**Computer Science**

**Advanced network programming**

**PART – A (4\*5=20M)**

1. Explain Inter process communication (IPC) mechanisms.
2. Explain about semaphores. Explain unix system V APIS for semaphores.
3. Explain Shared memory concept.
4. Write a short note on message Queues.

**PART – B (2\*10=20M)**

1. (a) Explain about signal generation & handling concept.

(b) Discuss about the signal functions.

1. (a) Explain the network progressing in java – network basics.

(b) Explain TCP sockets & UDP sockets.

**Advanced Data bases**

**PART – A (4\*5=20M)**

1. Briefly discuss Transaction management.
2. Explain the crash Recovery concept.
3. Explain the concurrency control concept.
4. Write a short note on B+ trees.

**PART – B (2\*10=20M)**

1. Explain overview of storage & Indexing concepts.
2. Briefly Discuss about Distributed data bases.

**Web services & Service Oriented Architecture**

**PART – A (4\*5=20M)**

1. Explain SOA development Life cycle
2. Explain SOAP HTTP binding & SOAP communication model & error handling in SOAP
3. Explain the role of meta data in SOA & discuss WS-meta data Exchange.
4. Explain Enterprise management Frame work & standard distributed management.

**PART – B (2\*10=20M)**

1. Briefly Discuss overview of XML.
2. Explain Registering and Discovering services. & Explain UDDI Architecture , UDDI with WSDL concept.

**Wireless Networks & Mobile Computing**

**PART – A (4\*5=20M)**

1. Explain mobile network layer concept.
2. Explain mobile transport layer concept.
3. Explain TCP over 2.5G/3G wireless networks.
4. Write a short note on DHCP.

**PART – B (2\*10=20M)**

1. Explain Global System for Mobile communications (GSM)
2. Explain : (a)GPRS (b)UMTS (c)LTE

**Database security (ELECTIVE-III)**

**PART – A (4\*5=20M)**

1. Explain SORION model for the protection of new Generation database systems.
2. Explain the ORION model JAJODIA for the protection of active data bases.
3. Explain the KOGAN’S model for the protection of active data bases.
4. Explain about IDES & RETISS systems.

**PART – B (2\*10=20M)**

1. Briefly discuss security software design concept.
2. Explain about Statistical database protection & Intrusion detection systems.

**Semantic web & Social networks (ELECTIVE-IV )**

**PART – A (4\*5=20M)**

1. Explain Semantic web applications & services.
2. Explain Semantic search Technology & e-learning.
3. Explain Ontology Libraries & Ontology Mapping.
4. Explain about network analysis concept.

**PART – B (2\*10=20M)**

1. Explain Ontology Engineering.
2. Briefly discuss Social network analysis & semantic web concept.