


National University of Computer and Emerging Sciences, Lahore Campus

	Course Name:	Web Programming	Course Code:	CS-406
	Program:	BS(Computer Science)	Semester:	Fall 2016
	Duration:	180 Minutes	Total Marks:	100
	Paper Date:	19-May-17	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-Which of the following component Manages lifecycles?

- a-Web Server.
- b-Container
- c-Servlet

Marks 2

2- Which of the following component has a reference to the response object(select all, which are correct)?

- a-Web Server.
- b-Container
- c-Servlet

Marks 2

3-Given req is a HttpServletRequest, which gets a binary input stream:

- a-BinaryInputStream s = req.getInputStream();
- b- ServletInputStream s = req.getInputStream();
- c- BinaryInputStream s = req.getBinaryStream();
- d- ServletInputStream s = req.getBinaryStream();

Marks 2

4-You can override the *init()* method in a servlet.

- a- True
- b-False

Marks 2

5- If an HTML form does not explicitly say "method=POST", the request is still sent as a POST.

a-True

b-False

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 information
- Doctors information
- Diagnosis
- Prescriptions
- Appointments.

The web application should be able to manage patient information. The doctor should be able to enter diagnosis and prescriptions in the web application.

- 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 a Java Script functions which would validate the following. Write a separate function for each of the following fields:

- id card number [id card should be of the following format: 111111-111111-1]
- email [email be should be of following format: email@domain.com]
- Name [Name should alphabets only]

Marks 20

8- What is Ajax? What are the benefits of Ajax? Describe the states an Ajax object has and what are they used for.

Marks 20

9-What are the different ways to parse XML. Briefly describe how DOM parsing works.

Marks 10

10- Explain in detail the steps of the communication that occurs for Authentication, between a browser and a container when BASIC security is applied.

Marks 10