

### **NATIONAL INSTITUTE OF BUSINESS MANEGEMENT**

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

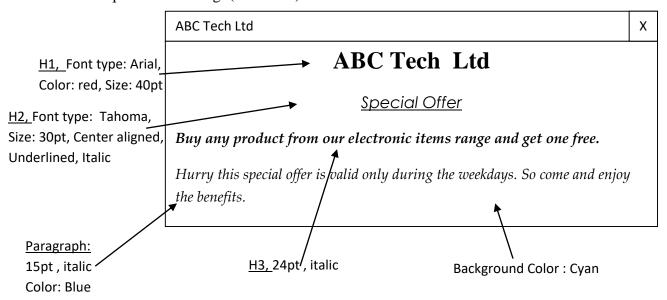
Answer All questions.

### **Question 1 (25 Marks)**

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



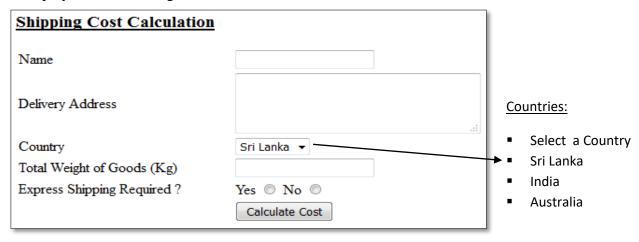
b) Create the following web page using HTML. Use an <u>Internal Style sheet</u> to add the required formatting. (10 Marks)



## **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)</p>
- 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)
  - i. The 'Name' and 'Delivery Address' fields should not be empty.
  - ii. 'Telephone Number' should be numeric.
  - iii. 'Country' should be selected
  - iv. 'Weight' should be Numeric.
  - v. 'Express Shipping' should be checked.

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



## **Question 3 (15 Marks)**

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

Pizza Express Ltd	
Customer Order Form	
Name:	
Address: Telephone Number:	<u>List Values:</u>
Type of Pizza Topping Select Topping ▼	<ul><li>Select Topping</li><li>Veggie</li><li>Chicken</li></ul>
Do you require extra cheese? © Yes © No	■ Supreme
Order Cancel	

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**

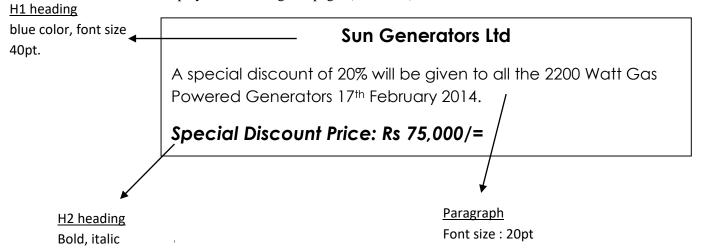
b) Extend your PHP script to save the data entered through the form and calculated value "Total Amount Payable" to the table "tblOrder" in the database "Pizza". Assume that the database and the table with the required fields are already created for you using MYSQL. (Host: localhost, username: dcsd, password: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

### **Question 4 (20 Marks)**

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

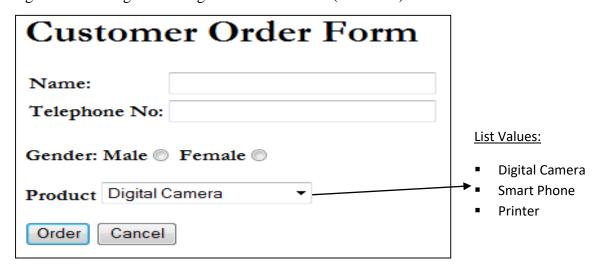
Item Code	Description	Price (Rs)
100	2200 Watt Gas Powered Generators	75,000
200	1500 Watt Inverter Generators	92,000
300	2000 Watt Liquid Propane Generators	86,000

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



## **Question 5 (15 Marks)**

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



# 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. What do you mean by www.lanka.com? 4. 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 The phrase \_\_\_\_\_\_ describes viruses, worms, Trojan horse attack applets, and 6. 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.