Hall Ticket Number :

Code: 5G184

R-15

IV B.Tech. II Semester Regular Examinations March 2019
Software Architecture
(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) Discuss about the status of software architecture.   6M

    b) What is software architecture and it was influenced by whom and explain.   8M

OR

2. What are the different levels of software design? Explain the process of innovative design in an engineering discipline.   14M

UNIT–II

3. a) What are the advantages of PIPE and FILTER architectural style   7M

    b) Explain about heterogeneous architectures.   7M

OR

4. Discuss briefly about architecture styles and reference models.   14M

UNIT–III

5. What is architectural design? Discuss briefly about software architecture in future.   14M

OR

6. Explain Interpretation in software development environment in detail.   14M

UNIT–IV

7. a) Explain about architectural design space.   7M

    b) Explain about CORBA.   7M

OR

8. Explain about patterns for distribution and patterns for interactive systems.   14M

UNIT–V

9. Explain briefly about ADL's with design styles.   14M

OR

10 a) Describe how a component based systems applied in achieving an architecture.   7M

    b) How to achieve system architecture from architecture to system?   7M

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Code: 5G68A

R-15

IV B.Tech. II Semester Regular Examinations March 2019
Disaster Management
(Common to All Branches)

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) Discuss about the statement 'Disasters occurs when Hazard meets the Vulnerability' with the help of any flow chart.   10M
    b) Differentiate the terms 'prevention' and 'mitigation' giving suitable examples.   4M

OR

2. a) Define the terminology 'Disaster, Hazard and Risk', differentiate them and relate them.   10M
    b) Define Impact and give classification.   4M

UNIT–II

3. a) Describe the earthquake about its characteristics and principle mechanism.   6M
    b) Write about the types of floods.   5M
    c) Differentiate manmade disasters vs natural disasters.   3M

OR

4. a) Discuss in detail about the vulnerable profile of India.   5M
    b) Write about the Nuclear Hazards in India.   4M
    c) Write about the ecological fragility of major rivers in India.   5M

UNIT–III

5. a) Discuss the environmental, physical, social, economical impacts due to earthquake and tsunami taking suitable examples.   10M
    b) Enlist the causes of urban disasters taking an example of any city in India.   4M

OR

6. a) Discuss the environmental, health, psycho-social impacts due to nuclear radiation and volcanoes taking suitable examples.   10M
    b) Discuss the global disaster trends of earthquakes and tsunamis.   4M

UNIT–IV

7. a) Discuss about the early warning systems available in India to avoid major loss due to tsunamis. 6M
    b) Explain the importance of Community Based Participation towards achieving DRR.   5M
    c) Write the policies available in India for DRR.   3M

OR

8. a) Draw the 'Disaster management' cycle and explain any two phases in detail.   6M
    b) Differentiate structural and non-structural measures in DRR.   4M
    c) Discuss the roles of NDMA.   4M

UNIT–V

9. a) Enlist the positive impacts on upstream side and downstream side of a dam.   5M
    b) Discuss some of the impacts on surrounding areas due to mining.   5M
    c) Enlist the recovery and reconstruction activities required after earthquake.   4M

OR

10. a) Discuss the causes of urbanization and impacts on the existing urban area.   8M
    b) Discuss any one developmental project that you like mentioning the causes of it and its immediate and long term impacts.   6M

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Code: 5G187

R-15

IV B.Tech. II Semester Regular Examinations March 2019
Design Patterns Through JAVA
(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)	Describe a design pattern?	4M
	b)	Illustrate the process of selecting and how to use a design pattern?	10M

OR

2.		Discuss about the basic design patterns?	14M

UNIT–II

3.		How to design and implement a singleton design pattern in java with example.	14M

OR

4.	a)	Define collectional design patterns?	6M
	b)	Explain about iterator design pattern and its advantages?	8M

UNIT–III

5.	a)	What are the characteristics of the decorator?	6M
	b)	Compare decorator pattern with inheritance?	8M

OR

6.		Explain the consequences of Chain of Responsibility design pattern?	14M

UNIT–IV

7.	a)	Illustrate state design pattern with example.	7M
	b)	Compare mediator design pattern with facade design pattern.	7M

OR

8.		Explain about mediator and memento design patterns with example?	14M

UNIT–V

9.	a)	What is the importance of object authenticator?	5M
	b)	How an object authenticator can be used in an application scenario.	9M

OR

10.	a)	Elaborate critical section design and its implementation in java?	8M
	b)	Discuss the advantages of concurrency patterns.	6M

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