



Course Title: IoT and Its Applications

Time: 3 hours

Course Code: EC312PE

Max. Marks: 70

Note: Answer ALL Questions

Part-A (10 x 2 = 20 Marks)

Q. No.	Stem of the Question	M	L	CO	PO
Unit-I					
1. a)	What is the role of smart objects and Internet in IoT?	2	3	1	2
1. b)	Explain the mechanisms for handling information in IoT systems?	2	2	1	1
Unit-II					
1. c)	Briefly explain about communication functional group in IoT system?	2	1	1	1
1.d)	Compare and contrast M2M Value Chains with IoT Value Chains?	2	4	1	2
Unit-III					
1. e)	What are the components in M2M architecture and explain their role?	2	1	1	1
1.f)	Differentiate between Functional View and Information View of IoT?	2	2	2	1
Unit-IV					
1. g)	What is the role of Big Data in Value Creation for IoT?	2	3	1	2
1.h)	Explain the concept of Smart Factory in IIoT system?	2	2	2	1
Unit-V					
1. i)	Write short notes on security functional group in IoT?	2	1	3	1
1.j)	Name different privacy and security issues in IoT?	2	1	3	1

Part-B (5 x 10=50 Marks)

Q. No.	Stem of the Question	M	L	CO	PO
Unit-I					
2.a)	Discuss the technologies that enable the IoT in detail?	6	2	1	2
2.b)	Give the classification of IoT applications?	4	1	1	1
OR					
2. c)	Discuss the factors that create inter-operability issues in IoT?	5	2	1	2
2.d)	Describe the technologies used for data management in IoT systems?	5	3	1	2
Unit-II					
3. a)	Draw the architecture of information driven value chain for IoT and explain it in detail?	6	1	2	1
3. b)	Discuss the standards need to be considered in building an IoT architecture?	4	2	2	1
OR					
3. c)	List out the main design principles and needed capabilities of IoT architecture?	5	2	2	1
3.d)	Describe the components of global value chain in M2M in detail?	5	1	1	1
Unit-III					
4. a)	Draw the high-level ETSI M2M architecture and explain each block in detail?	6	1	1	1
4. b)	Write short notes on communication model in IoT reference architecture?	4	1	2	1
OR					
4. c)	Explain the functional model of an IoT in detail with block diagram?	6	1	2	1
4.d)	Explain the deployment and operational view of IoT system?	4	1	2	1
Unit-IV					
5. a)	List out the IoT applications requirements and capabilities?	4	3	2	2
5. b)	Illustrate the challenges faced in implementing IoT applications?	6	4	2	3
OR					
5. c)	What are the four aspects in Business to Master IoT and compare them in detail?	4	4	1	2
5.d)	Describe the role of smart objects in building smart applications?	6	3	2	1
Unit-V					
6. a)	What are the governance issues in implementing the IoT system?	6	4	3	3
6. b)	Discuss the possible attacks on IoT devices?	4	1	3	1
OR					
6. c)	Explain the Security and Privacy needs of IoT reference model in detail?	6	3	3	1
6. d)	What are the activities involved in the security testing of IoT products?	4	4	3	2

M: Marks; L: Bloom's Taxonomy Level; CO: Course Outcome; PO: Programme Outcome



Note: Answer ALL Questions

Part-A (10 x 2 = 20 Marks)

Q. No.	Stem of the Question	M	L	CO	PO
Unit-I					
1. a)	What are the elements of Entrepreneurship?	2	1	1	6
1. b)	What are the different types of business ownership?	2	1	1	7
Unit-II					
1. c)	What do you mean by Patent & Trademark?	2	1	2	8
1. d)	Define Promotion. What are the examples of Promotion?	2	2	2	7
Unit-III					
1. e)	What is equity financing?	2	2	3	11
1. f)	What's the Difference Between a Grant & Subsidy?	2	3	3	8
Unit-IV					
1. g)	What is New Entry & Newness?	2	2	4	11
1. h)	What are the different sources for New Entry Opportunity?	2	2	4	11
Unit-V					
1. i)	What are the different contributions of Women Entrepreneurs in economic development?	2	2	5	11
1. j)	What are the different roles played by NGO's?	2	2	5	11

Part-B (5 x 10=50 Marks)

Q. No.	Stem of the Question	M	L	CO	PO
Unit-I					
2. a)	Summarize the role of government in promotion of an entrepreneur?	5	4	1	6
2. b)	Distinguish between Entrepreneur and Manager?	5	3	1	6
OR					
2. c)	Explain the Role of an Entrepreneur in the economic development of country.	5	2	1	7
2. d)	Mention the different types of Ownership & Explain in detail?	5	2	1	9
Unit-II					
3. a)	Explain the major steps in Project Management Life Cycle?	5	2	2	11
3. b)	Describe SWOT analysis with an example?	5	3	2	4
OR					
3. c)	Explain the sources of Opportunity analysis in detail.	5	3	2	12
3. d)	What is a feasibility study? Explain TELOS model in detail.	5	3	2	4
Unit-III					
4. a)	List out the ten sources of Capital?	5	2	3	11
4. b)	Explain the different types of investors in detail.	5	2	3	9
OR					
4. c)	What do you meant by Cost Benefit Analysis and explain its process in detail.	5	3	3	11
4. d)	Compare Debt & Equity method of financing?	5	4	3	11
Unit-IV					
5. a)	What do you meant by environmental instability and explain its first mover advantages & disadvantages	5	4	4	7
5. b)	Explain the different market Scope Strategies?	5	5	4	10
OR					
5. c)	What is Entrepreneurial Strategy & What are the elements of Entrepreneurial Strategy?	5	3	4	7
5. d)	What are the Objectives of Generating & Exploiting New Entries?	5	5	4	10
Unit-V					
6. a)	What are the different Phases of EDP's?	5	4	5	10
6. b)	State & Explain various Government Schemes to develop Women Entrepreneurs?	5	4	5	11
OR					
6. c)	What are the Needs & Objectives of EDP's?	5	3	5	11
6. d)	Explain the Characteristics & Functions of Women Entrepreneur?	5	2	5	11

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