USN

Fifth Semester MCA Degree Examination, June/July 2018 Service Oriented Architecture (SOA)

Time: 3 hrs. Max. Marks:100

Note: Answer any FIVE full questions.

- 1 a. Explain the principles of SOA and highlight the common characteristics of contemporary SOA. Explain any three characteristics in detail. (10 Marks)
 - b. What is an architecture? How can service oriented Architecture (SOA) be compared with client server architecture, explain. (10 Marks)
- 2 a. Define WSDL. Explain service description using WSDL. (08 Marks)
 - b. Explain the different Message Exchange Patterns (MEPs) with neat diagram. (06 Marks)
 - c. Explain atomic and ACID transactions with example. (06 Marks)
- 3 a Explain the structure of messaging with SOAP. (Simple object access protocol). (05 Marks)
 - b. What is service model? Explain business, utility and controller service models with neat diagrams. (10 Marks)
 - c. What is service activity? Explain. (05 Marks)
- 4 a. Describe orchestration with a neat diagram. Also discuss about choreography with a neat diagram. (10 Marks)
 - b. Explain WS-addressing in detail with an example. (10 Marks)
- 5 a. Explain the workflow logic for the TLS timesheet submission process and map out interaction scenarios. (05 Marks)
 - b. Briefly explain WS-BPEL language basics.

(10 Marks)

c. Discuss about WS-Security concepts.

- (05 Marks)
- 6 a. Explain reference model of web-based Java EE enterprise application with a neat diagram.
 (10 Marks)
 - b. Explain reference model of web-based .Net EE enterprise application with a neat diagram. (10 Marks)
- 7 a. Explain service oriented business process design with appropriate steps. (10 Marks)
 - b. List the best principles that can be applied in the architecture of enterprise application.

(10 Marks)

- **8** Write short notes on:
 - a. SOA timeline
 - b. Reliable messaging
 - c. Service orientation and object orientation
 - d. Policies and framework.

(20 Marks)

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