

## R-251

### P. G. D. C. S. A. (Second Semester) Examination, 2020

#### WEB DESIGNING

*Maximum Marks : 100*

*Note: Attempt all questions. Each question carries equal marks.*

1. Explain the structure of Web-page.
2. Explain the following : (any **two**)
  - (i) SPAN tags
  - (ii) DOM
  - (iii) DHTML
  - (iv) XML
3. How to implement Array in Java Script? Explain with example.
4. What is an object? Explain its various properties.
5. Explain the following : (any **two**)
  - (i) Distributed computing
  - (ii) CGI
  - (iii) PERL
  - (iv) WAP

## R-252

### P. G. D. C. S. A. (Second Semester) Examination, 2020

#### VISUAL BASIC

*Maximum Marks : 100*

*Note: Attempt all questions. All questions carry equal marks.*

1. Explain the concept of Front Eng and Back End in Visual Basic with example.
2. Describe any **two** with examples :
  - (a) Arrays
  - (b) Data types
  - (c) Error handling
  - (d) Functions
3. Describe any **two** of the following :
  - (a) Pointer and Cursors
  - (b) Multiple Document Interface
  - (c) Text formatting
  - (d) ActiveX components
4. Describe any **two** of the following :
  - (a) ADODB
  - (b) SQL
  - (c) Reports
  - (d) Write a program to demonstrate addition of two numbers.
5. Write short notes on any **two** :
  - (a) ASP
  - (b) VB script
  - (c) Types of files
  - (d) Operations on files

**R-253****P. G. D. C. S. A. (Second Semester) Examination, 2020****(New Course)****RDBMS using ORACLE****Maximum Marks : 100**

**Note:** Attempt all questions. All question carry equal marks.

1. (a) Define database schema. Write an example.  
(b) Write characteristics of object oriented models.
2. What is ER model? Design an ER model for library management system used in your university.
3. (a) What is Normalization? Explain its advantages.  
(b) What is transitive dependancy? Give an example.
4. (a) Define join operation. Explain its various types in SQL.  
(b) Differentiate DDL, DML and DCL with examples.
5. (a) What is Sequence? Write sequence in SQL to show student data in the following format :

Id	Name	Result

- (b) What are various types of select command in SQL? Explain with example.

## R-254

### P. G. D. C. S. A. (Second Semester) Examination, 2020

(New Course)

#### COMPUTER NETWORKING

*Maximum Marks : 100*

*Note: Attempt all questions. Each questions carries equal marks.*

1. What do you understand by transmission media? With neat sketch explain twisted pair cables, connectors of twisted pair cables. Also explain the performance of twisted pair cables.
2. Describe various types of computer network with their advantages and disadvantages.
3. Describe the following :
  - (i) IP Addressing
  - (ii) Flooding
  - (iii) Routing algorithm
4. Describe any two error detection mechanism in detail.
5. Describe any **three** of the following :
  - (i) UDP and ICMP
  - (ii) SMTP
  - (iii) FTP and Telnet
  - (iv) Apple talk protocol suite

## R-255

### P.G. D.C.S.A. (Second Semester) Examination, 2020

#### INTERNET and E-COMMERCE

*Maximum Marks : 100*

*Note: Attempt all the **five** questions. Each question carries equal marks.*

1. What is world wide web? What is the contribution of Java to the world wide web? Write the difference between routers and bridges.
2. What do you understand by Domain Name System? Explain any five domain name with their application.
3. Explain the following terms :
  - (i) POP3
  - (ii) SMTP
  - (iii) SNMP
  - (iv) TCP
4. What is Web browser? Explain different operations of any web browser. Write short note on firewall.
5. Write short note on E-Commerce, Explain function and type of E-Commerce.

**R-256****P. G. D. C. S. A. (Second Semester) Examination, 2020****(New Course)****(For Students without Maths at H. S. C. Level)****BRIDGE COURSE IN MATHEMATICS-II****Maximum Marks : 75***Note: Attempt all questions. Each question carry equal marks.*

1. (a) Explain sets, relation and functions with examples.

(b) Prove that :

$$A \cap (B \Delta C) = (A \cap B) \Delta (A \cap C)$$

where  $A, B, C$  are three sets.(c) Find area of Triangle whose vertices are  $(1, 0)$ ,  $(1, 1)$  and  $(2, 3)$ .2. (a) Find the angle between the lines  $4x + 3y - 11 = 0$  and  $8x + 6y + 5 = 0$ .(b) If  $p$  is the length of perpendicular from the origin to the line  $\frac{x}{a} + \frac{y}{b} = 1$ , then prove that :

$$\frac{1}{p^2} = \frac{1}{a^2} + \frac{1}{b^2}$$

(c) Find the equation of line which passes through the intersection point of the lines  $x - y\sqrt{3} = 5$  and  $\sqrt{3}x + y = 7$  and whose slope with  $x$ -axis is  $45^\circ$ .3. (a) Find the angle between the tangent line of the circle  $x^2 + y^2 - 4x + 6y - 12 = 0$  from the point  $(1, 1)$ .(b) Find the equation of the circle which pass through the points  $(1, -2)$  and  $(4, -3)$  and whose centre lies on line  $3x + 4y = 7$ .(c) Find the equation of circle whose centre is  $(-2, -3)$  and radius is 10.4. (a) If  $\alpha$  and  $\beta$  are the roots of  $2x^2 - x + 4 = 0$  then find the value of  $\frac{1}{\alpha^2} + \frac{1}{\beta^2}$ .(b) Find the square root of  $(5 + 12i)$ .(c) Find the modules and arguments of  $\frac{1-i}{1+i}$ .

5. (a) Find the sum of 20 terms of the A. P. 1, 4, 7, 10, ..... .

(b) Find the sum of the series :

$$2 + 4 + 8 + 16 + 32 + \dots + \infty$$

(c) Show that :

$$\left(1 + \frac{1}{n}\right)^n = e.$$