

NATIONAL INSTITUTE OF TECHNOLOGY, KURUKSHETRA**THEORY EXAMINATION (Regular)
Question Paper**

ROLL NO. _____

Month and Year of the Examination: **Nov/Dec 2021**Programme: **B.Tech. (IT)**Semester... **5th**....Subject.....**WEB TECHNOLOGIES**Course No...**ITPC33**Maximum Marks...**50**.....Number of Questions to be attempted...**4**...Time allowed ...**2 Hours**.....Total No. of Questions.....**4**.....Total No. of Pages used...**2**....**Note:** Assume suitably and state, additional data required, if any.

Q1.	a) Can XML replaces HTML?	(2X7=14)
	b) How to use a hidden field in java script?	
	c) What are the properties of XMLHttpRequest??	
	d) What is the use of is NaN function in JAVA Script?	
	e) Name any four built in functions in PHP?	
	f) Where AJAX can not be used?	
	g) How can you decode JSON string?	
Q2.	a) Write a perl program to evaluate the following mathematical Expression $1+2/2!+3/3!+.....+n/n!.$	(6)
	(b) Write a DTD for an XML document that declares an address book containing contacts. Each contact has a name and address. An address should contain attributes for street name, state and phone number. Also write an XML document and validate it against this DTD.	(6)
Q3.	A web application(JSP) takes a name as input and on submit it shows a hello page where is taken from the request. It shows the start time at the right top corner of the page and provides the logout button. On clicking this button, it should show a logout page with Thank You message with the duration of usage. (Use session to store name and time).	(6)

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Q3.	(b) What is Session sharing and Data sharing in JSP? Write a sample program of session sharing in JSP.	(6)
Q 4	(a) Write a program in SERVLETS that Read the user id and passwords entered in the Login form and authenticate with the values (user id and passwords) available in the cookies. If he is a valid user(i.e., user-name and password match) you should welcome him by name(user-name) else you should display “ You are not an authenticated user “	(6)
	<p>b) An organisation wishes to maintain the status about the working hours made by his employees. For that he uses the following tables:</p> <ul style="list-style-type: none"> • Emp (eid: integer, ename: string, age: integer, salary: real) • Works (eid: integer, did: integer, pct_time: integer) • Dept (did: integer, budget: real, managerid: integer) <p>An employee can work in more than one department; the pct_time field of the works relation shows the percentage of time that a given employee works in a given department. Resolve the following queries using PHP:</p> <p>Query1. For each department with more than 20 full time equivalent employees (i.e., where the part-time and full-time employees add up to at least that many full-time employees), print the did’s together with the number of employees that work in that department.</p> <p>Query2. Print the name of each employee whose salary exceeds the budget of all of the departments that he or she work in.</p> <p>Query3. Find the managerid’s of managers who manage only departments with budgets greater than 1,000,000</p>	(6)