Code : 1G471

R-11

IV B.Tech. I Semester Regular & Supplementary Examinations Nov/Dec 2015

Multimedia and Application Development

(Information Technology)

Max. Marks: 70   Time: 03 Hours

Answer *any five* questions

All Questions carry equal marks (14 Marks each)

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1.	a)	Explain in detail about:	
		(i)Video Editing	
		(ii) Multimedia Authoring	6M
	b)	Briefly explain file formats of GIF, JPEG.	8M
2	a)	Define and explain in detail about MIDI.	14M
3.	a)	Write different Action Script features.	7M
	b)	What is type checking? Give suitable example in action script.	7M
4.		Define exception? Differentiate with compile time errors and also give one example.	14M
5.		Explain in detail about Components with Action Script Movie Clip Subclasses.	14M
6.	a)	Write about Image compression Standards:	
		(i) The JPEG	
		(ii) The JPEG2000 Standard	6M
	b)	Explain Set Partitioning In Hierarchical Trees (SPIHT).	8M
7	a)	Describe Any two Basic Audio Compression Techniques	6M
	b)	Explain briefly about:	
		(i) Hybrid Excitation Vocoders	
		(ii) Multiband Excitation Linear Predicative (MELP)	8M
8.		Explain in detail about Digital Wireless Networks.	14M

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Code : 1G473

R-11

IV B.Tech. I Semester Regular & Supplementary Examinations Nov/Dec 2015
Cryptography and Network Security
(Information Technology)

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

Answer *any five* questions
All Questions carry equal marks (14 Marks each)
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1.	a)	Define Security attack? Explain Security Services with examples	7 M
	b)	Differentiate TCP session hijacking and UDP hijacking	7 M
2.	a)	List conventional Encryption algorithms with examples	7 M
	b)	Demonstrate Secure Hash Functions	7 M
3.	a)	Illustrate Diffie-hellman key exchange scheme with example.	7 M
	b)	Demonstrate X.509 Directory Authentication Service.	7 M
4.	a)	Discriminate PGP message generation and message reception.	7 M
	b)	Explain Pretty Good Privacy (PGP) certificate processing.	7 M
5.	a)	Write in detail about Combining Security Associations	7 M
	b)	Sketch IP Security Architecture	7 M
6.	a)	Distinguish between SSL vs. TLS	7 M
	b)	Mention Web Security Requirements	7 M
7.	a)	Describe SNMP Architecture.	7 M
	b)	Distinguish between SNMP, SNMPV1	7 M
8.	a)	Explain Intrusion Detection Systems with examples	7 M
	b)	Give Examples of Trusted Systems.	7 M

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Code : 1G472

R-11

IV B.Tech. I Semester Regular & Supplementary Examinations Nov/Dec 2015
Mobile Communications
(Common to CSE & IT)

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

Answer *any five* questions
All Questions carry equal marks (14 Marks each)
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1. a) Explain how the various location dependent services can be offered using mobile communication. 　7M
   b) What kind of security and new data services are available in GSM? 　7M

2. a) Explain Time Division Multiplexing with neat diagrams 　7M
   b) What is Code Division Multiplexing and explain how the multiplexing is incorporated in it. 　7M

3. a) Explain how Dynamic Host Configuration Protocol is working. 　7M
   b) Describe how the packet delivery is happening in a mobile network. 　7M

4. a) What is snooping TCP? What are its advantages and disadvantages? 　7M
   b) Explain Indirect TCP along with its pros and cons. 　7M

5. a) Explain any 2 protocols that are frequently used in MANET. 　7M
   b) List the various difficulties faced while routing packets in MANET 　7M

6. a) Explain the structure of the Bluetooth packet format in detail 　7M
   b) What is J2ME? How is it different from J2SE? 　7M

7. a) Write a note on transactional models. 　7M
   b) Narrate the various quality of service issues faced in databases. 　7M

8. a) Explain some of the widely used indexing mechanisms 　7M
   b) Elaborate how push and pull based mechanisms are working 　7M

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Code : 1G177

R-11

IV B.Tech. I Semester Regular & Supplementary Examinations Nov/Dec 2015
Network Programming
(Information Technology)

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

Answer *any five* questions
All Questions carry equal marks (14 Marks each)
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1.	a)	Write a note on TCP port number and concurrent server.	8M
	b)	Discuss in detail about Standard internet services.	6M
2.	a)	Get in detail about byte ordering and manipulation functions.	7M
	b)	Describe in detail about close function, getsocketname, getpeername functions.	7M
3.	a)	Explain in detail about terminate and POSIX signal handling functions.	7M
	b)	Write about TCP output and server process termination.	7M
4.	a)	Get in detail about getsockopt and setsockopt.	7M
	b)	What is TCP socket and write about TCP socket options.	7M
5.	a)	Write about lack of flow control with UDP.	7M
	b)	Discuss in detail about UDP Echo client-server program.	7M
6.	a)	Explain the purpose of using function and IPV6 support.	7M
	b)	Discuss about gethostbyname function.	7M
7.	a)	Explain about pipes and FIFO streams and messages.	8M
	b)	Write about IPC and message queues.	6M
8.	a)	Explain about Pseudo terminals.	7M
	b)	Get in detail about Terminal modes.	7M

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Code : 1G477

R-11

IV B.Tech. I Semester Regular & Supplementary Examinations Nov/Dec 2015
Soft Computing
(Information Technology)

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

Answer *any five* questions
All Questions carry equal marks (14 Marks each)
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1. Classify problems in AI domain and explain on Generate and Test heuristic in detail   14M

2. Demonstrate application of the following with an example each
    a. Constraint Satisfaction
    b. Means End Analysis   14M

3. Explain in detail on a given pattern matching algorithm in detail   14M

4. What is Hamming Network? Explain the scenarios for usage of supervised
    learning network and unsupervised learning network in general   14M

5. a) Explain with examples on the differences between Fuzzy vs Crisp set   7M

    b) List down the Fuzzy-set operations   7M

6. Illustrate the following steps with examples
    a. Fuzzification
    b. Defuzzification
    c. Membership functions   14M

7. Discuss fuzzy business decision making in detail   14M

8. Explain in brief on Internet search technique in detail   7M

    Explain in detail on Traveling Salesman Problem with its solution approach   7M

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Code : 1G474   R-11

IV B.Tech. I Semester Regular & Supplementary Examinations Nov/Dec 2015
Software Process and Project Management
(Information Technology)

Max. Marks: 70   Time: 03 Hours

Answer *any five* questions
All Questions carry equal marks (14 Marks each)
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1.   Explain the basic Framework described in the Waterfall Model along with five
        necessary improvements in that approach.   14M

2. a)   Identify three levels of process and their attribute in improving software
        Economics   7M

   b)   Classify the important Trends in improving Software Economics along with
        Cost model parameters   7M

3. a)   Summaries principles of Conventional Software Engineering   10M

   b)   Explain top five Principles of Modern Software management   4M

4. a)   Differentiate the two stages of Life cycle in Engineering stage emphasis and
        Production stage emphasis   4M

   b)   Illustrate the typical Software development plan outline   10M

5. a)   Discuss the seven top-level Workflows in the Lifecycle   7M

   b)   Summaries the artifacts of the design set in Model based architecture ,
        including the architecture view & architecture description   7M

6. a)   Describe the evaluation of planning fidelity in the WBS overs the life cycle.   4M

   b)   Explain Cost and Schedule estimation Process in Planning.   10M

7. a)   Explain about Software architecture team activities and Software
        assessment team activates   10M

   b)   What is the need for metrics and their purpose and perspectives   4M

8. a)   Summaries default project organization & maps project-level roles and
        responsibilities   7M

   b)   Compare and construct schedule discrimination for Small scale project
        versus large scale project   7M

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