List out vector data models and give an example 6M

UNIT-V

9. a) Explain how GIS techniques are used in Forest studies? 6M
b) Explain how GIS techniques are used in agriculture? 6M
(OR)
10. a) Explain how GIS techniques are used in Urban studies? 6M
b) Explain how GIS techniques are used in geology? 6M

FUNDAMENTALS OF ROBOTICS**Time: 3 Hours****Max Marks: 60**

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) Explain the importance of Robotics in Automation. 6 M
b) What are the different components of industrial robotics? 6 M
(OR)
2. How do you specify a robot? Is robotics automation? Discuss the different classification systems of robots. 12 M

UNIT-II

3. Explain the various drive systems used with an industrial robot and compare their features, merits and demerits. 12 M
(OR)
4. a) How do you classify Tactile sensor? Explain them briefly with neat sketch. 6 M
b) Explain about Proximity and Range sensors in detail. 6 M

UNIT-III

5. a) Write down the properties of rotational matrix. 6 M
b) What is homogenous transformation matrix? Explain four sub matrices. 6 M
(OR)
6. Determine the transformation matrix T that represents a translation of 'a' units along x-axis, followed by a rotation of β about x-axis and followed by a rotation of α about z-axis. 12 M

UNIT-IV

7. a) Explain the importance of Robot Programming lead through programming. 6 M
b) Explain the different types of Robot languages. 6 M
(OR)
8. a) Write down the capabilities and limitations of Lead through methods. 6 M
b) Discuss the software elements of robot and different teaching methods of robot. 6 M

UNIT-V

9. a) Describe the various considerations taken into account for material handling. 6 M
b) Enlist the applications and characteristics of future robots 6 M
(OR)
10. a) What are future manufacturing applications of robot? 6 M
b) Describe the Spray coating operation with robot system. 6 M

INTRODUCTION TO WIRELESS NETWORKS**Time: 3 Hours****Max Marks: 60**

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) How the evolution of wireless communication systems done? 6
b) Compare Infrared Wireless LAN and Spread spectrum Wireless LAN 6
(OR)
2. a) Find the differences between fixed and wireless telephone networks. 6
b) Explain about traffic routing in wireless networks 6

UNIT-II

3. a) Explain about Protocol architecture of Bluetooth. 6
b) Summarize the basic concepts of ISDN with necessary diagram. 6
(OR)
4. a) Build the architecture of CDPD and explain. 6
b) Explain the architecture of ISDN in detail. 6

UNIT-III

5. a) What is the Registration procedure in mobile IP. 6
b) Explain about Tunnelling procedure in mobile IP. 6
(OR)
6. a) Illustrate the operation of mobile IP network. 6
b) What are the functions of Wireless Session Protocol. 6

UNIT-IV

7. a) Discuss various services of IEEE 802.11. 6
b) Explain about 802.11 medium access control layer. 6
(OR)
8. a) Explain about 802.11 physical layer. 6
b) Build the architecture of IEEE 802.11. 6

UNIT-V

9. a) Explain about architecture of HIPERLAN type 1. 6
b) Illustrate the basic architecture of WATM Network. 6
(OR)
10. a) Explain about protocol entities in WATM. 6
b) What are the different versions of HIPERLAN s? 6

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**ADITYA INSTITUTE OF TECHNOLOGY AND MANAGEMENT, TEKKALI
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IV B.Tech I Semester Supplementary Examinations, May-2022

INTRODUCTION TO CLOUD COMPUTING

Time: 3 Hours

Max Marks: 60

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) Discuss the need of Parallel computing **6M**
b) Differentiate cluster computing and cloud computing **6M**
(OR)
2. a) Explain the Need for Cloud Computing **6M**
b) Discuss about the Grid Computing **6M**

UNIT-II

3. a) Discuss about IaaS **6M**
b) Compare public, private and hybrid cloud deployment models **6M**
(OR)
4. a) Discuss about SaaS **6M**
b) Summarize the essential Characteristics of cloud computing in real-time applications **6M**

UNIT-III

5. a) Explain about Event Management as real-time cloud services **6M**
b) Discuss about contact Management as real-time cloud services **6M**
(OR)
6. a) Discuss about Project Management Cloud Services **6M**
b) Explain Cloud Services Collaborating on Calendars **6M**

UNIT-IV

7. a) Discuss the advantages and disadvantages of virtualization **6M**
b) Explain the taxonomy of virtualization **6M**
(OR)
8. a) Discuss about AWS Cloud Platform in Industry **6M**
b) Illustrate about Microsoft Azure cloud platform **6M**

UNIT-V

9. a) Summarize the evolution of storage technology **6M**
b) Discuss about database in detail **6M**
(OR)
10. a) Explain about file systems **6M**
b) Discuss about distributed file systems **6M**

**ADITYA INSTITUTE OF TECHNOLOGY AND MANAGEMENT, TEKKALI
(AUTONOMOUS)****IV B.Tech I Semester Supplementary Examinations, May-2022****INTRODUCTION TO DBMS****Time: 3 Hours****Max Marks: 60**

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) Differentiate between File Systems and Database systems. 6M
b) Explain various types of Data Models in DBMS. 6M
- (OR)
2. With a neat diagram, explain the components of structure of DBMS. 12M

UNIT-II

3. a) What is Entity Relationship and draw any ER model with suitable example. 6M
b) Write and explain the structure of SQL SELECT, INSERT and DELETE statements with suitable example. 6M
- (OR)
4. a) Write a short note on i) Unique key ii) Primary key iii) Foreign Key 6M
b) Write short notes on i) Attribute ii) Entity iii) Derived attribute iv) Multi-valued attribute v) Composite attribute 6M

UNIT-III

5. a) Differentiate Nested and correlated query processing with example. 6M
b) What is join operation? Explain different types of operations 6M
- (OR)
6. a) Explain logical operators in SQL with example. 6M
b) Explain the importance of Null values in Relational Model. 6M

UNIT-IV

7. a) What is meant by the functional dependencies? Illustrate functional dependencies with an example. 6M
b) Explain 2NF(Normal Form), 3NF and 4NF with example. 6M
- (OR)
8. a) What is normalization? Explain its advantage. 6M
b) What is decomposition? Explain loss less decomposition with example. 6M

UNIT-V

9. a) What is transaction? Explain briefly transaction states with diagram. 6M
b) Write short notes on i) Schedule ii) Serializability iii) Concurrent execution 6M
- (OR)
10. What is File Organization? Write short note on various File organization techniques. 12M

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**ADITYA INSTITUTE OF TECHNOLOGY AND MANAGEMENT, TEKKALI
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IV B.Tech I Semester Supplementary Examinations, May-2022

**BASICS OF MOBILE COMMUNICATIONS
(Open Elective)**

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. | Explain the operation of basic cellular system | 14 M |
| | (OR) | |
| 2. a) | Explain the concept of frequency reuse | 7 M |
| b) | Write about co channel interference | 7 M |

UNIT-II

- | | | |
|----|---|------|
| 3. | Explain the point to point propagation model(Lee model) | 14 M |
| | (OR) | |
| 4. | Derive the expression for the received power in a simple signal propagation environment | 14 M |

UNIT-III

- | | | |
|-------|--|------|
| 5. | Explain different handoff initiation techniques | 14 M |
| | (OR) | |
| 6. a) | Explain how Omni directional antennas used at cell sites | 7 M |
| b) | Write short notes on space diversity used at cell sites | 7 M |

UNIT-IV

- | | | |
|-------|--|------|
| 7. | What is frequency management and explain with an example | 14 M |
| | (OR) | |
| 8. a) | Explain fixed channel assignment | 7 M |
| b) | Write about channel sharing and channel borrowing | 7 M |

UNIT-V

- | | | |
|--------|--|------|
| 9. | Write about network switching subsystems and base station subsystems | 14 M |
| | (OR) | |
| 10. a) | What is FDMA ,explain | 7 M |
| b) | Write the differences between CDMA and TDMA | 7 M |

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) Elaborate the concepts of an Intrapreneur. 7
b) Highlight the Role of Entrepreneurship in Economic development. 7
(OR)
2. a) Elaborate the role of Ethics and social responsibility of an entrepreneur. 7
b) Focus on the Future of Entrepreneurship in India. 7

UNIT-II

3. a) Define Entrepreneurship Development Programme (EDP) **and explain the need** 7
and objectives of EDPs.
b) Elaborate the role of Institutions supporting for EDP. 7
(OR)
4. a) Evaluate the working of MSMEDI. 7
b) Evaluate the working of DICs. 7

UNIT-III

7. a) What do you understand by Project selection and **explain** the relevance of project 7
report
b) Define a Business Plan, and design a Business Plan for a Mobile Repairing Shop. 7
(OR)
6. a) Elaborate the steps in Formulation of a project report. 7
b) Design a Preparation of sample project report of any one product and service. 7

UNIT-IV

7. a) Elaborate the different sources of Long Term Capital. 7
b) Explain the concept of Venture capital. 7
(OR)
8. a) Elaborate the Role of SIDBI and NSIC in Entrepreneurial Development. 7
b) Elaborate the Role of APSFC, in Entrepreneurial Development. 7

UNIT-V

9. a) Elaborate the concepts of TQM. 7
b) Explain the Problems and prospects of MSME in India 7
(OR)
10. a) Elaborate the Profile of any Male Entrepreneur of your choice. 7
b) Elaborate the Profile of any Woman Entrepreneur of your choice. 7