Code : *1G187* **R-11**

IV B.Tech. II Semester Regular Examinations April 2015

Software Testing Methodologies

(Computer Science & Engineering)

Max. Marks: 70 **Time: 03 Hours**

Answer *any five* questions

All Questions carry equal marks (14 Marks each)

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1.		List out various Dichotomies and Explain.	14M
2.	a)	How a programs control structure can be represented graphically? Explain with the help of required diagrams.	8M
	b)	Explain about Multi Entry and Multi Exit Routines& fundamental path selection criteria.	6M
3.	a)	Define a transaction. Give an example.	4M
	b)	How does Transaction flows occur, illustrate with help of examples.	10M
4.		What is domain testing? Discuss applications of domain testing?	14M
5.		Write the steps involved in Node Reduction Procedure. Illustrate all the steps with help of neat labeled diagrams	14M
6.		What is decision table and how does it is useful in testing. Explain it with help of an example.	14M
7.	a)	Differentiate between good state graphs and bad state graphs.	7M
	b)	What are principles of state testing? Explain its advantages and disadvantages.	7M
8.	a)	Write about building tools of graph matrices.	7M
	b)	What are relations and give their properties.	7M

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Code : *1G184*

R-11

IV B.Tech. II Semester Regular Examinations April 2015

Virtual Reality

(Computer Science & Engineering)

Max. Marks: 70 **Time: 03 Hours**

Answer *any five* questions

All Questions carry equal marks (14 Marks each)

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1.		Explain five components of VR system in detail	14M
2.	a)	Discuss about three dimensional positional trackers	7M
	b)	Explain about navigational and manipulation interfaces.	7M
3.		Explain about graphic displays	14M
4.	a)	What is modeling? What are various factors that helps in modeling?	4M
	b)	Discuss the importance of Geometric modeling	10M
5.		Discuss human factors methodologies and Terminology in detail	14M
6.		Discuss about Robotic applications using VR.	14M
7.	a)	Discuss the importance Java3D primitives	4M
	b)	Discuss the process of using Lathe to make shapes	10M
8.		Explain about 3D sprites processing with appropriate examples?	14M

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Code : *1G181*

R-11

IV B.Tech. II Semester Regular Examinations April 2015

Artificial Neural Networks

(Computer Science & Engineering)

Max. Marks: 70 **Time: 03 Hours**

Answer *any five* questions

All Questions carry equal marks (14 Marks each)

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1.	a)	What is a neural network?	4M
	b)	Explain structure of neuron?	5M
	C)	Explain the characteristics of neural networks?	5M
2.	a)	Explain about synaptic dynamic models?	7M
	b)	Explain about Recall in Neural Networks?	7M
3.		Explain about pattern recognition taken by functional units?	14M
4.	a)	Write about Hebb's law and widrow's laws in weights by learning?	8M
	b)	Explain about pattern association problem?	6M
5.	a)	Explain about the Hopfield model?	6M
	b)	Write about state transition diagram in pattern storage networks?	8M
6.	a)	Discuss about basic competitive learning?	7M
	b)	Explain about feedback layer in competitive learning networks?	7M
7.	a)	Explain about bidirectional associative memory?	4M
	b)	Write about multidirectional associative memory?	5M
	c)	Explain about temporal associative memory?	5M
8.	a)	Write about recognition of consonant-vowel (cv) segment?	7M
	b)	Explain about recognition of stop-consonant vowel utterances in Indian languages?	7M

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Code : *1G182*

R-11

IV B.Tech. II Semester Regular Examinations April 2015

Design Patterns

(Computer Science & Engineering)

Max. Marks: 70 **Time: 03 Hours**

Answer *any five* questions

All Questions carry equal marks (14 Marks each)

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1. a) What is Design Pattern? Explain the step by step approach to apply a design pattern Effectively? 7M

   b) Explain various causes for redesign? 7M

2. a) Elucidate about the motivation and applicability of Accessor Methods? 7M

   b) Describe several issues to be considered when applying the Constant Data Manager? 7M

3. a) Sketch the structure of Abstract factory pattern? 7M

   b) Explain key consequences of the Builder pattern? 7M

4. List out various Collection patterns? Explain about Composite pattern? 14M

5. a) Describe implementation issues to be considered in Chain of Responsibility pattern? 7M

   b) Write in detail about Proxy structural pattern? 7M

6. a) Summarize Memento patterns? 7M

   b) Discuss implementation mechanism of Observer pattern? 7M

7. Explain the participants, Collaborations, implementation and sample code of the Template Method? 14M

8. Give the structure, sample code, known uses and related patterns of the Concurrency pattern? 14M

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