Code: 19A373T

IV B.Tech. I Semester Regular Examinations Nov/Dec 2022

Management science

(Common to ECE & CSE)

Max. Marks: 70 Time: 3 Hours

Answer *any five full questions* by choosing one question from each unit (5x14 = 70 Marks)

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		Marks	CO	BL

UNIT–I

1.	What do you mean by management? Explain in detail the principles of management under the Henri Fayol's administration	14M	1	2

OR

2.	Explain the principles and types of organizational structures.	14M	1	2

UNIT–II

3.	Define EOQ? What are the factors that determine EOQ?	14M	2	2

OR

4. a)	What are types of channels of Distribution?	7M	2	2
b)	What is market mix? Explain	7M	2	2

UNIT–III

5.	What do you understand about performance appraisal? Discuss the various tool and techniques of performance appraisal	14M	3	

OR

6.	Briefly explain the process of recruitment and selection process	14M	3	

UNIT–IV

7. An R&D projects has a list of tasks to be performed whose time estimates are given in the table

Activity (i-j)	Activity name	t_o	t_m	t_p
1-2	A	4	6	8
1-3	B	2	3	10
1-4	C	6	8	16
2-4	D	1	2	3
3-4	E	6	7	8

Activity (i-j)	Activity name	t_o	t_m	t_p
3-5	F	6	7	14
4-6	G	3	5	7
4-7	H	4	11	12
5-7	I	2	4	6
6-7	J	2	9	10

a .Draw the project network   b. find the critical path

	c. Find the probability that the project is completed in 19 days. if the probability is less 20%,find the probability of completing it in 24 days	14M	4	3

OR

8. a)	What are the functions of working capital?	7M	4	2
b)	State the cost of capital.	7M	4	2

UNIT–V

9. a)	Write short notes on Total Quality Management (TQM)	7M	5	2
b)	Define business ethics. Write the importance of ethics in organization	7M	5	2

OR

10. a)	What is Management Information System (MIS)?	7M	5	2
b)	State the needs for Supply Chain Management and its potential benefits.	7M	5	1

END

Code: 19A55DT-SS

IV B.Tech. I Semester Regular Examinations Nov/Dec 2022
Principles of Programming Languages
(Computer Science and Engineering)

Max. Marks: 70   Time: 3 Hours
Answer *any five full questions* by choosing one question from each unit (5x14 = 70 Marks)
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UNIT–I

1. a) Explain in detail about various languages evaluation criteria and the characteristics that affect them.   7M
   b) What are the factors that influence the basic design of Programming languages?   7M

OR

2. a) Give BNF and EBNF versions of an expression grammar?   7M
   b) Explain denotational semantics and axiomatic semantics?   7M

UNIT–II

3. a) Distinguish between name type compatibility and structure type computability.   7M
   b) Explain Short Circuit evaluation and mixed mode assignment?   7M

OR

4. a) Explain the concept of late binding and early binding.   7M
   b) Discuss in detail the design issues for arithmetic expressions.   7M

UNIT–III

5. a) Explain in detail about guarded commands.   7M
   b) Distinguish between static scoping and Dynamic scoping with example?   7M

OR

6. a) What are design issues for selection structures?   7M
   b) Define Co-routines? Write the design issues of Subprograms?   7M

UNIT–IV

7. a) What are the languages design issues for abstract data types?   7M
   b) What is meant by subprogram level concurrency? Explain.   7M

OR

8. a) What is the difference between checked and unchecked exception in JAVA?   7M
   b) How user defined exception defined in ADA?   7M

UNIT–V

9. a) Write about functions in ML and Haskell.   7M
   b) Give applications of Logic programming.   7M

OR

10. a) List the applications of functional programming languages.   7M
    b) Give comparison of Functional and Imperative Languages.   7M

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IV B.Tech. I Semester Regular Examinations Nov/Dec 2022
Software Project Management
(Computer Science and Engineering)

Max. Marks: 70   Time: 3 Hours

Answer *all five* units by choosing one question from each unit (5 x 14 = 70 Marks)

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UNIT–I

1. a) List the Boehm's top 10 quotations for conventional software management performance.   7M

   b) According Boehm, explain in detail how to staff a software project.   7M

OR

2. a) What is the procedure to define software economics? Explain modern software economics.   7M

   b) What is a process? Explain three levels of process and their attributes.   7M

UNIT–II

3. a) Describe inception and elaboration phase in detail.   7M

   b) Write a note on management artifacts and pragmatic artifacts.   7M

OR

4. State and explain the principles conventional software engineering.   14M

UNIT–III

5. Explain about technical perspective of model based software architecture.   14M

OR

6. a) Define workflow. Write the seven top level workflows with a neat diagram.   7M

   b) Write about results of major milestones in a modern process.   7M

UNIT–IV

7. a) Briefly explain about work breakdown structures.   7M

   b) Write a detail note on cost and schedule estimating process.   7M

OR

8. a) Define round trip engineering. Write process discriminators that results from differences in architectural engineering.   7M

   b). What is the need of process automation? Explain.   7M

UNIT–V

9. Explain different quality indicators with suitable example.   14M

OR

10. a) Write about the top 10 software management principles.   7M

   b) Explain next generation cost models in brief   7M

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Code: 19A571T

IV B.Tech. I Semester Regular Examinations Nov/Dec 2022
Advanced Web Programming
(Computer Science and Engineering)

Max. Marks: 70   Time: 3 Hours
Answer *any five full questions* by choosing one question from each unit (5x14 = 70 Marks)
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			Marks	CO	BL
		UNIT–I			
1.	a)	Compare XAMPP and WAMP? Explain.	6M	CO1	L2
	b)	Write a PHP program to demonstrate the passing a variable by reference	8M	CO1	L1
		OR			
2.	a)	Illustration The anatomy of a PHP Page.	8M	CO1	L3,l4
	b)	Write a PHP program to display "Welcome to PHP world".	6M	CO1	L3
		UNIT–II			
3.	a)	Explain class destructors with suitable examples and code	6M	CO2	L2
	b)	Briefly explain variables, operators and control structures of objects in PHP	8M	CO2	L2
		OR			
4.	a)	Discuss different types of Conditional statements in PHP.	9M	CO2	L2
	b)	Write short note on Abstract classes and methods, and interfaces	5M	CO2	L1
		UNIT–III			
5.	a)	Compare Working with multiple forms and Preventing Multiple Submissions of a form.	9M	CO3	L2
	b)	Explain Understanding Common Form Issues?	5M	CO3	L1
		OR			
6.	a)	Illustrate Validating form input with example	7M	CO3	L3,L4
	b)	Justify, Why the POST method more secure as compared to the GET method?	7M	CO3	L5
		UNIT–IV			
7.	a)	What is PDO? How can you connect to the DB server using PDO?	8M	CO4	L1
	b)	Write the steps in connection database to the PHP page.	6M	CO4	L1
		OR			
8.	a)	Explain with an example program how to connect to a SQL Server database from a PHP script?	8M	CO4	L1
	b)	Write short notes: i) Prepared statements ii) Retrieving data.	6M	CO4	L1
		UNIT–V			
9.	a)	Explain AJAX basic http Request and Response	6M	CO5	L2
	b)	Briefly Explain Pros and Cons of Today's Web Application Environment.	8M	CO5	L2
		OR			
10.	a)	How can send request to the server? Explain with suitable code.	6M	CO5	L1
	b)	Define client side programming. Explain briefly about AJAX	8M	CO5	L1,L2

END

Code: 19A57CT

IV B.Tech. I Semester Regular Examinations Nov/Dec 2022
Design Patterns
(Computer Science and Engineering)

Max. Marks: 70   Time: 3 Hours
Answer *any five full questions* by choosing one question from each unit (5x14 = 70 Marks)
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			Marks	CO	BL
		UNIT–I			
1.	a)	Define Design pattern? Explain the process of describing the design pattern?	7M	CO1	L1
	b)	Explain design patterns in small task MVC?	7M	CO1	L2
		OR			
2.	a)	Demonstrate how to Select a Design Pattern and how to Use a Design Pattern.	7M	CO1	L3
	b)	Explain the catalog of Design pattern?	7M	CO1	L2
		UNIT–II			
3.	a)	Demonstrate the how to designing a Document Editor	7M	CO2	L2
	b)	Discuss about embellishing the user interface in detail.	7M	CO2	L3
		OR			
4.	a)	Explain about spell checking and Hyphenation?	7M	CO2	L2
	b)	Discuss about Standards which are Supporting Multiple Look-and-Feel In designing a document	7M	CO2	L2
		UNIT–III			
5.		Explain about creational patterns and Write in detail about Builder pattern with example?	14M	CO3	L3
		OR			
6.	a)	Discuss the Motivation, Structure, Collaborations and Implementation of prototype pattern with example?	7M	CO3	L3
	b)	Explain about singleton pattern with example?	7M	CO3	L3
		UNIT–IV			
7.		Explain the concept of Bridge design pattern with example and sample code?	14M	CO4	L3
		OR			
8.	a)	Demonstrate the concept of composite design pattern	7M	CO4	L2
	b)	Illustrate the concept of façade design pattern with example?	7M	CO4	L3
		UNIT–V			
9.		Explain the implementation issues of chain of responsibility pattern with sample code.	14M	CO5	L2
		OR			
10.	a)	Illustrate the concept of visitor method design pattern with an example?	7M	CO5	L2
	b)	Describe the concept of interpreter method design pattern	7M	CO5	L2

END

Code: 19A572T

IV B.Tech. I Semester Regular Examinations Nov/Dec 2022
Internet of Things
(Computer Science and Engineering)

Max. Marks: 70   Time: 3 Hours

Answer *any five full questions* by choosing one question from each unit (5x14 = 70 Marks)
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			Marks	CO	BL
		UNIT–I			
1.	a)	Differentiate between Logical and physical design of IoT.	7M	1	2
	b)	Discuss applications of IoT	7M	1	2
		OR			
2.	a)	Discuss the common protocols used in Transport layer of IoT.	7M	1	2
	b)	Describe any IoT level-3 application in detail	7M	1	2
		UNIT–II			
3.	a)	Define IoT and M2M. State the Characteristics of IoT and M2M	7M	2	1
	b)	Illustrate the difference between IoT and M2M.	7M	2	1
		OR			
4.	a)	Discuss the design objectives of IoT architecture needed to target horizontal system of real-world services.	7M	2	2
	b)	Discuss IoT designing methodology.	7M	2	2
		UNIT–III			
5.	a)	Explain 6LoWPAN Architecture with neat sketch.	7M	3	3
	b)	What are the advantages of uIPv6 in IoT?	7M	3	2
		OR			
6.		List out Contiki supported standard protocols and uIPv6 supported protocols for IoT.	14M	3	2
		UNIT–IV			
7.	a)	Discuss the special features of Python that made it suitable for IoT when compared to other existing programming languages.	7M	4	3
	b)	Compare and contrast list, set, tuples, and dictionary.	7M	4	2
		OR			
8.	a)	Give some packages and their functionality defined in Python	7M	4	3
	b)	Discuss various file opening modes in Python.	7M	4	2
		UNIT–V			
9.	a)	How to set up Operating system in RaspberryPi. Justify how a Linux Os is useful in IoT.	7M	5	3
	b)	Write a python script for smart home.	7M	5	2
		OR			
10.	a)	Discuss Serial Peripheral Interface for data transfer in RaspberryPi.	7M	5	3
	b)	Write a python script to switch off an electronic devise if it is ideal for 20 minutes automatically.	7M	5	2

END