

Roll No.

--	--	--	--	--	--	--	--	--	--

B.E /B.Tech (Full Time) END SEMESTER EXAMINATIONS, April / May 2019

INFORMATION TECHNOLOGY

Semester 2

IT8201 INFORMATION TECHNOLOGY ESSENTIALS

(Regulation 2012)

Time: 3 Hours

Answer ALL Questions

Max. Marks 100

PART-A (10 x 2 = 20 Marks)

1. Write HTML tags for creating a table with given content as shown below.

April 2019	Vacation
May 2019	



2. What is the difference between a web server and an application server?
3. Write a piece of Javascript code to check if the value of two fields – 'password' and 'confirmPassword' are the same, and display a message if they are not.
4. Write a PHP program to display the number of times a visitor visited a web page using session variable.
5. What is the difference between a Layer-2 switch and a router ?
6. To connect 6 machines, how many cables will be required in (a) ring topology and (b) bus topology? Show the connections..
7. What is the purpose of IMSI and IMEI in mobiles ?
8. What is meant by frequency reuse in the context of cellular network ?
9. List the components of a search engine.
10. If you want to search in Google for pdf files only from the web-site of a university www.abcd-univ.ac.in, how would you do this ?

Part – B (5 x 16 = 80 marks)
(Question No.11 is Compulsory)

11. (i) Write a program using HTML form and java script, to perform the following operations on two numbers entered in two different text boxes: Addition when the "ADD" button is clicked, subtraction when the "SUBTRACT" button is clicked, and multiply when the "MULTIPLY" button is clicked. Write a javascript to validate whether the name and password are empty or not. (8)
- (ii) If a packet of data is sent from a client A to a server B, through two routers R1 and R2, draw a diagram showing the flow of data. Explain encapsulation and decapsulation. How many times are encapsulation and decapsulation carried out in this process ? (8)

12. a) (i) Consider a DROP DOWN LIST BOX with subject names English, Tamil, Maths, Physics and Chemistry. Create a TEXT BOX to accept the marks for each subject selected from the list box and store in a database. (8)
- (ii) Write a PHP program to display the mark sheet when a "VIEW" button is pressed. (8)

(OR)

- b) (i) Write a PHP program to print the multiplication table (to multiply from 1 to 15) of a given number in a tabular format. (8)
- (ii) Consider a table "Voting Details" with Candidate name, Voting booth Id, and number of votes as fields. Write a PHP program to insert and retrieve a record from this table. (8)
13. a) Consider building a web-site for our department. Create web pages for faculty, courses, student lists, projects, labs, and other activities of the department. (use html tags such as ordered/unordered list, image tag, table, links, etc.,). Create a HTML form which allows students to send messages to the faculty. Obtain details like name, branch, mail id, and contact number. Create a home page through which the user can navigate to any of the pages. (16)

(OR)

- b) (i) What are the different classes of IP addresses? Explain with suitable examples. (8)
- (ii) Discuss the commonly used LAN technologies. (8)
14. a) (i) Explain how an SMS is processed in a GSM network. (8)
- (ii) If you are a Chennai cell phone customer roaming in Delhi, and your friend who is a Delhi customer, roaming in Chennai, sends you an SMS from Chennai, trace all the steps that take place to deliver the SMS to you. (8)

(OR)

- b) (i) How is roaming supported in a GSM cellular network? (8)
- (ii) Explain the functions of the various important components in your cell-phone. (8)
15. a) (i) Discuss the components involved in the design of an information system. (8)
- (ii) Design the UI for a mobile application that keeps track of your attendance. (8)

(OR)

- b) (i) Discuss the various options and features available in a search engine. (8)
- (ii) Consider a social networking application such as whatsapp. Explain the various features provided. Suggest at least one new feature that can be added. (8)

*** GOOD LUCK ***

