

NATIONAL INSTITUTE OF BUSINESS MANAGEMENT

Diploma in Computer System Design 17.1F –DCSD-3-4-12

Diploma in software Engineering 17.1F –DSE-3-4-12

Diploma in Computer Networking 17.1F – DCN-3-4-12

Web Application Development

28 February 2018

Time Allowed:3hrs

Answer All questions.

Question 1 (25 Marks)

a) Create the following web page using HTML: (15 Marks)

ABC Tech Ltd	X	
		
<h2 style="margin: 0;"><u>Welcome to ABC Tech Ltd</u></h2> <p>ABC Tech Ltd is offering total Power System solutions, including Power Protection, Surge Protection, Power Management Software, DC Systems and Batteries, across a broad range of industries and applications.</p>		
<u>Our Products</u>	<u>Description</u>	<u>Online Inquiry</u>
	<ul style="list-style-type: none"> DC Electronic Loads Single output 200W, 250W and 750W models. Price: USD 195 	Name: <input style="width: 100%;" type="text"/> Email: <input style="width: 100%;" type="text"/> Message: <input style="width: 100%; height: 40px;" type="text"/>
	<ul style="list-style-type: none"> 120V Surge Protector Power up to seven electronic devices Lengthy Cord Price: USD 102 	<div style="text-align: right;"> <input type="button" value="Submit"/> <input type="button" value="Reset"/> </div>

- b) Create the following web page using HTML. Use an Internal Style sheet to add the required formatting. (10 Marks)

ABC Tech Ltd

X

H1, Font type: Arial, Color: red, Size: 40pt

H2, Font type: Tahoma, Size: 30pt, Center aligned, Underlined, Italic

Paragraph: 15pt, italic Color: Blue

H3, 24pt, italic

Background Color : Cyan

Question 2 (15 Marks)

- a) Write a java script program to assign student id, marks1, marks2 and marks3 into variables and to calculate and display the average and grade of the assigned marks using a function calGrade (Average < 50, Grade is “Fail” else Grade is “Pass”). (05 Marks)
- b) Consider the form given below. Write a JavaScript function to include the following validations for the data input through the form. (You are required to write only the JavaScript function. **Do not create the form**). (10 Marks)
- The ‘Name’ and ‘Delivery Address’ fields should not be empty.
 - ‘Telephone Number’ should be numeric.
 - ‘Country’ should be selected
 - ‘Weight’ should be Numeric.
 - ‘Express Shipping’ should be checked.

Display suitable messages to the user based on the result of each validation.

Shipping Cost Calculation

Name

Delivery Address

Country

Total Weight of Goods (Kg)

Express Shipping Required ? Yes ☐ No ☐

Countries:

- Select a Country
- Sri Lanka
- India
- Australia

Question 3 (15 Marks)

a) Consider the form given below: (08 Marks)

Pizza Express Ltd

Customer Order Form

Name:

Address:

Telephone Number:

Type of Pizza Topping

Do you require extra cheese? ☐ Yes ☐ No

List Values:

- Select Topping
- Veggie
- Chicken
- Supreme

Write a PHP page to display the Name, Address, Telephone Number and the Total Amount Payable

Consider the following information to calculate the Amount Payable. (*You do not need to create the form*)

Type of topping	Amount
Veggie	750
Chicken	900
Supreme	1100

- If extra cheese is required an extra charge of Rs 250/= should be added to the Amount.

Total Amount Payable = Amount + Extra Charge

b) Extend your PHP script to save the data entered through the form and calculated value “Total Amount Payable” to the table “tblOrder” in the database “Pizza”. Assume that the database and the table with the required fields are already created for you using MYSQL. (*Host : localhost, username: dcsd, password: 123*) (07 Marks)

Question 4 (20 Marks)

- a) Explain the differences between XML and HTML tags. (03 Marks)
- b) Consider the table given below:

Item Code	Description	Price (Rs)
100	2200 Watt Gas Powered Generators	75,000
200	1500 Watt Inverter Generators	92,000
300	2000 Watt Liquid Propane Generators	86,000

- Write a well-formed XML document to represent the data in the table. (07 Marks)
- Write a DTD document to validate the XML document. (05 Marks)
- Using the above XML document, design an Extensible Stylesheet document to display the following webpage. (05 Marks)

H1 heading

blue color, font size
40pt.

Sun Generators Ltd

A special discount of 20% will be given to all the 2200 Watt Gas Powered Generators 17th February 2014.

Special Discount Price: Rs 75,000/=

H2 heading

Bold, italic

Paragraph

Font size : 20pt

Question 5 (15 Marks)

- Explain the following validation controls in ASP.NET. (05 Marks)
 - Required Field Validator
 - Range Validator
- Design the following form using ASP.Net Controls. (10 Marks)

Customer Order Form

Name:

Telephone No:

Gender: Male ☐ Female ☐

Product

List Values:

- Digital Camera
- Smart Phone
- Printer

Question 6 (10 Marks)

1. Select the correct statement.
 - a. A collection of websites and web pages are called internet.
 - b. World Wide Web is the internet.
 - c. E-mails and World Wide Web are operating in LAN only.
 - d. Inter-connected computer networks are called internet.
2. World Wide Web is operates on;
 - a. ICMP
 - b. UDP
 - c. HTTP
 - d. SMTP
3. Select the incorrect statement.
 - a. Web sites are hosted on web servers.
 - b. Apache is an example for web server.
 - c. HTTP is used by the web server to communicate with web browser.
 - d. E-mailing is another facility provide by web servers.
4. What do you mean by www.lanka.com?
 - a. www is a sub domain of lanka.com domain.
 - b. www is web service name and lanka.com is the domain name.
 - c. www.lanka.com is the full qualified domain name.
 - d. www is web server name and lanka.com is the hostname name.
5. A hacker contacts you using phone or email and attempts to acquire your password.
 - a. spoofing
 - b. phishing
 - c. spamming
 - d. bugging
6. The phrase _____ describes viruses, worms, Trojan horse attack applets, and attack scripts.
 - a. malware
 - b. spam
 - c. phish
 - d. virus
7. What are the main components of information security?
 - a. Confidentiality, Integrity, New Functions
 - b. Reusability, Integrity, New Functions
 - c. Confidentiality, Integrity, Availability
 - d. New Functions, Integrity, Availability

8. Which of the following statements is correct?
- a. Private Key is distributed widely and freely.
 - b. Sender knows receivers private key.
 - c. Sender knows receivers public key.
 - d. None of the above.
9. Encryption is _____
- a. A method of converting data in to a deferent format to transmit over the Internet.
 - b. A spyware protection
 - c. A method of formatting data in the web.
 - d. A virus protecting application.
10. A firewall is used to protect computer networks. Which of the following is correct regarding firewalls?
- a. Firewall directly protects the computers from the virus.
 - b. Connects different IP networks while protecting them.
 - c. Helps to monitor the traffic flowing through it.
 - d. Is a web protection tool.