# P.G.D.C.M. (Semester - I) Examination, 2011 <br> 101 : ELEMENTS OF INFORMATION TECHNOLOGY AND OFFICE AUTOMATION <br> (2008 Pattern) 

Time : 3 Hours
Max. Marks : 70

## Note: 1) Q. 1 is compulsory. <br> 2) Solve any four questions from the remaining. <br> 3) Figures to the right indicate full marks.

1. A) Convert : ..... 4
I) $(133)_{10}=(?)_{2}$
II) $(654)_{8}=(?)_{16}$
B) Explain generations of computer. 5
C) Explain implementation of logical operations of AND, OR, NOT.
2. A) Explain statistical and mathematical functions used in excel. 7
B) Differentiate between compiler and interpreter. 7
3. A) What is computer ? Explain with block diagram. 7
B) Explain MS-outlook as personal information manager. 7
4. A) Explain working of CD ROM. 7
B) Discuss laser and dot matrix printers. 7
5. Explain file organization and accessing techniques. $\mathbf{1 4}$
6. Write notes (any 2): 14
a) MICR
b) Computer virus
c) Device drivers.

# P.G.D.C.M. (Semester - I) Examination, 2011 <br> 102 : PROGRAMMING USING VISUAL BASIC (2008 Pattern) 

Time : 3 Hours
Max. Marks : 70
Notes : a) All questions are compulsory.
b) Figures to the right indicates full marks.

1. Give the output for following section of code and explain (solve any five) :
a) For $\mathrm{i}=17$ To 12 Step -1

Next i
Printi
b) Dim myDate As Date
myDate $=\# 1 / 31 / 2008 \#$
Print Date Add ("m", 1, myDate)
c) Print IIF ( $\operatorname{chr}$ (65) $>\operatorname{chr}(80), \operatorname{chr}(80), \operatorname{chr}(65)$ )
d) dimias integer
$i=-10+5-5 * 6 / 2$
print i
e) Print Now
f) $\operatorname{dim} x$ as string $* 7$

$$
\mathrm{x}=\text { "PGDCM class" }
$$

print $x$
2. Explain the use of following properties (solve any five) :
a) Tab stop
b) Style of option button
c) List property of list box
d) Interval property of timer
e) Password char of text box
f) Default of command button.
3. Write a sectional code for the following. (Solve any four) :
a) Write code to change the background colour of the form after every 5 secs.
b) Write a code to accept birth date and display his/her age.
c) Write a code to delete selected item from list box.
d) Write a userdefined function to reverse the given string.
e) Write a code to display an array items in descending order.
4. Write short notes on (Solve any four) :
a) Menu Editor
b) Event driven programming
c) String functions (any three)
d) Message box Vs. Input box
e) Common dialog box
f) Scope of variables.

# P.G.D.C.M. (Semester - I) Examination, 2011 103 : INTRODUCTION TO ' $\mathbf{C}$ ' $\& \times(++$ ' LANGUAGE (2008 Pattern) 

Time: 3 Hours

Instructions: 1) Q.No. 1 \& 5 are compulsory.
2) Solve any two questions from 2 to 4 .
3) Figures to right indicate full marks.
4) Use comments if necessary.

1. Write output of following programs :
A) Void main ()
\{ int $\mathrm{x}, \mathrm{y}, \mathrm{z}$;
$x=10, y=20, z=30$;
$x=x+++y--;$
$y=x+y--$;
Printf ("\%d", \%d", x, y, z);
\}
B) Void main ()
$\{$ int $P=20$;
int Q ;
$\mathrm{Q}=\mathrm{p} \ll \mathrm{z}\rangle>2$;
Printf ("\%d \%d", P, Q);
\}
2. A) Write a program to find average of all the numbers which are divisible by $2 \& 3$ from an integer array using ' $C$ ' language. Also find total of such elements.
B) Write short note on : $\mathbf{1 0}$
1) Function overloading
2) Public variables.
3. A) Differentiate following with example.
1) Sprintff and sscanf
2) Break and continue
B) What is conditional statement? Show the use of conditional statement using conditional expression.
4. A) Write a program to enter a string and find whether entered string is palindrome or not ? (eg. MADAM $\rightarrow$ when read from left to right or right to left it is same)
B) Write a program to check whether entered number is Armstrong or not eg $\left(153=(1)^{3}+(5)^{3}+(3)^{3}\right)$.
5. Explain following with suitable example. ..... 20
1) Encapsulation
2) Operators in $\mathrm{C}++$
3) Inline function
4) Constructor.

# P.G.D.C.M. (Semester - II) Examination, 2011 <br> 201 : WEB TECHNOLOGY INCLUDING E-COMMERCE, HTML AND <br> BASIC JAVA <br> (2008 Pattern) (New) 

Time : 3 Hours
Max. Marks: 70
Instruction:Attempt any seven questions from following.

1. What is E-Commerce ? Explain the procedure of obtaining digital certificate. $\mathbf{1 0}$
2. Explain Java Applet life cycle in detail. $\mathbf{1 0}$
3. Write java code for sorting of 10 elements of float array in ascending order. Display second highest value.10
4. Explain any four Java AWT Components. ..... 10
5. Discuss basic object oriented programming concepts. ..... 10
6. Discuss features of Java script. ..... 10
7. Write short notes on (any two) : ..... 10
a) WWW
b) XML
c) Constructors in java.
8. Write java code to display following pattern :
$\begin{array}{lllll}1 & 1 & 1 & 1 & 1\end{array}$
$\begin{array}{llll}1 & 1 & 1 & 1\end{array}$
111
11
1

# P.G.D.C.M. (Semester - II) Examination, 2011 <br> 202 : SOFTWARE ENGINEERING (2008 Pattern) (New) 

## Time : 3 Hours

Max. Marks : 70
Note : 1) Make your own assumptions, whenever necessary.
2) Solve any 5 questions [ $14 \times 5=70]$.

1. For Purchase Order Processing system for small scale industry draw
a) ER diagram
b) Database Design.
2. Discuss System Development life cycle.
3. What are the various roles played by system analyst ?
4. Draw the decision table and decision tree for the student marks If marks $>=70$ give distinction, if marks $>=60$ give First class, If marks $>=50$ give Second class, if marks $>=40$ give pass class otherwise fail.
5. Design following reports from Payroll System
1) Payslip
2) Professional tax statement to be submitted to State Govt.
6. Write short notes on (any two) :
i) Waterfall model
ii) Characteristics of system
iii) Input design.

# P.G.D.C.M. (Semester - II) Examination, 2011 203 : DATABASE MANAGEMENT SYSTEM AND ORACLE (2008 Pattern) (New) 

Time : 3 Hours
Max. Marks: 70
Note: All questions are compulsory.

1. Solve any two : 14
A) Explain keys in DBMS
B) Explain advantages and disadvantages of Normalization.
C) Explain any seven Codd's rules.
2. Write short notes (any 2). 14
A) Compare HDB, NDB, RDB in DBMS.
B) What is the Role of Administration in DBMS.
C) Define E-R models.
3. Using the following tables, write SQL statements

Emp table : Empno, ename, job hiredate, sal, deptno
Dept table : Deptno, Dname, Loc.

1) Display names and jobs of employees who are clerk.
2) Display name of department in which more than two clerk are working.
3) Display the name of department who is paying maximum salary.
4) List of all employees hired in the month of Jan.
5) Display details of employees having ' $M$ ' in his name.
6) Display name and salary of employees who are staying in Bostan.
7) Give the list of employees sorted on name in descending order.
4. Solve any two . 14
A) Write a PL/SQL block which will select first 10 highest earners from emp table and write their details into the highest table.

Table name -Height
Field name -empno, ename, sal.
B) Explain DDL commands in oracle.
C) Write a PL/SQL Block to accept Empno as parameter and update his salary by $10 \%$ using parameterised cursor.
5. Write short notes (any 3) : 14
A) Joins in oracle
B) Set operators
C) Conversion functions in oracle
D) Subqueries
E) Constraints in oracle.

# P.G.D.C.M. (Semester - II) Examination, 2011 <br> 201-WEB TECHNOLOGY (2005 Course) (Old) 

Time : 3 Hours

Max. Marks: 70

## Instructions: 1) Question 1 and question 6 are compulsory. <br> 2) Solve any three questions from question $\mathbf{2}$ to question 5.

1. a) What is E-Commerce ? Explain the procedure of obtaining digital certificate. ..... 10
b) Discuss Applet Life Cycle with help of diagram. ..... 10
2. Write Java code for displaying addition of all digits of four digit number. Accept the number from user. ..... 10
3. Explain any four Java AWT Components. ..... 10
4. Discuss basic object oriented programming concepts. ..... 10
5. Write Java code for following pattern using loops. ..... 10
11111
2222333445
6. Write short notes on (any 4 ): ..... 20
a) XML
b) WWW
c) Scripting Languages
d) E Commerce Models
e) Packages in Java.

# P.G.D.C.M. (Semester - II) Examination, 2011 <br> 202 : SOFTWARE ENGINEERING (2005 Pattern) (Old) 

Time : 3 Hours

Max. Marks : 80
Note: 1) Q. 1 is compulsory
2) Solve any 5 from remaining.

1. Following activities describes a simplified process model of Loan Accounting System of a Bank. Reserve Bank of India sends parameters such as Loan Limits, Interest Rates for different type of loans. Customers approach bank for loans and furnish all details. Bank scrutinizes the applications and either approves or disapproves the proposals. For approved proposals the new loan account is created and loan amount is debited on that loan account. Customer pays loan installments every month and upon such payments the account is credited and the transaction is recorded. The interest is computed every month by scanning all transactions (credits) during that month. Whenever the customer demands, statement of Account is given. Interest Statement is given to General Manager from the Interest Register. New Loan Sanctioned Statement is generated every year and is submitted to RBI.

## Draw the First Level DFD and Normalized File Layouts.

2. Explain various skills required by System Analyst. $\mathbf{1 2}$
3. Draw Decision Tree and Decision Table for the following. 12
Invoice Amount Sales Tax Discount

| Less than 15,000 | Nil | Nil |
| :--- | :--- | :--- |
| $15,000-25,000$ | $4 \%$ | $5 \%$ |
| $25,001-45,000$ | $5 \%$ | $7 \%$ |
| More than $-45,000$ | $8 \%$ | $9 \%$ |

4. Prepare Data Entry Screen layout of any two of the following.
i) Payment made to supplier against specific bill in a purchase order system
ii) Goods Dispatched to customer against specific order in Sales Order System
iii) Recording earnings and deductions to be made from employees pay calculation.
5. Explain various stages involved in SDLC. ..... 12
6. Explain various fact finding techniques with their advantages and disadvantages. ..... 12
7. Write shorts notes on (any two) : ..... 12
a) Prototyping
b) Types of System
c) FDD .
