Total No. of Questions : 5]

SEAT No. :

P-7790

[Total No. of Pages : 2

[6121]-11

M.B.A. (I.T)

101(Core) : C PROGRAMMING & DATA STRUCTURE

(Rev.2020 Pattern) (Semester - I)

Time : 2½ Hours] ***[Max. Marks : 50***

Instructions to the candidates:

1) ***All Questions are compulsory.***
2) ***Figures to the right indicate full marks.***

Q1) Solve any Five : **[10]**

a) Structure in C Program.

b) Discuss the left bit shift operator (CC) in C.

c) Identifiers & keywards in C.

d) gets() & puts() in C.

e) Explain local static variables in C

f) Union in C program

g) fpintf in C program

Q2) Solve any Two :- **[10]**

a) Explain for loop & do - while loop in C program.

b) Explain the role of free () function in C program.

c) Explain ternary operator in C with example.

Q3) Write a C program to find the largest element in an Array of Integers. **[10]**

OR

Write a C program to find the sum of all even numbers between 1 and 100.

P.T.O.

Q4) Write a C program to create an array of employee structures and display the details of each employee. **[10]**

OR

Write C program to print a triangle pattern as shown below :-

× × ×

× × × × ×

× × × × × × ×

Q5) Write a C program that copies the contents of one text file to another text file, removing any blank lines present in original file. **[10]**

OR

Write a C program that accepts a sentence from the user and counts the number of vowels in it using pointers.

Total No. of Questions : 5]

SEAT No. : ____

P-7791

[Total No. of Pages : 2

[6121]-12

M.B.A. (I.T)

102 : SOFTWARE ENGINEERING WITH UML

Software Engineering and Data Structure

(Revised 2020) (Semester - I)

Time : 2½ Hours] ***[Max. Marks : 50***

Instructions to the candidates:

1) ***All Questions are compulsory.***
2) ***Draw neat labelled diagrams wherever necessary.***
3) ***All questions are equal marks.***

Q1) Solve any Five (each 2 marks) : **[5 × 2 = 10]**

a) Write any four advantages of spiral model.

b) Explain basic characteristics of system.

c) Define the basic components of software system.

d) Write any four notes of users in SDLC.

e) Distinguish RAD model and waterfall model.

f) Explain in short software development approach with SSAD.

g) What is SDLC? List any four types of SDLC model.

h) What is RUP? Write any four phases of RUP.

Q2) Write short note on (any 2) : **[2 × 5 = 10]**

a) Inheritance and polymorphism

b) Methods and Message

c) Aggregation and composition in OOAD.

P.T.O.

Q3) Prepare SRS document for Railway Reservation system. **[10]**

The overall functionality is as follows :-

a) Registration of passangers

b) Ticket booking

c) Train details

d) Payment

OR

Explain Decision tables and decision Trees draw decision table for Chatbox App.

Q4) Demonstrate use-case driven object-oriented analysis for online movie tickets booking for metro multiplex web application. **[10]**

OR

Draw state transition diagram for bank safety rocker system which consists of a sensor and the system with following facilities.

a) Sensing the intruders

b) Capture photograph

c) Scanning finger prints.

Q5) Design uses interface for providing student feedback for teaching faculty member and infrastructure facilities for the educational institute. **[10]**

OR

Explain various eight golden rutes and issues for UI design.

Total No. of Questions : 5]

SEAT No. : ____

P-7792

[Total No. of Pages : 2

[6121]-13

M.B.A. (Information Technology)

103-Core : DATABASE MANAGMENT SYSTEM

(Rev.2020 Pattern) (Semester - I)

Time : 2½ Hours] ***[Max. Marks : 50***

Instructions to the candidates :

1) ***All questions are compulsory.***
2) ***Figures to the right indicate full marks.***

Q1) Answer of any five : **[10]**

Define the following terms :

a) Cardinality

b) Database

c) Aggregation

d) Specialization

e) Encryption

f) Views in SQL

g) Deadlock

h) 2NF

Q2) Solve any two : **[10]**

a) What is data independence? Explain two types of data independence.

b) What is need of lock in DBMS? Explain shared lock and exclusive lock with the help of example.

c) Define transaction and explain desirable properties of transactions.

Q3) Construct an E-R diagram for a hospital with a set of patients and a set of medical doctors. Associate with each patient a log of the various tests and examinations conducted . (Take suitable assumption if necessary) **[10]**

OR

Demonstrate Conflict Serializability.

P.T.O.

Q4) What do you understand by constraints in SQL? Explain its various types with the help of examples. **[10]**

OR

Create student table with following attributes student (S-id, S-name, Gender, Age)

a) insert 5 records in student table.

b) print student information who's Gender is female.

c) count how many female students are in student table.

d) print student name starting with 'A'.

Q5) What is normalization. Illustrate functional dependency with example.**[10]**

OR

How does the process of database backup and recovery address catastrophic failures?

⌘⌘⌘

Total No. of Questions : 6]

SEAT No. :

P-7793

[Total No. Of Pages : 2

[6121]-14
M.B.A. (IT)
104: Principles of Management and Organizational Behaviour
(Rev.2020) (Semester - I)

Time : 2½ Hours] ***[Max. Marks : 50***

Instructions to the candidates :

1) ***Q.1 and Q.6 are compulsory.***

2) ***Solve any 3 questions from Q.2 to Q.5***

Q1) **Solve all** **[5 × 2 = 10]**

a) Leadership styles

b) Team Building

c) Contingency approach.

d) Ego states

e) MIS

Q2) Explain in detail theory of 'X' and theory of "Y". **[10]**

Q3) Define and explain group & group dynamics with examples. **[10]**

Q4) Explain types of decision making tools you will suggest to small scale industries. **[10]**

Q5) What is stress management? Describe various sources and types of stress. **[10]**

P.T.O.

Q6) Write short note on (any 2) **[10]**

a) Conflict management

b) F.W Taylor's

c) Johari window



Total No. of Questions : 5]

SEAT No. :

P8069

[Total No. of Pages : 2

[6121]-15

M.B.A. - I (I.T.)

105 - (CORE) : FUNDAMENTALS OF INFORMATION TECHNOLOGY

(Revised 2020) (Semester-I)

Time : 2½ Hours] *[Max. Marks : 50*

Instructions to the candidates:

1) ***All the questions are compulsory.***
2) ***Figures to the right indicate full marks for questions / sub questions.***

Q1) Answer the following (Any 5) **[5×2=10]**

a) What are the types of networks?

b) Write the types of memory.

c) Explain types of computer?

d) What is EBCDIC and ASCIT?

e) Write the functions of operating system?

f) Write the name of four input & four output devices?

g) What are the types of processor?

h) List the characteristics of computer.

Q2) Answer the following: (Any 2) **[2×5=10]**

a) Write computer definition and explain computer generations with example.

b) Explain the types of operating system.

c) Explain communication media.

Q3) Convert the following: **[1×10=10]**

a) i) $(280)_{10} = (?)_2$

ii) $(546)_8 + (?)_{16}$

OR

b) i) $(10011110)_2 = (?)_8$

ii) $(3EC)_{16} = (?)_8$

P.T.O.

Q4) Solve any one. **[1×10=10]**

a) Explain on-line processing and real-time processing

OR

b) What is high level language, low level language and object oriented language.

Q5) Solve any one. **[1×10=10]**

a) Draw the OSI model. Write down function of network layer.

OR

b) Explain image capturing devices with examples.

✡ ✡ ✡

Total No. of Questions : 5]

SEAT No. :

P-7794

[Total No. of Pages : 2

[6121]-16
M.B.A. (IT)
106 : DIGITAL MARKETING
(Rev.2020 Pattern) (Semester - I)

Time : 2½ Hours] ***[Max. Marks : 50***

Instructions to the candidates :

1) ***Assume Suitable Data if necessary.***
2) ***Draw neat, labelled diagram whenever necessary.***
3) ***Figures to the right indicate full Marks.***
4) ***All questions are compulsory.***

Q1) Solve the following (Any five) : **[10]**

a) Define Marketing?

b) What do you mean by online shopping?

c) What is Segment?

d) What is advertisement?

e) What is Offers?

f) What is LEO?

g) What is Media marketing?

h) State any two features of digital marketing?

Q2) Answer the following (Any two) : **[10]**

a) Explain in details Digital Marketing and its type?

b) What is Video Marketing in detail?

c) Explain the elements of E-commerce?

P.T.O.

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

a) What is LEO and explain in detail the concept of LEO?

b) Difference between M-commerce & E-Commerce in detail?

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

a) Explain you tube Marketing in details?

b) Explain in detail elements of digital marketing?

Q5) Answer the following (Any One) : **[10]**

a) Discuss the role of You Tube in digital marketing?

b) Explain the Social Media platform and its type with Example?

▽▽▽▽

Total No. of Questions : 5]

SEAT No. :

P-7795

[Total No. of Pages : 2

[6121]-17
M.B.A. (I.T)
107-UL : E-COMMERCE
(2020 Revised Pattern) (Semester - I)

Time : 2 Hours] ***[Max. Marks : 50***

Instructions to the candidates:

1) ***All Questions are compulsory.***
2) ***Draw neat labelled diagrams wherever necessary.***
3) ***Assume suitable data, if necessary.***

Q1) Solve any Five (2 marks each) : **[10]**

a) Define M-commerce.

b) Elaborate the concept of B2B Model.

c) Define Market Place.

d) List any two Attributes of E-commerce.

e) Enlist most commonly used online travel booking websites.

f) Elaborate Enterprise Social Network.

g) Name any two benefits of Social Business Networks?

h) Define EDI?

Q2) Solve any two (5 Marks each) **[10]**

a) Describe the advantages of Enterprise Social Network.

b) Explain the five benefits of Social Commerce.

c) Discuss Five benefits of E-Commerce for organization.

P.T.O.

Q3) Solve any <u>one</u> : **[10]**

a) Explain B2B and C2C E-commerce business models.

b) Explain the importance of internet in E-commerce with examples.

Q4) Solve any <u>one</u> : **[10]**

a) Explain the pre-requisite for E-commerce & explain the components of e-commerce.

b) Explain the use of EBAY and Paypal in E-commerce.

Q5) Solve any <u>one</u> : **[10]**

a) Explain the functions of E-commerce with its goals.

b) Explain the different technologies available for effective use of e-commerce?

Total No. of Questions : 5]

SEAT No. : ____

P-7796

[Total No. of Pages : 2

[6121]-18

F.Y. M.B.A. (IT)

108UL : WEB DESIGNING

(Rev.2020 Pattern) (Semester - I)

Time : 2 Hours] ***[Max. Marks : 50***

Q1) **Solve any Five :**

a) Define www. **[2]**

b) List types of images. **[2]**

c) List different DOM objects. **[2]**

d) What is DHTML? **[2]**

e) Define image mapping. **[2]**

f) What is Java Script? **[2]**

g) What is VB Script? **[2]**

h) List types of links. **[2]**

Q2) **Solve any Two :**

a) Explain common tags in HTML. **[5]**

b) Discuss HTML form elements. **[5]**

c) Write the program for following using HTML Table. **[5]**

Site#	Latitude	Longitude
Site 1		
Site 2		

Q3) **Solve any One :**

a) Explain different web component in Java Script. **[10]**

b) Explain any 5 elements of table in HTML. **[10]**

P.T.O.

Q4) **Solve any one :**

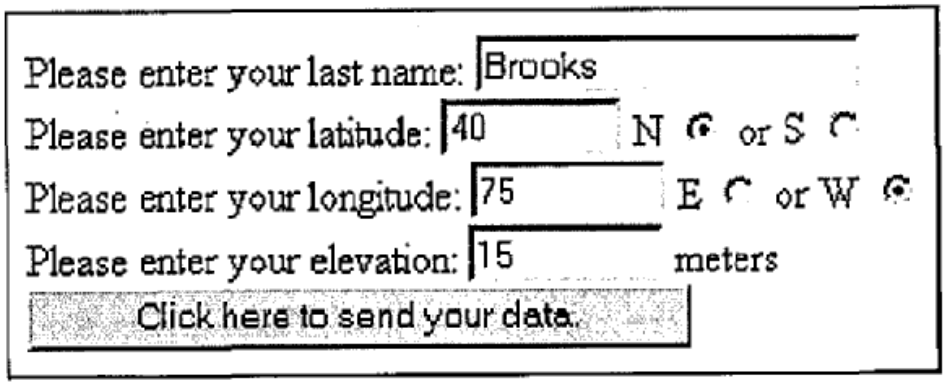
a) Discuss any 5 VB script functions with syntax and example. **[10]**

b) Explain while, do while, for statements in Java Script with syntax and example. **[10]**

Q5) **Solve any one :**

a) Discuss why we use of JavaScript and VB Script along with HTML. **[10]**

b) Write a program in HTML using form which shows following output. **[10]**



□□□

Total No. of Questions : 5]

SEAT No. : ____

P-7797

[Total No. of Pages : 2

[6121]-19

M.B.A. (I.T.)

109UL : CYBER SECURITY

(Revised 2020 Pattern) (Semester - I)

Time : 2 Hours] ***[Max. Marks : 50***

Instructions to the candidates:

1) ***All questions are compulsory.***
2) ***Each question carries 10 marks.***

Q1) Answer in Short (Any 5) : **[5 × 2 = 10]**

a) What is stream cipher & block cipher.

b) What is Address resolution protocol poisining.

c) What is the difference between virus & worm.

d) What is network sniffing?

e) Define topology.

f) Define VPN.

g) Define IDS.

h) What is system hardening?

Q2) Answer any two : **[10]**

a) What is firewall, explain its steps?

b) What is risk management?

c) What are the types of cyber attacks?

Q3) Answer any one : **[10]**

a) Explain internation standards in security management.

b) Explain tools & techniques in cryptography.

P.T.O.

Q4) Answer any one : **[10]**

a) Explain OS security.

b) How security is done in ecommerce?

Q5) Solve any one : **[10]**

a) What are different topologies and types of networks?

b) Discuss different threats and vulnerabilities.

Total No. of Questions : 5] **SEAT No. :**

P7798 **[Total No. of Pages : 2**

[6121]-21
M.B.A. - I (Information Technology)
201-SD Core : JAVA PROGRAMMING
(2020 Revised) (Semester - II)

Time : 2½ Hours] ***[Max. Marks : 50***

Instructions to the candidates:

1) ***All questions are compulsory.***
2) ***Each questions carries 10 marks.***

Q1) Solve any five from the following. **[10]**

a) What is a class?

b) Define exception

c) What is bytecode?

d) What is constructer?

e) Define abstract class.

f) What is 'super' keyword?

g) Define Interface.

h) Define polymerphism.

Q2) Answer any two of the following. **[10]**

a) Explain applet life cycle.

b) Explain access specifiers with an example.

c) Explain the OOP principles.

Q3) Answer any one of the following. **[10]**

a) Write a java program to find the facterial of a given number.

b) Define a class Employee, having instance variables eno, ename, basic, da, hra, incometax, if write a program to calculate and display the salary for 10 employees.

P.T.O.

Q4) Answer any one from the following. **[10]**

a) Write an application that will accept number from user and find whether it is divisible by 5 or not if it is not divisible, throw an exception, (user defined) 'Number Not divisible Exception'.

b) Write a java code to print the centents of a file "students.txt".

Q5) Answer any one from the following. **[10]**

a) Write an applet to draw a rectangle. Accept the necessary parameters for drawing and a color to fill it.

b) Write a AWT application to accept a name in Text field and display a 'Hello' message with the name entered.



Total No. of Questions : 5] **SEAT No. :**

P7799 **[Total No. of Pages : 2**

[6121]-22
First Year M.B.A. (I.T.)
201NT : BASIC OF NETWORKING
(2020 Revised) (Semester - II)

Time : 2½ Hours] ***[Max. Marks : 50***

Instructions to the candidates:

1) ***All questions are compulsory.***
2) ***All questions carry equal marks.***

Q1) Define (any 5) **[10]**

a) IP

b) Computer network

c) Firewall

d) IPv4 & IPv6

e) Switches

f) Print Service

g) WINS

h) DHCP server

Q2) Answer (any 2) **[10]**

a) What is topologies and its types.

b) Differentiate between Active Directory & Group Policy.

c) Explain Tunneting Protocols in details.

Q3) Solve (any 1) **[10]**

a) Explain modem and modem using ethernet card.

OR

b) Illustrate the steps of installation of print & document services with respect to windown server 2012.

P.T.O.

Q4) Solve (any 1) **[10]**

a) Write the installation steps for Net framework on client machine.

b) Define DHCP? Explain steps for configuring the DHCP server - 2012.

Q5) Solve (any 1) **[10]**

a) Explain clustring services & Network load balancing.

b) Give brief description of user management and group management in windows server - 2012.

Total No. of Questions : 5]

SEAT No. :

P7800

[Total No. of Pages : 2

[6121]-23
First Year M.B.A. (IT)
201ST Core : INTRODUCTION TO SOFTWARE TESTING LIFE CYCLE
(2020 Revised) (Semester - II)

Time : 2½ Hours] ***[Max. Marks : 50***

Instructions to the candidates:

1) ***All questions are compulsory.***
2) ***Each question having 10 marks.***
3) ***Figures to the right indicate full marks.***

Q1) Define the following terms (Any Five)

a) Issue

b) Test closure

c) Regression Testing

d) CobiT or COBIT

e) COTS

f) Alpha Testing

g) Who does Testing

h) User Interface Testing

Q2) Answer any two of the following.

a) What is Fundamental of Test Process?

b) What is Validation in Software Testing?

c) What is Tester Workbench?

Q3) Answer any one of the following.

a) Describe Origin of Defects in detail?

b) Explain Defect Life Cycle?

P.T.O.

Q4) Answer any one of the following.

a) Describe Building Test environment for testing a Software Product?

b) Describe Penetration Point Matrix in Testing?

Q5) Answer any one of the following.

a) Explain Security Awareness Policy? Why has a Security Policy?

b) Explain the difference between Distributed Application Testing and Web-Based Application Testing? What are the things that we need to test in such Application?



Total No. of Questions : 5]

SEAT No. : ____

P7801

[Total No. of Pages : 2

[6121]-24

First Year M.B.A. (IT)

202SD (CORE) : MOBILE PROGRAMMING USING ANDROID

(2020 Revised) (Semester - II)

Time : 2½ Hours] ***[Max. Marks : 50***

Instructions to the candidates:

1) ***All questions are compulsory.***
2) ***Each question having 10 marks.***
3) ***Figures to the right indicate full marks.***

Q1) Solve any FIVE of the following :

a) What role does Linux Kernel plays in Android devices?

b) What is mean by Layout in Android?

c) List important files and folders in Android List components of Android application.

d) What is use of adapter in Android?

e) What are attributes of Command Button?

f) Explain attributes “Wrap content” and “match_parent” with respect to view group.

g) What is mean by menu? Enlist its types.

h) What is collapseColumns, shrinkColumns, stretchColumns attributes of Table Layout of Android.

Q2) Write short notes on (ANY TWO).

a) Absolute Layout.

b) R.Java file.

c) AVD.

P.T.O.

Q3) Solve any ONE of the following.

a) Explain Life cycle of service in Android.

b) Explain Android SDK versions and their features.

Q4) Solve any ONE of the following

a) Explain Android architecture in detail.

b) What is the use of Manifest.xml file in any Android application?

Q5) Solve any ONE of the following

a) Design an XML code to display Login Screen using Linear Layout.

b) Design a Android App to create database is "Employee" having attributes are Empid & Empname and insert & delete the records in the database.

❄ ❄ ❄

Total No. of Questions : 5]

SEAT No. : ____

P7802

[Total No. of Pages : 2

[6121]-25

First Year M.B.A. (IT)

202 NT : SERVER AND DESKTOP TECHNOLOGIES

(2020 Revised) (Semester - II)

Time : 2½ Hours] ***[Max. Marks : 50***

Instructions to the candidates:

1) ***All questions are compulsory.***
2) ***Each question having 10 marks.***
3) ***Figures to the right indicate full marks for individual questions.***

Q1) Give the answers in short (Solve any 5). **[5×2=10]**

a) State types of viruses.

b) Explain the types of USB ports.

c) Explain the DDR3-RAM.

d) State characteristics of Data bus.

e) What is NIC?

f) What use of pipelining in instruction execution?

g) Define the term Remote access.

h) Explain Password Management through BIOS.

Q2) Solve any two of the following. **[2×5=10]**

a) What is firmware? Give three examples of it.

b) Explain the different units of 16-bit processor architecture.

c) Explain the main five components of main board.

P.T.O.

Q3) Solve any one of the following. **[10]**

a) Explain all types of addressing modes in detail.

b) Explain different type of co-processors with their applications.

Q4) Solve any one of the following. **[10]**

a) Explain the steps to install window 8 with security policy implementation.

b) Explain the steps to install from Window 8 to Windows 10.

Q5) Write descriptive note on any two: **[2×5=10]**

a) Network Installations techniques

b) CISC and RISC

c) Explain types of Printers.

❄ ❄ ❄

Total No. of Questions : 5]

SEAT No. : [ ]

P7803

[Total No. of Pages : 2

[6121]-26

First Year M.B.A. (IT)

202 ST Core : SOFTWARE QUALITY ASSURENCE

(2020 Revised) (Semester - II)

Time : 2½ Hours] ***[Max. Marks : 50***

Instructions to the candidates:

1) ***All questions are compulsory.***
2) ***Each question having 10 marks.***
3) ***Figures to the right indicate full marks.***

Q1) Give the answers in short (Solve any 5 each having 2 marks) **[5×2=10]**

a) Define Software.

b) Explain use of checklist.

c) Explain walkthrough.

d) Define faults.

e) Explain reviews.

f) Define templets.

g) List models of software development process.

h) List causes of software error.

Q2) Solve any two (each of 5 Marks) **[2×5=10]**

a) Explain IEEE standard.

b) Elaborate various software maintenance components.

c) Explain SQA objectives.

P.T.O.

Q3) Solve any one of the following. **[10]**

a) Draw and explain components of SQA architecture.

b) Explain importance of contract review

Q4) Solve any one of the following. **[10]**

a) Explain McCall's Quality Model?

b) Distinguish between SQA Vs Software Testing.

Q5) Write descriptive note on any two: **[2×5=10]**

a) Software developer methodologies.

b) ISO 9001 guiding principles.

c) Software configuration.

❄ ❄ ❄

Total No. of Questions : 5]

SEAT No. :

P7804

[Total No. of Pages : 2

[6121]-27
First Year M.B.A. (IT)
203 : BUSINESS PROCESS DOMAIN
(Revised 2020) (Semester - II)

Time : 2½ Hours] ***[Max. Marks : 50***

Instructions to the candidates:

1) ***Assume suitable data if necessary.***
2) ***Draw neat, labelled diagram whenever necessary.***
3) ***Figures to the right indicate full marks.***
4) ***All questions are compulsory.***

Q1) Solve the following (Any five) **[10]**

a) What are Products?

b) What is Sales?

c) What is invoice?

d) What is E-billing?

e) What are Order?

f) What is E-recruitment?

g) What is segment?

h) What are accounts?

Q2) Answer any following. (Any two) **[10]**

a) What is the MRP?

b) What is sales budgeting in Customer?

c) Explain the Material Procurement?

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

a) State the Efficiency Leave Management in HR?

b) Explain E-recruitment Techniques in HR?

P.T.O.

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

a) What are the Ledger Entries with example?

b) Draw the format of Balance Sheet in Details?

Q5) Answer the following. (Any One) **[10]**

a) What is a relation between CRM & SCM?

b) Explain the Demand planning with example?



Total No. of Questions : 5]

SEAT No. :

P7805

[Total No. of Pages : 2

[6121]-28
First Year M.B.A. (I.T.)
204 (Core) : ORACLE
(Revised 2020) (Semester - II)

Time : 2½ Hours] ***[Max. Marks : 50***

Instructions to the candidates:

1) ***All questions are compulsory.***
2) ***All questions carry equal marks.***
3) ***Each question having 10 marks.***
4) ***Figures to the right indicate full marks.***

Q1) Consider the following table to solve ANY FIVE the following SQL queries:

University wants to develope a system for maintaining paper setter's data and their paper setting attendance record. Consider the following tables:

a) Paper_setter_master (paper_setter_id, name, course, experience, college)

b) Paper_setting_attendance (SRNo, paper_setter_id, paper_setting_lastdt, setting_start_dt, setting_end_dt, subject, duration, subject_pattern_year)

i) Create above tables with suitable constraints.

ii) Display paper setter details, those who have attended paper setting meeting more than 5 times.

iii) Create index on subject.

iv) Display number of paper setters, who attended a meeting for a subject 'S.E.'.

v) Display all paper setters from 'XYZ' College.

vi) Change the college name 'XYZ' whose paper setter id is 'X'.

vii) Delete all paper setters record, who have submitted paper sets after schedule date.

viii) Display paper setter details, those whose experience is greater than 10 years.

P.T.O.

Q2) Write short notes on (ANY TWO)

a) Numeric functions.

b) Grant and Revoke.

c) Sequence.

Q3) Solve any ONE of the following.

a) Explain different types of Join operations with example.

b) What is mean by Constraints? Explain different types of constraints available in Oracle.

Q4) Solve any ONE of the following.

a) What is mean by Cursor? Explain different types of Cursor available in Oracle.

b) Explain different Date functions available in oracle.

Q5) Solve any ONE of the following.

a) Write a PL/SQL block to display the paper setter details, who is having experience greater than 10 years.

b) Write a function display_paper_setter_details () which accept paper_setter_id as a parameter and show details of that paper setter.

Total No. of Questions : 5]

SEAT No. :

P7806

[Total No. of Pages : 2

[6121]-29

First Year M.B.A. (Information Technology)

205 : CLOUD INFRASTRUCTURE & SERVICES

(Revised 2020 Pattern) (Semester-II)

Time : 2½ Hours] *[Max. Marks : 50*

Instructions to the candidates:

1) ***All questions are compulsory.***
2) ***Each questions having 10 marks.***
3) ***Figures to the right indicate full mark.***

Q1) Define the following terms (Any Five).

a) Grid Computing.

b) Data Lake.

c) Key requirements of a Data Center.

d) Hypervisor.

e) SOA.

f) Load Balancing in Cloud Computing.

g) Hyperjacking.

h) Cloud Resource Monitoring.

Q2) Answer any two of the following.

a) How does Cloud Computing work?

b) What are three Business Continuity Factors for Data Centers?

c) How data Centers important to Business?

Q3) Answer any one of the following.

a) Describe NIST Cloud definition framework?

b) Explain Block level storage and File level Storage in SAN?

P.T.O.

Q4) Answer any one of the following.

a) Explain Cloud infrastructure Management and service creation Tools?

b) How would you secure data for transport in cloud?

Q5) Answer any one of the following.

a) How to assume the phase's strategy for Migration to Cloud?

b) How cloud computing has changed the Economics of IT?

✡ ✡ ✡

Total No. of Questions : 5]

SEAT No. : ____

P7807

[Total No. of Pages : 2

[6121]-30

First YearM.B.A. (I.T.)

206 Core : SOFTWARE PROJECT MANAGEMENT

(Revised 2020) (Semester-II)

Time : 2½ Hours] ***[Max. Marks : 50***

Instructions to the candidates:

1) ***All questions carry equal marks.***
2) ***Each question having 10 marks.***
3) ***Figures to the right indicate full marks.***

Q1) Solve any Five of the following.

a) What are different activities under technical project management?

b) What are different types of risks in software project?

c) What are different techniques for software quality assurance?

d) What is strategic and technical assessment in project planning.

e) What are different key attributes of quality software?

f) What is role of Client and Users in project management?

g) Write the goals of Project management.

h) What is mean by dynamic system development?

Q2) Write short notes on (any two).

a) Risk management in software project

b) Extreme programming

c) Defect Management

Q3) Solve any One of the following.

a) Define software project management. How software projects are differ from other type of project?

b) What are software process model? Explain briefly the waterfall model of software development.

P.T.O.

Q4) Solve any one of the following.

a) Explain PERT a tool of risk management.

b) Explain difference between Software engineering and SPM.

Q5) Solve any one of the following.

a) Explain COCOMO model with an example.

b) Explain the different levels of CMM and its advantages.

❖ ❖ ❖

Total No. of Questions : 5]

SEAT No. :

P-7808

[Total No. Of Pages : 2

[6121]-31
F.Y. M.B.A.(Information Technology)
207 UL : Current Trends In IT
(2020 Revised) (Semester - II)

Time : 2 Hours] ***[Max. Marks : 50***

Instructions to the candidates :

1) ***All Questions are Compulsory.***
2) ***Draw neat diagrams whenever necessary.***
3) ***Every Question carries 10 marks.***

Q1) **Answer any Five out of Eight (2 Marks Each) :** **[10]**

i) Define Social Media Marketing tools.

ii) Explain the popularity wise social media platforms.

iii) What are IT infrastructure requirements in Organizations?

iv) Explain Electronic Document Management and their needs.

v) Explain the different applications of E- learning.

vi) Explain the Zoom and Google meet.

vii) Explain Digital Signature.

viii) Explain BHIM.

Q2) **Answer any Two out of Three (5 Marks each) :** **[10]**

i) Explain the preventive measures for to handle the Social Networking security Issues.

ii) What are the prerequisites required for the IT infrastructure management?

iii) Explain the Content Management System with examples.

P.T.O.

Q3) a) "M-Commerce is the need of era.". Explain it. **[10]**

OR

b) How E-Commerce is helping for to enhance the business opportunities. **[10]**

Q4) a) "Enterprise Content Management is the need of Organizations". Explain it. **[10]**

OR

b) Explain Virtual School system and their impact in Covid Lock Down. **[10]**

Q5) a) Explain LCMS in brief with examples **[10]**

OR

b) "Electronic payment system should be always safe". Explain it. **[10]**

Total No. of Questions : 5]

SEAT No. : ____

P-7809

[Total No. of Pages : 2

[6121]-32
M.B.A. (Information Technology)
208 UL : BASIC OF BUSINESS ANALYTICS
(Rev.2020) (Semester - II)

Time : 2 Hours] ***[Max. Marks : 50***

Instructions to the candidates :

1) ***All questions are compulsory.***
2) ***All questions carry 10 marks.***
3) ***All questions has internal option.***

Q1) Define any five terms. **[5 × 2 = 10]**

a) Analytics

b) Data Analyst

c) Data

d) Insight

e) Business Analyst

f) Prescriptive Analytics

g) Marketing Analytics

h) Big data

Q2) Answer <u>any two</u> questions : **[2 × 5 = 10]**

a) Explain the types of Digital data.

b) Explain the types of analytics.

c) Differentiate between data science & business intelligence.

P.T.O.

Q3) Answer <u>any one</u> question : **[10]**

a) Explain the reason behind using Hadoop in Big data analytics.

b) Elaborate the application of business analytics in improving the productivity & performance of retail industry.

Q4) Answer <u>any one</u> question : **[10]**

a) Discuss the utilities of Hadoop streaming & Hadoop Eco System.

b) Elaborate the stages of an organization in terms of data maturity & also highlight the drawbacks in the absence of good quality data.

Q5) Answer <u>any one</u> question : **[10]**

a) Elaborate the different tools used for analytics.

b) Explain the characteristics of the analytical decision - making process & skills required in good business analyst.

▽▽▽▽

Total No. of Questions : 5]

SEAT No. : ____

P-7810

[Total No. of Pages : 2

[6121]-33

M.B.A. (IT)

209UL : INFORMATION SECURITY AUDIT

(2020 Revised Pattern) (Semester - II)

Time : 2 Hours] ***[Max. Marks : 50***

Instructions to the candidates:

1) ***All questions are compulsory.***
2) ***Each question carries 10 marks.***

Q1) Answer in Short (Any 5) : **[5 × 2 = 10]**

a) Define cipher text

b) What is audit?

c) Define patent.

d) What is security?

e) What is Firewall?

f) Spillars of IS.

g) Who should issue organisational policies?

h) Objective of internal auditing.

Q2) Answer any two : **[10]**

a) Explain how organisations manage security of information systems.

b) Explain PDCA model.

c) What are the security considerations in mobile workforce?

Q3) Answer any one : **[10]**

a) What are the security aspects in VPN?

b) Explain risk management in information security.

P.T.O.

Q4) Answer any one : **[10]**

a) Explain the security models & framework.

b) What are the types of audit and approaches to audit?

Q5) Solve any one : **[10]**

a) What are 3 pillars C/A of information security?

b) What are the ethical issues in IS?

Total No. of Questions : 5]

SEAT No. :

P-7811

[Total No. of Pages : 2

[6121]-41

M.B.A.(IT)

301 SD Core : PROGRAM AND DESIGN WITH ASP.NET

(Rev.2020 Pattern) (Semester - III)

Time : 2½ Hours] ***[Max. Marks : 50***

Instructions to the candidates :

1) ***Assume Suitable Data if necessary.***
2) ***Draw neat, labelled diagram whenever necessary.***
3) ***Figures to the right indicate full Marks.***
4) ***All questions are compulsory.***

Q1) **Solve the following: (Any five)** **[10]**

a) What is Error?

b) What is Flowchart?

c) What is Integer?

d) What is Methods?

e) What are Members?

f) What are Modifiers?

g) What is object?

h) What is Constant?

Q2) **Answer the following :(Any two)** **[10]**

a) What is Files and explain its details?

b) Explain Webpage in details?

c) Explain the overloading process in detail?

P.T.O.

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

a) State the Over ridding Methods in detail?

b) Explain Image Map control in detail?

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

a) Design a Form of and write code to

i) Book _ name & Book_no

ii) display in dropdown list

iii) Add a record

b) Explain in list control in detail?

Q5) **Answer the following :(Any One)** **[10]**

a) What is a Web page? Create a web page ding VS code?

b) What is Style sheet in web page?



Total No. of Questions : 5]

SEAT No. : ____

P-7812

[Total No. of Pages : 2

[6121]-42

M.B.A. (IT)

301NT : ADVANCED COMPUTER NETWORKS

(Revised 2020 Pattern) (Semester - III)

Time : 2½ Hours] ***[Max. Marks : 50***

Instructions to the candidates:

1) ***All questions are compulsory.***
2) ***Each question carries 10 marks.***
3) ***Figures to the right indicate full marks.***

Q1) Solve any 5 : **[5 × 2 = 10]**

a) Define layers.

b) ATM is defined at which layer?

c) ATM reference model comprises of how many layers?

d) The network layer is comprised of what part of data?

e) Define nodes.

f) What is a subnet?

g) Any one type of multimedia networking?

h) What is delay in multimedia?

i) Is PGP symmetric or asymmetric? Explain.

Q2) Solve any 2 : **[10]**

a) Using hybrid form of network explain network application architectures.

b) Elaborate on mobility in cellular networks.

c) How to configure & monitor SNMP?

P.T.O.

Q3) Answer the following : **[10]**

a) Describe the elements of mail protocols?

b) Discuss Pros & Cons of 802.11 wireless LANs.

Q4) Write a brief outline on cryptography public key algorithms. **[10]**

Q5) Short Notes (any two) : **[10]**

a) Cryptography

b) Email Security

c) Streaming Video in multimedia

d) WAP

e) QOS

Total No. of Questions : 5]

SEAT No. : ____

P-7813

[Total No. of Pages : 2

[6121]-43

M.B.A. (Information Technology)

301ST : SOFTWARE TEST PLANNING & DOCUMENTATION

(2020 Revised Pattern) (Semester - III)

Time : 2½ Hours] ***[Max. Marks : 50***

Instructions to the candidates :

1) ***All questions are compulsory.***
2) ***Each question carries 10 marks.***

Q1) Answer in short (any five) : **[10]**

a) Who approves the test plan document.

b) Define testing

c) List the types of testing

d) What is meant by test coverage?

e) What is structural test case?

f) What is a test plan?

g) What is a test report?

h) List categories of debugging

Q2) Answer any two : **[10]**

a) What are the critical steps in test planning?

b) How will you overcome challenges faced due to unavailability of proper documentation?

c) What are functional test cases & non functional test cases?

Q3) Answer any one : **[10]**

a) Explain the tools important for test report.

b) Differentiate between bug release & bug leakage.

P.T.O.

Q4) Answer any one : **[10]**

a) Explain integration testing and system testing.

b) Explain development of test plan & test Metrix.

Q5) Answer any one : **[10]**

a) What is user acceptance tisting give merits & challenges.

b) Which are the tools used in testing.

⌘⌘⌘

Total No. of Questions : 5]

SEAT No. : ____

P-7814

[Total No. of Pages : 2

[6121]-44

S.Y. M.B.A. (IT)

302SD Core : ADVANCED JAVA

(Rev.2020 Pattern) (Semester - III)

Time : 2½ Hours] ***[Max. Marks : 50***

Instructions to the candidates:

1) ***All questions are compulsory.***
2) ***All questions carry equal marks.***

Q1) Answer the Following (Any five) :

a) What is the use of Collable Statement?

b) What is introspection?

c) What is Cookie?

d) Write syntax of JSP scriptlet.

e) What is use of for Name() method.

f) What is socket?

g) What is use of accept() method in networking?

h) Differentiate between Socket and Server Socket.

Q2) Answer Any Two out of Three :

a) What is RMT ? Explain RMT operation in detail.

b) Explain servlet life cycle with suitable diagram.

c) What is Bean? Explain advantages of Bean.

Q3) a) Write a socket program to display Date and Time of server's machine on the client's machine

OR

b) Write a Java socket program that runs on a client and send the series of the strings to server at port 50000. if client sends 'EXIT' the program terminates.

P.T.O.

Q4) a) The database is stored on oracle server.The database has one table named "Employee" with following fields

Attribute	Datatype	Size
empid	varchar2	05
empname	varchar2	30
edept	varchar2	10
total_sal	number	8.2

Write a Jdbc program to print the list of Employee with total salary.

OR

b) Write a servlet which accept itemno from user and display the details of that item to client(item table has itemno ,itemname and stock as fields)

Q5) a) Write a JSP application to accept city name from HTML page and display List of students from that city.Assume suitable Table structure.

OR

b) Write a JSP and HTML code to read student Course. Print students details of specific course in tabular format after accepting course as input. Assume suitable Table structure



Total No. of Questions : 5]

SEAT No. :

P7815

[Total No. of Pages : 1

[6121]-45
Second Year M.B.A. (IT)
302NT Core : PARALLEL COMPUTING
(Revised 2020) (Semester - III)

Time : 2½ Hours] ***[Max. Marks : 50***

Instructions to the candidates:

1) ***All questions are compulsory.***
2) ***Each question having 10 marks.***
3) ***Figures to the right indicate marks for individual questions.***

Q1) Give the answers in short (Solve any 5) **[5×2=10]**

a) Define vector processing
b) What is thread?
c) Define Node degrees.
d) Define Scalable network.
e) What is SIMD?
f) What is MIMD?
g) Explain Data Hazards
h) Virtual Machine

Q2) Solve any two (each of 5 Marks) **[2×5=10]**

a) List applications of parallel processing.
b) Explain the concept of inter connected network?
c) List recent parallel programming models.

Q3) Solve any one of the following. **[10]**

a) What is pipelining? Explain the different types of pipelining?
b) Explain the Flynn's classification in parallel computing?

Q4) Solve any one of the following. **[10]**

a) What are the advantages of parallel computing over sequential computing?
b) What are the issue of inter connection networks?

Q5) Write descriptive note on any two: **[2×5=10]**

a) Explain parallelism based on Grain size?
b) Discuss instruction level parallelism.
c) What is superscalar processing?

◀▶ ◀▶ ◀▶

Total No. of Questions : 5]

SEAT No. :

P7816

[Total No. of Pages : 1

[6121]-46
Second Year M.B.A. (IT)
302ST Core : AGILE MODEL & METHODOLOGY
(Revised 2020 Pattern) (Semester - III)

Time : 2½ Hours] ***[Max. Marks : 50***

Instructions to the candidates:

1) ***All questions are compulsory.***
2) ***Each question having 10 marks.***
3) ***Figures to the right indicate full marks.***

Q1) Define the following terms (Any Five)

a) Scrum Master
b) User Stories
c) Lean Production
d) SCRUM
e) Check List
f) Agile Knowledge Management
g) Agile Quality Assurance
h) Project Constraints

Q2) Answer any two of the following.

a) How Risks are managed in Agile Projects?
b) Describe the role of Scrum team in Agile Scrum Methodology?
c) Describe the generic agile concept?

Q3) Answer any one of the following.

a) Describe the Agile process flow in detail?
b) Explain Extreme Programming (XP) in Agile Process?

Q4) Answer any one of the following.

a) Describe Acceptance criteria in Agile project?
b) Explain in brief what is Agile Testing, Methodology, and process life cycle?

Q5) Answer any one of the following.

a) How do you Setting up QA processes in an Agile environment?
b) How to build a good QA plan for your Agile ste-up?

◀▶ ◀▶ ◀▶

Total No. of Questions : 5]

SEAT No. :

P7817

[Total No. of Pages : 2

[6121]-47

S.Y. M.B.A. - (IT)

303 Core : MANAGEMENT INFORMATION SYSTEM

(Rev.2020 Pattern) (Semester - III)

Time : 2½ Hours] *[Max. Marks : 50*

Instructions to the candidates:

1) ***Assume suitable data if necessary.***
2) ***Draw neat, labelled diagram whenever necessary.***
3) ***Figures to the right indicate full marks.***
4) ***All questions are compulsory.***

Q1) Solve the following (any five). **[10]**

a) What is system design?

b) What is MIS?

c) What is net working

d) What is Data mining?

e) What is AI?

f) What is FIS?

g) What is information?

h) What is IS?

Q2) Answer the following (any two). **[10]**

a) What is system and user defined system with example?

b) Explain information in details?

c) Explain quality information and its application in detail?

P.T.O.

Q3) Answer the following (any one). **[10]**

a) Explain SDLC Phases in detail?

b) Explain CASE tools in detail?

Q4) Answer the following. (any one). **[10]**

a) Descirbe Data ware Housing and its component in detail?

b) Explain in EIS and Component in detail?

Q5) Answer the following. (any one). **[10]**

a) What is a RAD? Explain with example?

b) What is FIS in Marketing in MIS?



Total No. of Questions : 5]

SEAT No. :

P7818

[Total No. of Pages : 2

[6121]-48

S.Y. M.B.A. (Information Technology)

304 : DATA MINING

(Revised 2020 Pattern) (Semester-III)

Time : 2 Hours] *[Max. Marks : 50*

Instructions to the candidates:

1) ***All qustions are compulsory.***
2) ***All questions carry equal marks.***
3) ***Figures to the right indicate full marks.***
4) ***Draw diagram wherever necessary.***

Q1) Define the following terms (Any Five). **[10]**

a) DBMS.

b) Data Mining.

c) Knowledge Engine.

d) Sample Size.

e) Population.

f) BI.

g) OLTP.

h) OLAP.

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

a) What are the applications of data mining?

b) What do you mean by data cleaning?

c) List any five data mining tools.

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

a) Write short note on Neural Network.

b) Differentiate between Database management System and data mining.

P.T.O.

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

a) What is web mining? Explain in brief web content mining.

b) What do you mean by risk management? Explain how to manage it using data mining tools.

Q5) Answer the following questions (Any One). **[10]**

a) What do you mean by market basket analysis? State and explain the data mining technique used for market basket analysis.

b) List and Explain the phases of data collection and processing for weather forecasting.

✡ ✡ ✡

Total No. of Questions : 5]

SEAT No. :

P7819

[Total No. of Pages : 2

[6121]-49

S.Y. M.B.A. - (IT)

306 Core : INTRODUCTION TO ANIMATION

(Revised 2020 Pattern) (Semester - III)

Time : 2½ Hours] *[Max. Marks : 50*

Instructions to the candidates:

1) ***Assume suitable data if necessary.***
2) ***Draw neat, labelled diagram wherever necessary.***
3) ***Figures to the right indicate full marks.***
4) ***All questions are compulsory.***

Q1) Solve the following (any five). **[10]**

a) What are cards?

b) What is algorithm?

c) What is Character?

d) What is E - learning?

e) What are Operating Systems?

f) What are CAD?

g) What is Photoshop?

h) What is Corel draw?

Q2) Answer the following (any two). **[10]**

a) What are the Elements of design Art?

b) State the application of any one elements of Design in brief?

c) Explain the elements of Color wheels?

P.T.O.

Q3) Answer the following (any one). **[10]**

a) State the Characteristics of Design Art?

b) Explain Types of movement in applied design?

Q4) Answer the following. (any one). **[10]**

a) What are the basic components of computer Graphics?

b) Explain in details X windows open GL?

Q5) Answer the following. (any one). **[10]**

a) What is a script? Explain with example?

b) Explain the fundamental principles of animation?



Total No. of Questions : 5]

SEAT No. : ____

P7820

[Total No. of Pages : 2

[6121]-50

Second Year M.B.A. (IT)

307 UL : DATA WAREHOUSING

(Revised 2020 Pattern) (Semester-III)

Time : 2 Hours] ***[Max. Marks : 50***

Instructions to the candidates:

1) ***All questions are compulsory.***
2) ***Each question having 10 marks.***
3) ***Figures to the right indicate full marks.***

Q1) Solve any FIVE of the following. **[10]**

a) What are the 5 key components of Data Warehouse?

b) What is mean by metadata?

c) What is mean by Data Mart?

d) What is data Warehousing?

e) What is mean by Dimension Table?

f) What is mean by OLAP?

g) What is mean by Fact Table?

h) What are different characteristics of Data Warehouse?

Q2) Write short notes on (ANY TWO). **[10]**

a) ETL tools.

b) Tools for metadata management.

c) Granularity.

Q3) Solve any ONE of the following. **[10]**

a) Explain ETL process in detail.

b) What is schema? Explain different types of schemas in data Warehouse.

P.T.O.

Q4) Solve any ONE of the following. **[10]**

a) Explain Kimball's life cycle of Data Warehouse in detail.

b) Explain important responsibilities of team members while designing data Warehouse.

Q5) Solve any ONE of the following. **[10]**

a) Explain the advantages and disadvantages of Data Warehouse.

b) Explain different types of Data Warehouse.

✡ ✡ ✡

Total No. of Questions : 5]

SEAT No. :

P7821

[Total No. of Pages : 2

[6121]-51
M.B.A. - II (IT)
308UL : OOPS WITH CPP
(Revised 2020 Pattern) (Semester - III)

Time : 2 Hours] *[Max. Marks : 50*

Instructions to the candidates:

1) ***All questions are compulsory.***
2) ***Each question having 10 marks.***
3) ***Figures to the right indicate full marks.***

Q1) Explain the following terms with an example (any 5). **[10]**

a) Operator Overloading

b) Abstraction

c) Inline Function

d) Array

e) Constructors

f) Pointers

g) Variables

h) Constants

Q2) Solve any 2. **[10]**

a) Why do we need the object - oriented programming paradigm?

b) What is an implicit conversion, Explain with an example?

c) Explain the static member function?

P.T.O.

Q3) Solve any 1. **[10]**

a) Write a program to overload the '+' operator to concatenate two strings.

b) Explain types of inheritance? Write a program to pass parameters to the base class constructor in multilevel inheritance.

Q4) Solve any 1. **[10]**

a) Write a program that reads a text file & creates another file that is identical except that every sequence of consecutive blank spaces in replaced by a single space & Also count the number of characters in the file.

b) What is a Virtual base Class? Explain with a suitable example.

Q5) Solve any 1. **[10]**

a) Write a program to demonstrate default arguments and constant arguments for a function.

b) Design a class employee (name, dept, salary). Write a C++ program that should throw an exception when salary is less than or equal to 0.



Total No. of Questions : 5]

SEAT No. :

P7822

[Total No. of Pages : 2

[6121]-52

S.Y. M.B.A. (I.T.)

309 UL : E - GOVERNANCE AND FRAMEWORK OF ICT

(2020 Revised Pattern) (Semester - III)

Time : 2 Hours] *[Max. Marks : 50*

Instructions to the candidates:

1) ***All questions are compulsory.***
2) ***Each question carries 10 marks.***

Q1) Answer in short (any 5). **[10]**

a) SMAC technology.

b) Mobile wallet

c) Explain smart villages.

d) What is Big-data?

e) Define e-waste

f) Data security

g) Define pervasive computing

h) What are smart cities.

Q2) Solve any two. **[10]**

a) Explain working of digital library

b) Explain open government data standards

c) Differentiate between e Governance and e Government

P.T.O.

Q3) Solve any one of the following. **[10]**

a) How e Governance resolve the problem digital divide in Indian content.

b) Explain how e Commerce is helpful to move nation towards cashless India.

Q4) Solve any one. **[10]**

a) Explain maturity model of e Governance

b) Elaborate your views on individual privacy vs national security

Q5) Solve any one **[10]**

a) What are the objectives of e - Governance

b) Explain various e Governance project model



Total No. of Questions : 5]

SEAT No. : ____

P7823

[Total No. of Pages : 2

[6121]-61

S.Y.M.B.A. (IT)

401 : ENTERPRISE RESOURCE PLANNING

(Rev.2020 Pattern) (Semester-IV)

Time : 2½Hours] ***[Max. Marks : 50***

Instructions to the candidates:

1) ***All questions are compulsory.***
2) ***Each questions having 10 marks.***
3) ***Figures to the right indicate full marks.***

Q1) Define the following term (any 5) **[5×2=10]**

a) BPR

b) MRP

c) ERP

d) SOA

e) Logical integration.

f) CRM

g) SAP

h) SCM

Q2) Solve any 2 **[10]**

a) Discuss Why enterprise integration important?

b) Difference between role of ERP in logical & Physical integration.

c) Explain MRP in detail.

Q3) Answer the following (any 1) **[10]**

a) Discuss proof of concept (POC) with steps?

b) Explain briefly the responsibility of ERP project team?

P.T.O.

Q4) Solve (any 1)

a) How to choose Right ERP for the business. **[10]**

b) Elaborate on ERP implementation challenges. **[10]**

Q5) Solve (any 1)

a) Explain vanilla Implementation with difference in custom ERP & Vanilla implementation. **[10]**

b) What are 3 main components of Customer Relationship Management.**[10]**



Total No. of Questions : 5]

SEAT No. : ____

P7824

[Total No. of Pages : 2

[6121]-62

Second Year M.B.A.(IT)

402 CORE : MULTIMEDIA AND ANIMATION

(2020 Revised Pattern) (Semester-IV)

Time : 2½ Hours] ***[Max. Marks : 50***

Instructions to the candidates:

1) ***All questions are compulsory.***
2) ***Assume suitable data if necessary.***
3) ***Draw neat, labelled diagram whenever necessary.***
4) ***Figures to the right indicate full marks.***

Q1) Solve the following (Any five) **[10]**

a) What is Multimedia?

b) Define Networks?

c) What is LAN networking?

d) What is TEXT?

e) Define Message?

f) What is Audio Message?

g) What is Compression?

h) What is Applications in Multimedia?

Q2) Answer the following. (any two) **[10]**

a) Explain the image fundamentals in multimedia?

b) What is the category use for?

c) Explain the fundamentals of Image?

P.T.O.

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

a) What is Lossless and Lossy image compression.

b) Explain Audio compression and application in details?

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

a) What is Huffman coding? and explain in Huffman coding text compression in detail?

b) State the LZW text compression?

Q5) Answer the following (any one) **[10]**

a) What is predictive coding? Explain in detail linear predictive coding?

b) What is video compression? State the principles for video compression?

Total No. of Questions : 5]

SEAT No. :

P7825

[Total No. of Pages : 1

[6121]-63

S.Y.M.B.A. (IT)

404-UL : OPEN SOURCE IOT PLATFORM

(Revised 2020 Pattern) (Semester - IV)

Time : 2 Hours] *[Max. Marks : 50*

Instructions to the candidates:

1) ***All questions are compulsory.***
2) ***Each question carries 10 marks.***

Q1) Answer in short (any 5) : **[10]**

a) Define IoT
b) What is internet
c) Brief the technology M2M
d) What is web technology
e) Give 2 advantages of IoT
f) Internet future technology
g) Give 2 features of IoT sensor
h) Give 2 challenges of IoT

Q2) Solve any two : **[10]**

a) Describe the different components of IoT.
b) How is IoT energy efficient?
c) Explain how bigdata contributes to IoT.

Q3) Solve any one : **[10]**

a) What is the vision and characteristics of IoT?
b) Highlight the privacy and security in IoT.

Q4) Solve any one : **[10]**

a) What is the role of IoT in influencing development of smart cities.
b) Explain how IoT works.

Q5) Solve any one : **[10]**

a) What are the challenges in IoT?
b) What is IoT reference model?



Total No. of Questions : 5]

SEAT No. :

P7826

[Total No. of Pages : 1

[6121]-64

Second Year M.B.A. (IT)

405 UL : DEBUGGING OF APPLICATION PROGRAMMING (IoT)

(Revised 2020 Pattern) (Semester-IV)

Time : 2 Hours] *[Max. Marks : 50*

Instructions to the candidates:

1) ***All questions are compulsory.***
2) ***Each questions having 10 marks.***
3) ***Figures to the right indicate full marks.***

Q1) Define the following terms (Any Five).

a) IoT.
b) Industry 4.0.
c) Adoption of IoT.
d) Open Source.
e) Pre-Processor.
f) MQTT Server.
g) Injection Engine.
h) Cryptography.

Q2) Answer any two of the following.

a) What are different component of IoT?
b) Describe open source platform?
c) How to setup IoT Platform?

Q3) Answer any one of the following.

a) Explain IoT Architecture in brief?
b) Explain in detailed Basic statements used in C with suitable example?

Q4) Answer any one of the following.

a) Describe IoT Cloud building blocks in brief?
b) Explain Device Management and Application services in details?

Q5) Answer any one of the following.

a) Explain different securities used in IoT?
b) Describe Benchmarking of IoT application and its platforms in detail?

✡ ✡ ✡