Total No. of Questions-6] [Total No. of Printed Pages-1
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Seat
No.
[4984]-11
P.G.D.C.M. (Semester-I) EXAMINATION, 2016 ELEMENTS OF INFORMATION TECHNOLOGY AND OFFICE AUTOMATION
(Windows Operating System \& MS Office)
(2008 PATTERN)

## Time : Three Hours

Maximum Marks : 70
N.B. :- (i) Q. No. 1 is compulsory.
(ii) Solve any four questions from the remaining.
(iii) Figures to the right indicate full marks.

1. (a) Convert :
(i) $\quad(976)_{10}=(?)_{8}$
(ii) $\quad(678)_{16}=(?)_{2}$.
(b) Explain Boolean algebra rules.
(c) Explain with example use of number system.
2. (a) Explain mail-merge facility in MS-WORD.
(b) Differentiate between batch processing and online processing. [7]
3. (a) What is computer ? Explain with block diagram.
(b) Explain Application software and system software.
4. (a) Explain working of magnetic tape as storage medium.
(b) Discuss any one input and any one output device.
5. Explain generations of computers.
6. Write notes on (any two)
(a) Computer virus
(b) Operating system functions
(c) Computer languages.

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## [4984]-12

## PGDCM (Semester-I) EXAMINATION, 2016 <br> 102 : PROGAMMING USING VISUAL BASIC (2008 PATTERN)

Time : Three Hours
Maximum Marks : 70
N.B. :- All questions are compulsory.

1. Answer any four question (any five) :
(a) What are Image controls ?
(b) What is the use of variant Data Type in VB.
(c) Define and explain Function Procedures.
(d) What are Static Arrays. Give an example.
(e) What is the use of 'ERASE' COMMAND ? Give an example.
(f) What is difference between while and do while loop ?
2. What will be the output of the following code when it is executed ? [10]
(a) Dim x As Double $=3$, y as Double $=1$

Dim z As Double
$\mathrm{z}=\mathrm{x}+(\mathrm{y} * \mathrm{x})$
$\mathrm{x}=\mathrm{y}$
$\mathrm{z}=\mathrm{x}+\mathrm{z}$
Ist Box.Items.Add ( $\mathrm{x}+\mathrm{y}+\mathrm{z}$ )
(b) $\operatorname{Dim} \mathrm{a}, \mathrm{b}, \mathrm{c}$ As String
$\mathrm{a}=$ "THE WHOLE"
b = "PART"
$\mathrm{c}=\mathrm{a}$. Substring (CInt (Math. Sqrt(4)), b. Length)
txtBox. Text $=\operatorname{CStr}(\mathrm{c})$
P.T.O.
(c) Dim Boy as string = "jack"

Dim Girl as string = "Jill"
txtBox.Text = Boy \& "and" \& "Girl" \& "went up the hill"
(d) Dim age As Integer $=42$

Select Case age
Case Is>=0
txtBox.Text="Child"
Case Is>=13
txtBox.Text="Teenager"
Case Is $>=21$
txtBox.Text="Young Adult"
Case Is>=40
txtBox.Text= "Middle age"
Case Is > $=65$
txtBox.Text="Old Person"
Cas Else
textBox.Text="Not Human"
End Select
(e) Dim i as integer

Dim j as integer
for $\mathrm{i}=1$ to 3
for $\mathrm{j}=1$ to 5
print "*"
next
$\mathrm{i}=\mathrm{i}+2$
next
3. Solve any two from the following :
(a) Write a program to check whether the given number is palindrome or not.
(b) Write a program to find the sum and average of N given numbers.
(c) Write a program to print prime numbers between 1 to 100. [5]
4. Describe in detail, standard properties and event procedures of text boxes.

Or
Write a VB Code to accept Name and Password from user, when the command button "Login" is clicked, display "Hello! Friends" message if user name and password is correct, else display "Sorry, wrong password entered".
5. Write short notes on (any four) :
(a) The command button
(b) Event Driven Program
(c) Numeric Functions
(d) Image Controls.
(e) Use of labels.

Total No. of Questions-5]
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[4984]-13

## P.G.D.C.M. (Semester-I) EXAMINATION, 2016 INTRODUCTION TO C AND C++ LANGUAGE

 (2008 PATTERN)Time : Three Hours
Maximum Marks : 70
N.B. :- (i) Question Nos. 1 and 5 are compulsory.
(ii) Attempt any two from Q. Nos. 2 to 4.

1. Consider the following programs and explain what will be the output :
(a) \#include<iostream.h>
\#include<conio.h>
class cl
\{
private:
int age;
char gender;
public:
cl();
void Display();
\};
cl::cl()
\{
age = 21;
gender = 'F';
\}
Void cl::Display()
\{
P.T.O.
```
If (gender == 'F')
If (age >= 18)
cout << "\n Eligible to Marry";
else
cout << "\n Not Eligible";
else
If (age >=21)
cout << "\n Eligible to Marry";
else
cout << "\n Not Eligible";
}
int main()
{
clrscr();
cl obj;
obj. Display();
return 0;
getch();
}
(b) #include<stdio.h>
#include<conio.h>
void main()
{
int i, j;
clrscr();
for(i=9; i<=1; i = i-2)
{
for (j = i; <= 1; j = j - 2)
printf("%d", j);
printf("\n");
}
getch();
}
2. (a) Write a program in C to accept base \& height of triangle and to display its area. Hint : Area of triangle equals product of base \& height multiplied by 0.5
(b) Explain array in C.
3. (a) Write a program in C to create a file having the following fields : int player_number, char name_of_player[25], int runs_scored.
(b) Explain various continue \& break in C.
4. (a) Write a program in C++ to accept a number and to display whether it is prime or not. A prime number is divisible by 1 and itself only.
(b) Explain method overloading of C++ with an example. [10]
5. Write short notes on (any two) :
(a) C compiler
(b) Conditional statements in C
(c) Multiple inheritance in C++
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P.G.D.C.M. (Semester-II) EXAMINATION, 2016

201 : WEB TECHNOLOGY INCLUDING E-COMMERCE, HTML AND BASIC JAVA
(2008 PATTERN)
Time : Three Hours
Maximum Marks : 70
N.B. :- (i) Q. No. 8 is compulsory.
(ii) Solve any six from the remaining.
(iii) Write assumptions if any.
1. How does E-Commerce work ? Explain its benefits.
2. Explain the concept of an array in java with an example. Write a java code which accepts 10 numbers and print maximum of them. [10]
3. What is an object? With example explain the concept of class. [10]
4. What is an access modifier ? Explain 4 types of it with example. [10]
5. Solve (any two) :
(a) What are Constructors in Java ? Explain with example.
(b) Explain any two Java AWT components with its methods.
(c) Explain with an example the concept of inheritance in java.
6. Discuss Applet life cycle with diagram.
7. What is HTML ? Explain the uses of HTML. List at least 5 various tags used in HTML.
8. Write short notes on (any two) :
(a) Polymorphism in java
(b) Data types used in Java
(c) Various operators used in Java.

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P.G.D.C.M. (Semester-II) EXAMINATION, 2016

202 : SOFTWARE ENGINEERING (2008 PATTERN)

\section*{Time : Three Hours}

Maximum Marks : 70
N.B. :- Solve any five questions.
1. Explain various steps of SDLC.
2. Explain role of Analyst in detail.
3. Explain waterfall model with suitable diagram.
4. Draw decision table and decision tree for student marks. If marks \(>=70\) give distinction, if marks \(>=60\) first class, if marks \(>=50\) give second class, if marks \(>=40\) give pass class otherwise fail.
5. Draw context level diagram for railway reservation system. Design format of rail ticket.
6. Explain normalization with its types in detail.
7. Write short notes on (any two) :
(a) 4GL
(b) Pseudo code
(c) DFD components.
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\section*{P.G.D.C.M. (Semester-II) EXAMINATION, 2016 \\ 203 : DATABASE MANAGEMENT SYSTEM \& ORACLE (2008 PATTERN)}

Time : Three Hours
Maximum Marks : 70
N.B. :- All questions are compulsory.
1. Solve any five :
(a) What are the various datatypes used in MS-Access.
(b) Explain any 5 Codd's Rule.
(c) Explain advantages and disavantages of Normalization.
(d) Explain various keys in DBMS.
(e) What are the different types of anomalies? Explain with example.
(f) Explain HDB, NDB and RDB.
2. Consider the following tables :
(a) Item_mst (itemno (PK), itemname (should entered in capital only), rate (> 0), stock (> 0)
(b) Item_trn (tranno (PK), trandate (date), trantype (either Issue/ Receipt), qty.)
Query \(\mathbf{1}\) is compulsory. Solve any six from 2 to 8 :
(a) Create the above tables with proper constraints.
(b) Display Item List having names starting with letter "A"
(c) Show Today's truncations.
(d) Display the total sales of Items.
(e) Display Items whose stock greater than 100.
(f) Display all transactions which are done in the month of March.
(g) Show the itemwise transactions.
(h) Find out the item which has maximum quantity.
3. Answer the following (any two) :
(a) What is DDL ? Explain it with an example.
(b) Explain Set Operators.
(c) Write a PL/SQL block to increase the salaries of employees by \(15 \%\) whose salary is greater than 2000 and having department is 'Research'. (use Cursor).```

