



**MCA DEGREE EXAMINATIONS: MAY 2018**

(Regulation 2015)

Fourth Semester

**MASTER OF COMPUTER APPLICATIONS**

P15CAT403: Service Oriented Architecture

**COURSE OUTCOMES**

**CO1:** Compare different IT architecture.

**CO2:** Analyze and design SOA based applications.

**CO3:** Implement web service and obtain the realization of SOA.

**CO4:** Implement RESTful Services.

**CO5:** Design and implement SOA based Application Integration using BPEL.

**Time: Three Hours**

**Maximum Marks: 100**

**Answer all the Questions:-**

**PART A (10 x 1 = 10 Marks)**

1. Assertion (A): Technical Architecture focus on specific technologies. CO1 [K<sub>1</sub>]  
Reason (R): It is based on elements that can be constructed through programming,  
design pattern.
- a) Both A and R are Individually true and R is the correct explanation of A      b) Both A and R are Individually true but R is not the correct explanation of A  
c) A is true but R is false      d) A is false but R is true
2. \_\_\_\_\_ is a directory that contains information about available service. CO1 [K<sub>1</sub>]  
a) Service Contract      b) Service Registry  
c) Data Contact      d) Enterprise Service Bus
3. Data Services can be defined for data manipulation through CO1 [K<sub>2</sub>]  
i) Create  
ii) Update  
iii) Retrieve  
iv) Delete  
a) i-ii-iii-iv      b) ii-i-iii-iv  
c) i-iii-ii-iv      d) i-iv-iii-ii

4. Matching list I (vendors) with list II(Tools) and select the correct answer using the code given below CO2 [K<sub>3</sub>]

List I	List II
A. IBM	i. Service Mix
B. Apache	ii. WebSphere
C. IONA	iii. Aqua logic Service Bus
D. BEA	iv. Artix ESB

- |    |     |    |     |     |  |
|----|-----|----|-----|-----|--|
|    | A   | B  | C   | D   |  |
| a) | ii  | i  | iii | iv  |  |
| b) | iii | iv | ii  | i   |  |
| c) | ii  | iv | iii | i   |  |
| d) | ii  | i  | iv  | iii |  |
5. Assertion (A): Service model is on account of the principle of reuse. CO2 [K<sub>1</sub>]  
Reason (R): Principle eliminates duplication of functionality and improve productivity, quality and efficiency.
- a) Both A and R are Individually true and R is the correct explanation of A      b) Both A and R are Individually true but R is not the correct explanation of A  
c) A is true but R is false      d) A is false but R is true
6. \_\_\_\_\_ involves conducting analysis and research of the current set of business processes. CO2 [K<sub>2</sub>]
- a) TO-BE Strategic      b) AS-IS Assessment  
c) Due Diligence      d) Repository
7. The architecture of an application has CO2 [K<sub>2</sub>]
1. Business layer
  2. Presentation layer
  3. Service layer
  4. Integration layer
- a) 1,3,2,4      b) 1,2,4,3  
c) 2,1,3,4      d) 2,3,4,1
8. \_\_\_\_\_ sends the HTTP GET request that has been configured using the Web service's URL. CO2 [K<sub>1</sub>]



29. Explain JAXB data binding with example. CO2 [K<sub>3</sub>]  
30. List down the characteristics of Restful web services. CO2 [K<sub>3</sub>]

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**Answer any TWO Questions**  
**PART D (2 x 10 = 20 Marks)**

31. Discuss different levels of solution architecture for enterprise applications. CO3 [K<sub>3</sub>]  
32. Explain SOA governance with development of services. CO3 [K<sub>2</sub>]  
33. Write a procedure to create a RESTful web services with and without using JWS. CO5 [K<sub>5</sub>]

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