USN ☐☐☐☐☐☐-☐☐☐☐ **13MCA545**

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)**

* * * * *