


National University of Computer and Emerging Sciences, Lahore Campus

	Course Name:	Web Programming	Course Code:	CS-406
	Program:	BS(Computer Science)	Semester:	Fall 2017
	Duration:	180 Minutes	Total Marks:	100
	Paper Date:		Weight	40%
	Section:	ALL	Page(s):	2
	Exam Type:	Final		

Student : Name: _____ **Roll No.** _____ **Section:** _____

Instruction/Notes: 1. Please answer all the questions (including multiple choice) on the answer book provided.

1- Key elements of a Request stream are?

- a-A status code
- b-The page to access (URL)
- c-Http method

Marks 2

2- Which of the following does the Servlet do?

- a- Starts a new thread to handle requests.
- b- Adds HTML to the response object.
- c-Manages lifecycles.

Marks 2

3-Return type of an Attribute is :

- a-String
- b-Double
- c- Object
- d-Null

Marks 2

4-Which are valid JSP implicit variables?

- a-stream
- b-context
- c-exception

Marks 2

5- Which show valid usage of EL implicit variables?

a-`${requestDispatcher.foo}`

b-`${iParam.foo}`

c-`${pageContext.foo}`

Marks 2

6- You have been given a project to create a Hospital Management System. You need to manage the following in the web application:

- Patient Profile.
- Room Booking functionality.
- Schedule an appointment with doctor.
- Maintain diagnosis history of patient.

- Draw a high level architecture diagram of how you would implement such a system.
- Draw a class diagram of related classes needed for this project.
- Briefly describe each component of your proposed architecture.

Marks 30

7- Write Ajax code to display an xml document in a webpage to the client. You can assume any name for the xml document. Also assume the xml document is on the server in the Resources folder.

Marks 20

9-What are the benefits of using web services? In a SOAP message packet what are the different parts, explain in detail each part?

Marks 20

10- You are given a page `updatePrivateData.jsp`. This should be accessible to only the manager in a web application. The system also has Admin and Guest User roles. Write the declarative code to enable only the manager to access the above mentioned page. Admin and Guest User should not be able to access this page. Explain your answer as well describing how each component in security works.

Marks 20