Total No. of Questions—**5**] [Total No. of Printed Page—**1**

Seat No.	

[5578]-101

PGDCM (First Semester) EXAMINATION, 2019

ELEMENTS OF INFORMATION TECHNOLOGY AND OFFICE AUTOMATION

(Windows Operating System and MS-Office)

(2013 PATTERN)

Time : Three Hours **Maximum Marks : 50**

Instructions:

1) All questions are compulsory.

2) Figures to the right indicate full marks.

Q1. Answer the following **(Any One)** **[10]**

a) Discus difference between compiler and interpreter.

b) Define data & information. Explain various types of data processing

Q2.Answer the following **(Any One)** **[10]**

a) Define Hardware. Explain input & output devices of computer.

b) Define binary system. Explain 1's and 2's complement in brief.

Q3. Answer the following **(Any One)** **[10]**

a) Explain AND, OR, NOT logical gates.

b) Explain various Microsoft outlook function & features.

Q4. Answer the following **(Any One)** **[10]**

a) Explain History & generation of computer in brief.

b) Define GUI. Explain Features of good GUI with Examples.

Q5. Write short notes on **(any Two)** **[5+5]** **[10]**

1. Spreadsheet
2. OCR
3. Secondary Memory

Total No. of Questions—4] [Total No. of Printed Page—1

Seat No.	

[5578]-102

P.G.D.C.M. (I Sem.) EXAMINATION, 2019
102 : PROGRAMMING USING VISUAL BASIC
(2013 PATTERN)

Time : 2½ Hours **Maximum Marks : 50**

***Note : All** questions are **compulsory**.*

Q. 1. Give output for following section of code and explain (**any five**) : **20**

a) nm = "Atul"
If (nm > "Arjun") then
Print nm
else
Print "Ashok"

b) Print Asc ("A")

c) for i = 1 to 3ern)
Print "i"
next i

d) dim ct as string
ct = "Pune"
Print Right (ct, 3)

e) Print chr (67)

f) Msgbox "Hello"

Q. 2. Name the property for the following controls (**any five**) : 5

a) To change size of font of Text Box.
b) To change colour of label.
c) To assign image to picture box.
d) To apply a graphical effect to Command Button.
e) To change title of Command Button.
f) To change dimensions (size) of image box.

Q. 3. Write a sectional code for the following (**any four**) : **20**

a) To find maximum among three numbers.
b) To change colour of form on click to three command buttons namely Red, Green and Blue.
c) To display 1 to 10 numbers and their squares.
d) To display "P.G.D.C.M." in a label and to change its font as per selection from option button to Bold or Italic.
e) To arrange five names in dictionary order.

Q. 4. Write short notes on (**any one**) : **5**

a) Mathematical functions
b) Common dialog box

Total No. of Questions—**5**] [Total No. of Printed Page—**1**

Seat No.	

[5578]-103

P.G.D.C.M. (I Sem.) EXAMINATION, 2019
103 : INTRODUCTION TO C AND C++ LANGUAGE
(2013 PATTERN)

Time : 3 Hours **Maximum Marks : 50**

Note : 1) Q. No. 1 and 5 are compulsory.
2) Solve any two questions from 2 to 4.
3) Figures to the right indicate full marks.

1.			Write output of following programs with explanation	10

	a)		#include<stdio.h>
			int main()
			{
			char ch;
			if(ch = printf("""))
			printf("It matters\n");
			else
			printf("It doesn't matters\n");
			return 0;
			}	

	b)		#include<stdio.h>
			Void main ( )
			{
			int i, j=9;
			for (; ;)
			printf ("%d", j);
			}	

2.			Write a program in C++ to accept radius & calculate diameter, circumference and area of circle.	10
3.			Differentiate between	10
		1)	Call by value and call by reference	
		2)	Continue and break statements.	
4			Write a program in C to calculate sum of 5 subjects its average and find percentage	10
5.			Short Notes – Any Four	20
	a)		Standard library string function: strlen( ), strcat( ),strcpy( ),strcmp( ).	
	b)		Hybrid Inheritance with example in C++.	
	c)		Constructors and destructors.	
	d)		Iterative/Looping statements of C.	
	e)		Friend functions in C++ .	

Total No. of Questions—**6**] [Total No. of Printed Page—**1**

Seat No.	

[5578]-11

PGDCM (First Semester) EXAMINATION, 2019
ELEMENTS OF INFORMATION TECHNOLOGY AND OFFICE AUTOMATION
(Windows Operating System and MS-Office)
(2008 PATTERN)

Time : Three Hours **Maximum Marks : 70**

Instructions:

(1) Q. 1 is compulsory.

(2) Solve any **four questions** *from the remaining.*

(3) Figures to the right indicate full marks.

Q1. [7+7]

a)

i) $(45)_{10} = (?)_2$

ii) $(372)_8 = (?)_{10}$

b) Define GUI. Explain importance & features of GUI with Examples.

Q2. [7+7]

a) Define Software. Explain various types of software with Examples.

b) Define data & information. Explain various types of data processing.

Q3. [7+7]

a) Define binary system. Explain 1's and 2's complement with example.

b) Explain AND,OR,NOT logical gates

Q4. [7+7]

a) Explain various mathematical & Statistical functions used MS-Excel.

b) Explain mail merge procedure in MS Word with example.

Q5. [7+7]

a) Explain various Microsoft outlook function & features.

b) Differentiate between compiler and interpreter

Q6. Write short notes on **(any Two)** [7+7]

1. Flow Chart
2. Secondary memory
3. OCR

Total No. of Questions—**4**] [Total No. of Printed Pages—**3**

Seat No.	

[5578]-12

P.G.D.C.M. (First Semester) EXAMINATION, 2019

102 : PROGRAMMING USING VISUAL BASIC

(2008 PATTERN)

Time : Three Hours **Maximum Marks : 70**

N.B. **:—** *All* questions are compulsory.

1. Give output for following section of code and explain (any *five*) : [20]

(*a*)
```
x = 3.14
y = 4.13
If (x > y) then
    print"x="&x
    else
    print"y="&y
```

(*b*)
```
prit left ("pune-Mumbai",4)
```

(*c*)
```
for i=1 to 5
    print"i="&i
    next i
```

P.T.O.

(*d*)
```
p = 2
switch(p)
        case 1 :
                print 1
        case 2 :
                print 2
        end switch
```

(*e*)
```
i=3
for i=1 to 3
        print i
next i
```

(*f*)
```
Print chr(asc("diploma"))
```

2. Name the property for the following controls (any *five*) : [5]

(*a*) To change title of checkbox

(*b*) To apply a graphical effect to command Button.

(*c*) To assign image to image box.

(*d*) To set password character of textbox.

(*e*) To change colour of Tentbox

(*f*) To change position of Label.

3. Write a sectional code for the following (any *four*) : [20]

(*a*) To arrage five numbres in descending order.

(*b*) To check for condition whether the person is eligible to vote or not depending on age entered through keyboard.

(*c*) To initialize month-names into an array.

(*d*) To display temperature in Cel from given temp. in fah. Where

$$\text{Cel} = \frac{5}{9}(\text{Fah}-32)$$

(*e*) Select colour using common dialog control and change the colour of textbox.

4. Write short notes on (any *five*) : [25]

(*a*) Looping statements

(*b*) Option Button

(*c*) Event driven programming

(*d*) Events associated to command button

(*e*) Data Types

(*f*) Array's.

Total No. of Questions—**5**] [Total No. of Printed Pages—**2**

Seat No.	

[5578]-13

P.G.D.C.M. (I Sem.) EXAMINATION, 2019
103 : INTRODUCTION TO C AND C++ LANGAUGE
(2008 PATTERN)

Time : Three Hours **Maximum Marks : 70**

Note : 1) Q. No. 1 and 5 are compulsory.
2) Solve any two questions from 2 to 4.
3) Figures to the right indicate full marks.

1.			Write output of following programs with explanation	10

	a)		#include<stdio.h>
			Void main ( )
			{
			int i, j=5;
			for (; ;)
			printf ("%d", j);
			}	

	b)		#include<stdio.h>
			int main()
			{
			char ch;
			if(ch = printf(""))
			printf("It matters\n");
			else
			printf("It doesn't matters\n");
			return 0;
			}	

2.	a)		Write a program in C to accept radius & calculate diameter, circumference and area of circle.	10
	b)		Write short notes on :	10
		1)	Friend functions in C++ .	
		2)	Iterative/Looping statements of C.	
3.	a)		Differentiate between :	10
		1)	continue and break statements.	
		2)	if... else and switch case statements.	
	b)		Write a program in C program to calculate sum of 5 subjects and find percentage:	10
4.	a)		Write a program in C++ to swap two numbers.	10

P.T.O.

	b)		Explain Single dimension Array in C with example.	10
5.			Write short notes on:	20
	a)		Standard library string function: strlen( ), strcat( ),strcpy( ),strcmp( ).	
	b)		Hybrid Inheritance with example in C++.	
	c)		Constructors and destructors.	
	d)		Call by value and call by reference in C.	

Total No. of Questions—**7**] [Total No. of Printed Page—**1**

Seat No.	

[5578]-201

PGDCM (Second Semester) EXAMINATION, 2019

WEB TECHNOLOGY

(Including E-Commerce, HTML and Basic JAVA)

(2013 PATTERN)

Time : Three Hours **Maximum Marks : 50**

Instructions:
(1) Question No. 7 is compulsory.
*(2) Solve **any** 3 from Q. Nos. 1 to 6.*
(3) Write your assumptions if any.

Q1. Explain with example Encapsulation and Polymorphism in Java. **[10]**

Q2. What is E-Commerce? How it works? Explain its advantages and disadvantages. **[10]**

Q3. Write an item class with itemno, itemnm, stock and uom as instance variables. Write the overloaded constructors. Also write Issue() and Receipt() methods. **[10]**

Q4. Explain various Java AWT components in detail. **[10]**

Q5. Explain various uses of HTML and XML. **[10]**

Q6. Discuss basic object oriented programming concepts. **[10]**

Q7. Write short notes on **(any four)** **[20]**

1. Web Hosting
2. Wrapper Classes
3. Digital Signature
4. Constructors in JAVA
5. WWW

Total No. of Questions—**6**] [Total No. of Printed Page—**1**

Seat No.	

[5578]-203

P.G.D.C.M. (II Sem.) EXAMINATION, 2019
203 : DATABASE MANAGEMENT SYSTEM AND ORACLE
(2013 PATTERN)

Time : 3 Hours **Maximum Marks : 50**

N.B. :— (*i*) Question No. **1** is compulsory.
(*ii*) Attempt any *three* from Q. Nos. **2** to Q. No. **6**.

Q 1.		Car(carno,carnm,carsegment(small/midsize),price,clrid,cmid) Car_manufacture(cmid,cmnm) Color(clrid,clrname) Solve the following SQL Queries: 1) Create all tables with proper constraints? 2) Display the car details in range 100000 to 500000. 3) Display the total number of cars segment wise. 4) Display the car details of "Black" color cars. 5) Display the total cars manufactured by "TATA" 6) Add column "contact_no" in car_manufacturer relation.	[20]
Q 2.	a.	What are the advantages & Disadvantages of Normalization	[6]
	b.	Compare HDB Vs NDB	[4]
Q 3.	a.	Explain various users of DBMS.	[6]
	b.	Describe architecture of DBMS.	[4]
Q 4.	a.	Explain 1NF,2NF and 3NF with example	[6]
	b.	Explain characteristics of DBMS.	[4]
Q5.	a.	Explain CODD's Rule.	[6]
	b.	Explain different data types in MS-Access.	[4]
Q6.		Write a short note on- (Any Two) i) Numeric Functions ii) Software Modules in DBMS iii) ER Model	[2*5=10]

Total No. of Questions—**7**] [Total No. of Printed Page—**1**

Seat No.	

[5578]-21

PGDCM (Second Semester) EXAMINATION, 2019

WEB TECHNOLOGY

(Including E-Commerce, HTML and Basic JAVA)

(2008 PATTERN)

Time : Three Hours **Maximum Marks : 70**

Instructions:

(1) Question No. 7 is compulsory.

*(2) Solve **any five** from Q. Nos. 1 to 6.*

(3) Write your assumptions if any.

Q1. What is WWW? What is HTML? Explain the following tags. **[10]**

a) <sup> b) c) <style> d) <sub>

Q2. Write a Java program to print the following pattern: **[10]**

```
* * * * *
* * * *
* * *
* *
*
```

Q3. What is JavaScript? Explain Arrays in JavaScript? **[10]**

Q4. Write a Java Code to design a class organization with method count_staff. **[10]**

Q5. What is applet in JAVA? Discuss Applet Life Cycle with the help of diagram. **[10]**

Q6. What is E-Commerce? Explain web hosting in detail. **[10]**

Q7. Write short notes on **(any four)** **[20]**

1. Benefits of electronic commerce
2. Abstract Class
3. Constructors in JAVA
4. Classes and Objects
5. XML

Total No. of Questions—**7**] [Total No. of Printed Pages—**2**

Seat No.	

[5578]-22

P.G.D.C.M. (II Sem.) EXAMINATION, 2019

202 : SOFTWARE ENGINEERING

(2008 PATTERN)

Time : Three Hours **Maximum Marks : 70**

Note: 1. Make your own assumptions, whenever necessary.
2. Q.1 and Q.7 are compulsory and solve Any Three from remaining

1. Order processing system includes the following activities.
   i) Customer sends in order.
   ii) Order is received by order processing clerk.
   iii) Order Processing clerk verifies the order for the material before sending for further Processing or rejecting it.
   iv) Rejected order will be sent to customer others will entered into the customer file.
   v) Order is processed and invoice is prepared.

   A) Draw Ist level Data Flow Diagram. **[10]**
   B) Design Normalized File Layouts. **[10]**
   C) Data Entry Form for receiving order with Validations **[05]**

2. a) Discuss feasibility study. **[5]**
   b) Explain Spiral model. **[5]**

3. Explain Waterfall model with neat diagram. Also describe advantages and limitations. **[10]**

4. All the states in country have arranged to implement Value Added Tax (VAT) on the various commodities sold in their respective states. The VAT rules are as follows:
   - If the commodity is product within the state 4% VAT is applicable
   - If the commodity is from outside state, 8% VAT is applicable for all.
   - If the commodity is imported, then 12% VAT is applicable for all.
   - If it is second sale, the 4% VAT is applicable for all Commodities

   Draw Decision Table and Decision Tree to compute VAT. **[10]**

P.T.O.

5. a) Explain various skills required by System Analyst. **[5]**
   b) What is role of system analyst in SDLC? Explain in detail. **[5]**

6. Design a Fixed Deposit Receipt for bank. **[10]**

7. Write short notes on (**Any three**) **[15]**
   a) Prototyping
   b) 4GL
   c) System Testing
   d) FDD

Total No. of Questions—**6**] [Total No. of Printed Pages—**2**

Seat No.	

[5578]-23

PGDCM (Second Semester) EXAMINATION, 2019

203 : DATABASE MANAGEMENT SYSTEM AND ORACLE

(2008 PATTERN)

Time : Three Hours **Maximum Marks : 70**

N.B. **:—** (*i*) Question No. **1** and Question No. **6** are compulsory.

(*ii*) Attempt any *three* from Question No. **2** to Question No. **5**.

1. Consider the following table structure : [15]

Drug_master(drug_code, drug_name, drug category, drug_dose)

Patient_prescription(patno, patname, sex, presc_date, drug_code, drug_dose)

Write SQL Queries for the following (any *five*) :

(*a*) Display the name of the various categories of the drugs.

(*b*) Display the drug which comes under category 'Antibiotics'.

(*c*) Display the prescription given to patno 10 on date 14-12-17.

(*d*) Delete the drugs with the name 'MICIP'.

(*e*) Count the Patient's to whom the drug 'Amoxciline' is given.

(*f*) Display all 'Male' patients to whom drug 'Zerodol' is given.

P.T.O.

2. (*a*) Differentiate between Hierarchical Model and Network Model. [8]

(*b*) Explain any *seven* Dr. E.F. Codd's rules for RDBMS. [7]

3. (*a*) Explain the update Anomally with an example. [8]

(*b*) Explain the 1NF, 2NF and 3NF with examples. [7]

4. (*a*) Differentiate between RDBMS and DBMS. [8]

(*b*) Explain the use of MS-Access. [7]

5. (*a*) Explain the Implicit and Explicit Cursor. [8]

(*b*) Explain the VIEWS in Oracle. [7]

6. Write short notes on (any *two*) : [2×5]

(*a*) Mapping cardinalities

(*b*) Average functions in oracle

(*c*) COMMIT

(*d*) ALTER TABLE.