INSTITUTE OF AERONAUTICAL ENGINEERING
(Autonomous)
Dundigal, Hyderabad - 500 043

COMPUTER SCIENCE AND ENGINEERING

TUTORIAL QUESTION BANK

Course Name	:	Web Technologies
Course Code	:	A60512
Class	:	III B. Tech II Semester
Branch	:	Computer Science and Engineering
Year	:	2015 – 2016
Course Faculty	:	Ms.S.Swarajya Laxmi ,Associate Professor Mr.Santhosh patil ,Assistant Professor

OBJECTIVES

To meet the challenge of ensuring excellence in engineering education, the issue of quality needs to be addressed, debated and taken forward in a systematic manner. Accreditation is the principal means of quality assurance in higher education. The major emphasis of accreditation process is to measure the outcomes of the program that is being accredited.

In line with this, Faculty of Institute of Aeronautical Engineering, Hyderabad has taken a lead in incorporating philosophy of outcome based education in the process of problem solving and career development. So, all students of the institute should understand the depth and approach of course to be taught through this question bank, which will enhance learner's learning process.

PART – A (SHORT ANSWER QUESTIONS)

S. No.	Questions	Bloom's Taxonomy Level	Course Outcome
	UNIT - I		
1	**What** is PHP?	Remember	2
2	**What** is the difference between $name and $$name?	Remember	2
3	**What** are the differences between Get and post methods.	Remember	2
4	**How** can we create a database using PHP and MySQL?	Remember	10
5	**What** is the use of header() function in PHP ?	Remember	2
6	**How** can we get second of the current time using date function?	Remember	3
7	**List** out the predefined classes in PHP?	Remember	3
8	**What** type of inheritance that PHP supports?	Remember	2
9	**What** are the advantages/disadvantages of MySQL and PHP?	Remember	10
10	**What** is the difference between PHP and Javascript?	Remember	3
	UNIT – II		
1	**Define** XML? What are the advantages of xml?	Remember	4
2	**List** the XML syntax rules in detail.	Remember	4
3	**Define** an xml scheme show how an XML Scheme can be created?	Remember	4
4	**Explain** a brief note on XML parsers?	Understand	1
5	**Define** how it is different from HTML?	Remember	4
6	**Explain t**he purpose of XML schema?	Understand	1
7	**List** out the advantages of schema over DTD?	Remember	1
8	**Explain** about XML parsing done with SAX?	Understand	4
8	**List** out the three flavours of Document Type declaration?	Remember	10

10	**Distinguish** between SAX AND DOM?	Remember	4
	UNIT – III		
1	**List** out difference between web server and application server?	Remember	1
2	**Which** HTTP method is non-idempotent?	Remember	1
3	**Explain** difference between GET and POST method?	Understand	2
4	**List** out MIME Types?	Remember	2
5	**Discuss** the web application and what is its directory structure?	Remember	1
6	**Explain** about Servlet?	Understand	9
7	**List** out various phases of Servlet life cycle?	Remember	9
8	**Build** a Servlet program to illustrate parameter reading and parameter initializing. ?	Apply	9
9	**Explain** how to override service () method?	Understand	9
10	**List** the methods defined in HttpServletRequest?	Remember	9
11	**How** do you get ServletContext reference inside Servlet?	Remember	9
12	**Which** open source tag library have you used?	Remember	10
13	**What** are the differences between GET and POST method in HTTP protocol?	Remember	10
14	**List** different types of statements in JDBC?	Remember	10
15	**Explain** different types of JDBC drivers?	Understand	10
	UNIT – IV		
1	**What** are the differences between custom JSP tags and Serlets?	Remember	6
2	**Explain** the difference between JSP include directive and JSP include action.	Understand	6
3	**Explain** about Scriptlet tag?	Understand	6
4	**Explain** how to use JavaBeans from JSP pages.	Understand	8
5	**Explain** about various implicit objects?	Understand	8
6	**How** many JSP scripting elements and what are they?	Remember	9
7	**How** JSP pages the preferred API for creating a web-based client program?	Remember	9
8	**Define** Tag library descriptor (TLD)?	Remember	6
9	**Explain** the categories of JSP tags - Directives, Scripting elements, Actions?	Understand	9
10	**List** out differences between including action and include directive in JSP?	Remember	6
11	**How** do you define application wide error page in JSP?	Remember	9
12	**Explain** how to load the drivers?	Understand	10
13	**Explain** how to insert an image file (or other raw data) into a database?	Understand	10
14	**List** the Java packages which contains JDBC classes and interfaces, Java.SQL, Javax.SQL	Remember	9
15	**Define** how to open a database connection using JDBC.	Remember	10
	UNIT – V		
1	**Explain** how to embed JavaScript code in an HTML document.	Understand	1
2	**Define** arrays in JavaScript?	Remember	5
3	**List** the differences between Client side JavaScript Server side JavaScript?	Remember	9
4	**Define** how to create a Date Object?	Remember	1
5	**Explain** dynamic html? What is the main difference between DHTML and HTML?	Understand	1
6	**Explain** the various control statements available with JavaScript.	Understand	5
7	**Explain** about a function using function constructor?	Understand	5
8	**Explain** about the Accessing Elements using JavaScript?	Understand	5
9	**Define** a boolean operator that a JavaScript support?	Remember	5
10	**Explain** about String object in JavaScript?	Understand	5

PART – B (LONGANSWER QUESTIONS)

S. No.	Questions	Bloom's Taxonomy Level	Course Outcome
	UNIT-I		
1	**What** are the different types of errors in PHP?	Remember	2
2	**What** is the functionality of the function strstr and stristr?	Remember	2
3	**Explain** about various datatypes in PHP.	Understand	3
4	**Explain** about Arrays in PHP.	Understand	2
5	**List** and Explain the string functions in PHP.	Remember	2
6	**List** the statements that are used to connect PHP with MySQL.	Remember	10
7	How PHP is different from PHP Script? **Explain**.	Understand	3
8	**Explain** PHP form processing with an example.	Understand	2
9	**How** can I retrieve values from one database server and store them in other database server using PHP?	Remember	10
10	**What** are the differences between Get and post methods in form submitting. Give the case where we can use get and we can use post methods?	Remember	3
	UNIT – II		
1	**Explain** and show how XML is useful in defining data for web applications.	Understand	1
2	**Explain** the various terms related to Document Type Definition.	Understand	4
3	**Design** an XML schema for hospital information management. Include every feature available with schema.	Remember	4
4	**Explain** how styling XML with cascading style sheets is done for the library information domain.	Understand	4
5	**List and Explain** the important features of XML which make it more suitable than HTML for creating web related services.	Understand	4
6	**Define** an xml scheme to show how an XML Scheme can be created	Remember	4
7	**Define** Attributes in XML .Also different types of attributes	Remember	5
8	**List** the elements in XML .Also different types of content of Elements.	Remember	4
9	**How** do you define the elements of an XML document in an XML Schema?	Remember	4
10	**How** do you set default and fixed values for simple Elements?	Remember	1
	UNIT – III		
1	**Define** a session tracker that tracks the number of accesses and last access data of a particular web page.	Remember	1
2	**What** is the security issues related to Servlets.	Remember	5
3	**Explain** how HTTP POST request is processed using Servlets	Understand	9
4	**Explain** how cookies are used for session tracking?	Understand	7
5	**Explain** about Tomcat web server.	Understand	9
6	**What** is Servlet? Explain life cycle of a Servlet?	Remember	9
7	**What** are the advantages of Servlets over CGI	Remember	9
8	**What** is session tracking? **Explain** different mechanisms of session tracking?	Understand	10
9	**What** is the difference between Servlets and applets?	Remember	9
10	**What** is the difference between doGet() and doPost()?	Remember	9
	UNIT - IV		
1	**Explain** about the JSP processing	Understand	9
2	**Explain** the mechanism to include resources dynamically and to forward request to other JSPs?	Understand	9

3	**Explain** about JSP Elements?	Understand	9
4	**List** the different Action Tags used in JSP with their functionality	Remember	1
5	**Explain** the types of Scripting tags and Directive tags in JSP.	Understand	5
6	**Explain** about the usage of JavaBean Component in JSP.	Remember	8
7	**Explain** briefly about the Problem with Servlets	Understand	6
8	**Describe** the Anatomy of JSP Page	Remember	9
9	**Explain** the MVC architecture and write a JSP program which prints the current date?	Understand	6
10	**List** the types of JSP Implicit Objects.	Remember	9
11	**How** application data can be shared in JSP. Explain.	Remember	9
12	**Explain** sharing and application data in JSP application Development	Understand	9
13	**List** the methods in request object.	Remember	8
14	**Explain** about the JSP Directive Elements? Explain each one of them in detail?	Understand	9
15	**Explain** JSP application design with suitable example?	Understand	9
	UNIT – V		
1	**Build** a JavaScript program to convert distance in kilometers, miles to meters or inches	Apply	5
2	**Build** a java script to verify a phone number, email-id and date formats.	Apply	5
3	**Compare** and contrast HTML and DHTML with suitable examples.	Understand	1
4	**Explain** the need for scripting languages in web programming.	Understand	5
5	**Explain** the features of Java Script.	Understand	5
6	**What** is JavaScript? Write the features of JavaScript?	Remember	5
7	Write the code in JavaScript to open a new window when a	Remember	1
8	**Explain** any three objects of JavaScript	Understand	5
9	**What** is form validation? Explain with example?	Remember	5
10	**What** is an event? How can we handle events in JavaScript?	Remember	5

PART – C (PROBLEM SOLVING AND CRITICAL THINKING QUESTIONS)

S. No.	Questions	Bloom's Taxonomy Level	Course Outcome
	UNIT - I		
1	**List and Explain** PHP development framework	Understand	2
2	**Explain** about database connectivity with PHP with suitable examples.	Understand	3
3	**How** strings are declared in PHP? Explain string operators.	Remember	2
4	**How** array is declared in PHP. Also explain various types of array with proper examples.	Remember	2
5	**Build** simple calculator using PHP.	Apply	3
6	**Build** a program using PHP that creates the web application for result publication	Apply	3
7	**Build** application to send a email using PHP	Apply	3
8	**Build** a shopping cart application using PHP with use of cookies.	Apply	2
9	**Explain** about the control statements in PHP with example.	Understand	2
10	**Explain** about cookies in PHP with example.	Understand	3
	UNIT - II		
1	**Build** an XML File using the following information structure including DTD section appropriately:- <Accounting> <Inventory> <Inventory_item> <Invoices> <Invoice> <Item> <Sales> Note: a) Inventory_Item has an attribute namely id (Required). b) Inventory_Item, Item & Sales can be Empty too. c) Item has 3 attributes namely id (Required), qty & price. Sales has an attribute namely ids (Required).	Apply	4
2	**Convert** the given information into a XML file and then convert this XML File data into HTML file as it is. <table><tr><td>Roll No.</td><td>Name</td><td>Subject</td><td>Marks</td></tr><tr><td>11</td><td>Ram</td><td>Web Tech</td><td>78</td></tr><tr><td>12</td><td>Shyam</td><td>DBMS</td><td>65</td></tr><tr><td>13</td><td>Krishna</td><td>SE</td><td>82</td></tr></table>	Understand	1
3	**Define** the Document type Definition (DTD) in XML. What is difference between Internal and External DTD?	Remember	4
4	**What** do you mean by XML? What are its Differences and similarities from HTML & CSS? Also explain the concept of Entities & Attributes in XML?	Remember	4
5	**Build** a document with two links to an external document. The first link should lead to the beginning of the external document. The second link should lead to a particular section in the external document.	Apply	1
6	**How** to write and read XML documents and How XML structures documents?	Remember	4

7	**How** and why XML was developed. typical applications of XML, with examples	Remember	4
8	**Build** XSLT code to display Employee details in a table from which is stored in XML.	Apply	4
9	**Explain** how data types are represented in XML Schema.	Understand	4
10	Get the students' details like name, register number and mark using form. Generate DTD for this XML document. <table><tr><td></td><td>Regno</td><td>Mark</td></tr><tr><td>Xyz</td><td>1000</td><td>90</td></tr><tr><td>Abc</td><td>1001</td><td>80</td></tr><tr><td>Pqr</td><td>1002</td><td>87</td></tr><tr><td>Rst</td><td>1003</td><td>89</td></tr></table> **Generate** the collected information in the descending order of marks using XSLT. Results should be displayed in the above format. Write a source code and explain the same.	Remember	4

UNIT - III

1	**Build** a Servlet that generates HTML page and explain the process of generation of HTML page.	Apply	1
2	**List** and explain the classes and interfaces of javax.servlet.http package.	Understand	6
3	**Build** a Servlet that handles HTTP get Request.	Apply	6
4	**Describe** about session tracking with relevant code snippet.	Knowledge	9
5	"Servlet offer several advantages over CGI". **Justify.**	Evaluate	6
6	**Explain** about Security Issues in Servlet	Understand	6
7	**Explain** about Servlet? Explain lifecycle of a Servlet. Illustrate with an example program.	Understand	9
8	**Build** a Servlet program to illustrate parameter reading and parameter initializing.	Apply	6
9	**Explain** Cookies session tracking with relevant code snippet.	Understand	8
10	**List** the methods defined in HttpServletRequest.	Remember	9

UNIT - IV

1	**Explain** about the JSP processing	Understand	9
2	**Explain** the mechanism to include resources dynamically and to forward request to other JSPs?	Understand	9
3	**Explain** about JSP Elements?	Understand	9
4	**List** the different Action Tags used in JSP with their functionality	Remember	1
5	**Explain** the types of Scripting tags and Directive tags in JSP.	Understand	6
6	**Interpret** about the usage of JavaBeans Component in JSP.	Understand	8
7	**Describe** the Anatomy of JSP Page	Knowledge	9
8	**Describe** the MVC architecture and write a JSP program which prints the current date?	Knowledge	9
9	**Explain** JSP application design with suitable example?	Understand	9
10	**Explain** about JSP with a Bean in the session scope.	Understand	8

UNIT - V

1	**Build** a JavaScript to analyze a subject code for subject in a semester. The subject code may be visualized like 12 CS 43 where '12' represents year of syllabus, 'CS' – indicates the engineering discipline as Computer Science and Engineering and '4' gives the semester details as 4 them, and '3' gives the subject information.	Apply		1
2	**Build** a JavaScript that displays the as per the following: (calculates the squares and cubes of the numbers from 0 to 10)	Apply		5
3	Insert an image into a webpage. **Build** a script which displays a message when the mouse is over the image.	Apply		1
4	**Interpret** how JavaScript can handle the events? "JavaScript is event driven". What is meant by an event?	Understand		5
5	**Build** a Web page ,which accept user information and user comments on the web site to check if all the Text fields have being entered with data else display an alert.	Apply		8
6	**Build** a JavaScript which accepts the text in lower case and displays the text in uppercase.	Apply		1
7	**Build** a java script to validate a form consisting of user name .Also navigate to another web pages after navigation	Apply		5
8	**Build** a java script that read four integers and display the largest and displays the largest and smallest integers from the given integers.	Apply		1
9	**Build** a java Script program to determine whether a given number is an Armstrong number or not.	Apply		5
10	**Build** a JavaScript that reads list of ten numbers and displays the count of negative numbers, the count of positive numbers and the count of zeros from the list.	Apply		5

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