

Total No. of Questions—7]

[Total No. of Printed Pages—2

Seat No.	
-------------	--

[5367]-101

M.C.M. (Semester I) EXAMINATION, 2018
FUNDAMENTALS OF INFORMATION TECHNOLOGY
(2013 PATTERN)

Time : 2½ Hrs.

Maximum Marks : 50

N.B. :— (i) Answer any 5 from 7 questions.

(ii) All questions carry equal marks.

(iii) Figures to the right indicate marks.

1. (A) Explain characteristics of computer. [5]
(B) Explain various scanning devices. [5]
2. (A) Explain the following terms : [5]
(i) Bit
(ii) Byte
(iii) MB
(iv) KB
(v) GB
(B) Discuss various processing devices in brief. [5]
3. (A) Explain time-sharing, on-line processing and real time processing. [5]
(B) Discuss file management. [5]

P.T.O.

4. (A) What is meant by computer language ? Explain low level language. [5]
- (B) Explain CPU scheduling in operating system. [5]
5. Explain OSI seven layer model in detail. [10]
6. (A) Explain block diagram of computer and discuss each unit.
- (B) Explain different types of monitor. [10]
7. Solve : [10]
- (a) $(440)_{10} - ?_2$
- (b) $(1101101)_2 - ?_{10}$
- (c) $(3AC)_{16} - ?_{10}$
- (d) $(320)_{10} - ?_8$
- (e) $(186)_{10} - ?_2$

Total No. of Questions—7]

[Total No. of Printed Pages—2

Seat No.	
-------------	--

[5367]-102

M.B.A. (Semester-I) EXAMINATION, 2018

INFORMATION TECHNOLOGY

102 : 'C' Programming and Data Structure

(2015 PATTERN)

Time : 2½ Hours

Maximum Marks : 50

N.B. :— (i) Question No. 1 is compulsory.

(ii) Solve any *four* from the remaining.

(iii) Figures to the right indicate full marks.

1. (A) Find and explain output of the following program. Assume suitable header file. [6]

```
(a) Void main() { char S[ ] = "Just In Time"; int t=0;
while (S[t]!='\0') { if (S[t]!=' ')
S[t]=S[t]+2; t++;}
```

```
(b) int main() { int a = 2; int b = 10;
switch(a)
{ case 1 : printf("b is %d\n",b);break;
default; printf("b is %d\n",b); break;
} return 0; }
```

```
(c) int main() {char arr[ ] = "geeksforgeeks";
```

P.T.O.

```

char* ptr1 = arr; char * ptr2 = ptr1+3;
printf("ptr2 - ptr1 =%d\n", ptr2 - ptr1);
printf(" (int*)ptr2 - (int*) ptr1 = %d", (int*) ptr2-(int*) (ptr1);
getchar(); return;}

```

- (B) Explain the following (any *two*) : [4]
- (a) Storage classes
 - (b) Queue
 - (c) Command line argument.
2. Write a C program to find and print A to the power N using function. [10]
 3. Write a C program which uses an array of structure to accept Name, Course of 10 students. Sort these records on Name in the ascending order and display in a tabular form. [10]
 4. Write a C program which accept five digit number and calculate sum of each digits by using function. e.g. 12345 = 15 o/p will be 6. [10]
 5. Write a C program to copy the content of one text file into another file. [10]
 6. Write a C program to convert uppercase string into lowercase string. [10]
 7. Write a C program to print the following pattern : [10]


```

1
1 0
1 0 1
1 0 1 0
1 0 1 0 1.

```

Total No. of Questions—5]

[Total No. of Printed Pages—2

Seat No.	
-------------	--

[5367]-103

M.C.M. (Semester-I) EXAMINATION, 2018
103 : SOFTWARE ENGINEERING WITH UML
(2013 PATTERN)

Time : 2½ Hours

Maximum Marks : 50

- N.B.** :— (i) Question No. 1 and 5 are compulsory.
(ii) Answer any 2 from the remaining.
(iii) Mention assumptions made for solving case study.
(iv) Net diagrams carry marks.

1. State Govt. declares various scholarships to students of colleges. A student has to fill up a form and submit it to college office with necessary documents. After verification by scholarship section of colleges, all forms are sent to education department of State Govt. forms are scrutinized and sectioned list of students along with cheque of total amount is sent to college. College display list of notice board student approaches the office, office prepares voucher and asks student to sing. After this only the amount is paid to student by account department. You are required to do the following :
- (a) Draw ERD [07]
(b) File Layout. [07]
2. (a) Explain Decision Tree and Decision Table with suitable example . [06]
(b) Explain Input/output Design in Software Development. [06]

P.T.O.

3. Draw use case diagram and Class diagram for the case of Intranet Mail System. [12]

The organization is decided to computerize the internal mailing system of the various departments. It allows an employee (User or Administrator) to manage their communication with a group of other employee within the organization. It is user-friendly and flexible to send, receive, delete, save, reply & forward the mails with attachment to the valid user with minimum data entry and availability of information on request with response in seconds.

This system provides facility of registration for new users. Existing users should be able to login using username and password. The reminder should be visible as very first task after valid login. When User login successfully then following things are accessible. Such as Display Remainder, Go to Index, Update Profile, Change Password, Compose, Attached, Send to All, Send Item, Delete, Save, Trash, Remainder and Logout. When Administrator login successfully then following extra things are accessible. Such as View User Information, Search, Delete User, etc.

4. (a) Explain the role of System Analyst ? [06]
(b) Explain Spiral Model of SDLC. [06]
5. Write short notes on (any *Three*) : [12]
(i) System Requirement Specification (SRS)
(ii) Feasibility Study
(iii) Rational Unified Process (RUP)
(iv) Requirement Analysis.

Total No. of Questions—5]

[Total No. of Printed Pages—2

Seat No.	
-------------	--

[5367]-104

M.C.M. (I Sem.) EXAMINATION, 2018

104 : DATABASE MANAGEMENT SYSTEM

(2013 PATTERN)

Time : 2½ Hours

Maximum Marks : 50

N.B. :— (i) Question Nos. 1 and 5 are compulsory. Solve any *two* questions from remaining.

(ii) Figures to the right indicate full marks.

1. A bank has many branches and a large number of customers. A customer can open different kinds of accounts with the bank. The bank keeps track of customer by his SSN, Name, address and phone number. Age is used as a factor to check whether he is major. There are different types of loan, each identified by loan number. A customer can take out more than one type of loan, and all branches can give loan. Loans have duration and interest rate. The account holder can enquire about the balance in his accounts. Draw an E-R diagram for above case and normalized upto 3NF. [15]

2. What is concurrency control ? Explain time stamp based protocols with example. [10]

P.T.O.

3. Explain the following keys with example : [10]
- (1) Primary key
 - (2) Secondary key
 - (3) Candidate key
 - (4) Super key
 - (5) Foreign key.
4. (A) Explain log base recovery. [5]
- (B) Explain how concurrent transactions are recovered. [5]
5. Write short notes on (any *three*) : [15]
- (1) Database users
 - (2) Transaction states
 - (3) E.F. Codd's rule (any *five*)
 - (4) Data warehousing
 - (5) Encryption.

Total No. of Questions—5]

[Total No. of Printed Pages—2

Seat No.	
---------------------	--

[5367]-201

**M.B.A. (IT) (Semester II) EXAMINATION, 2018
201 : BUSINESSS APPLICATION AND ERP TOOL
(2015 Pattern)**

Time : 2½ Hours

Maximum Marks : 50

NB.:—(i) All questions are compulsory.

(ii) Figures to the right indicate full marks.

1. (a) Explain EOQ & Labour efficiency with example ? [10]

Or

(b) Explain FIFO and LIFO methods with examples ? [10]

2. (a) What is sales budget ? Explain the different market segments used to boost sales ? [10]

Or

(b) Design a quotation for the following items. Consider you as sales manager of net soft computer services Pune. [10]

Sr. No.	Particular	Quantity
1	Mouse	5
2	Laptop	3
3	Keyboard	6
4	CD Drive	3
5	Printer	2
6	Monitor	5

P.T.O.

3. (a) Explain the procedure to prepare Profit and Loss A/c along with its format for any Small Scale Company who engaged in automobile sector. [10]

Or

- (b) Draw layout of Trial Balance. Explain the significance of Trail Balance in Financial Accounting System ? [10]

4. (a) Explain recruitment process with the help of DFD. [10]

Or

- (b) Design an employee database for Software Company and explain the need of employee database in current scenario. [10]

5. (a) What is ERP ? How ERP is different from MRP-II ? [10]

- (b) What is ERP ? Explain different phases of ERP implementation life cycle. [10]

Total No. of Questions—5]

[Total No. of Printed Pages—2

Seat No.	
-------------	--

[5367]-202

M.C.M. (II Semester) EXAMINATION, 2018

204 : PRINCIPLES & PRACTICES OF MANAGEMENT & ORGANIZATIONAL BEHAVIOR

(2013 PATTERN)

Time : 2½ Hours

Maximum Marks : 50

N.B. :— (i) Question Nos. 1 and 5 are compulsory.

(ii) Draw neat diagrams wherever applicable.

(iii) Attempt any *two* questions from the remaining.

1. Explain the contribution of Henry Fayol to the evolution of management thought. [15]
2. Define Motivation. Explain the Maslow's Need Hierarchy Theory ? [10]
3. Define Group. Explain the stages of group formation. [10]
4. What do you mean by Organization Behavior ? Explain the need and importance of OB. [10]

P.T.O.

5. Write short notes on (any *three*) :

[15]

- (a) Johari Window
- (b) Organization Structures
- (c) Qualities of a Leader
- (d) Team Building
- (e) Theory X and Theory Y.

Total No. of Questions—5]

[Total No. of Printed Pages—2

Seat No.	
-------------	--

[5367]-203

M.C.M. (II Semester) EXAMINATION, 2018

203 : ADVANCED RDBMS USING ORACLE

(2013 PATTERN)

Time : Two Hours

Maximum Marks : 50

N.B. :— (i) Q. No. 1 is compulsory.

(ii) Attempt any *three* from the remaining.

(iii) Figures to the right indicate full marks.

1. Consider the following tables to solve queries and PL/SQL below :

STUDENT (S_Id, Sname, city)

COURSE (C_Id, Cname, fee)

REGISTRATION (S_id, C_id, Data-of-Reg).

(A) Create above tables with suitable constraints. [5]

(B) Add at least *two* records in each table. [5]

(C) Solve any *five* queries : 5×2=10

(1) Display all the students from “Pune”.

(2) Display the name of students who have registered for more than two courses.

(3) Display the No. of students registered for the course ‘Oracle’ in year 2016.

(4) Add one column ‘Adv-Fees-Paid’ in the table Registration.

P.T.O.

- (5) Display the course name of Minimum Fee.
 - (6) Delete the course named 'Advanced Java'.
-
- 2. Write PL/SQL block, which will accept S-Id and display the name of the course the student in registered. [10]
 - 3. Write a cursor to increase the course Fee by 10% for which total No. of registered students are more than 150. [10]
 - 4. Write a trigger program for not registering students on Saturday or Sunday. [10]
 - 5. Write short notes on any *two* : [10]
 - (a) Implicit and explicit cursors.
 - (b) DML Statement
 - (c) Data Recovery.

Total No. of Questions—6]

[Total No. of Printed Pages—2

Seat No.	
---------------------	--

[5367]-204

M.C.M. (II Sem.) EXAMINATION, 2018

204 : JAVA PROGRAMMING

(2013 PATTERN)

Time : 2½ Hours

Maximum Marks : 50

N.B. :— (i) Question No. 1 is compulsory.

(ii) Attempt any *four* questions from the remaining.

(iii) *All* questions carry equal marks.

Q1. Solve the following:

[5*2=10]

1. What is Static modifier.
2. Explain Checked and Unchecked exceptions.
3. Differentiate between Abstract Class and Interface.
4. What is Object serialization?
5. Explain Dynamic method dispatch.

Q.2 Write an application that will accept age from user and check condition to through

“YouAreTeenager” user defined exception if entered age is in between 13 to 19 years. [10]

Q.3 Design an applet program to display digital clock using thread.

[10]

Q.4 Write a Java application that reads lower case stream from command line and writes it to

file in upper case.

[10]

Q.5 . Write a program in Java to show multilevel inheritance in which Animal class should be

inherited by Dog class and BabyDog class should be inherited from Dog class. Display the

respective information for each class.(Assume suitable information)

[10]

P.T.O.

Q.6 Write short note on any two

[10]

- a) Layout Manager.
- b) Interface with example.
- c) JVM
- d) Thread life cycle

Total No. of Questions—5]

[Total No. of Printed Pages—2

Seat No.	
-------------	--

[5367]-301

M.C.M. (Semester III) EXAMINATION, 2018
301 – INFORMATION SECURITY AND AUDIT
(2013 PATTERN)

Time : 2Hrs 30 Min.

Maximum Marks : 50

N.B. :—All questions are compulsory.

1. Explain Role of Internet and World Wide Web in the evolution of Global Information Systems. [10]

Or

How do organizations manage security of their information systems ?

2. Explain the importance of physical security and biometric controls for protecting information security assets. [10]

Or

What are the security considerations for mobile work force ?

3. What is Firewall ? How does it help to secure the information assets. [10]

Or

How do Encryption and decryption help to maintain security ?

4. Discuss SSE-CMM model in detail. [10]

P.T.O.

Or

Explain the security of electronic mailing systems.

5. Explain the disaster recovery planning management in detail. [10]

Or

Explain ethical issues related to information security professionals.

Total No. of Questions—7]

[Total No. of Printed Pages—2

Seat No.	
-------------	--

[5367]-302

M.C.M. (Semester-III) (SPECIALIZATION) EXAMINATION, 2018
302 NT : BASICS OF NETWORK TECHNOLOGIES
(2015 PATTERN)

Time : 2.30 Hours

Maximum Marks : 50

N.B. :— (i) Solve any 5 questions.

(ii) *All* questions carry equal marks.

1. Explain steps for installation of Windows 2003 Server with roles.
2. Explain the following protocols :
FTP, TELNET, HTTP, HTTPS, Mail Protocols.
3. Explain any *four* Modems.
4. Explain Internet Information Services (IIS 6.0) and Windows Share-Point Services.
5. Write down steps to configure apache web server and DHCP server.
6. What is Internet Service Provider ? Explain various types of ISP.

P.T.O.

7. Write short notes on (any *two*) : [10]

(a) File Management command for Linux (any 4)

(b) File and Print Services

(c) Peer-Peer Networks and Client/Server Networks.

Total No. of Questions—7]

[Total No. of Printed Pages—2

Seat No.	
-------------	--

[5367]-303

M.B.A. IT (Semester-III) (MGT. FACULTY) EXAMINATION, 2018
302 ST : SOFTWARE QUALITY ASSURANCE
(2015 PATTERN)

Time : Two Hours

Maximum Marks : 50

N.B. :— (i) Solve any 5 questions.

(ii) All questions carry equal marks.

1. Explain Software Project Life Cycle in detail. [10]
2. What is SQA ? Explain software quality Plan. [10]
3. Explain Software configuration Management with all its components. [10]
4. Explain in detail important features of SEI-CMM [10]
5. Explain Risk Management in detail. [10]
6. Discuss ISO 9001 and ISO 9003. [10]

P.T.O.

7. Write short notes on (any *two*) :

[10]

(a) Documentation Control

(b) Verification and Validation

(c) Impact of Case Tools.

Total No. of Questions—7]

[Total No. of Printed Pages—2

Seat No.	
-------------	--

[5367]-304

M.C.M. (Semester-III) (MGT. FACULTY) EXAMINATION, 2018

SOFTWARE AND DEVELOPMENT SPECIALIZATION

302-SD : (Program and Design with ASP.Net)

(2015 PATTERN)

Time : 2½ Hours

Maximum Marks : 50

N.B. :— (i) Q. No. 1 is compulsory.

(ii) Solve any *four* questions from Q. 2 to Q. 7.

(iii) Figures to the right indicate full marks.

1. Design a form and write code to : [10]

(a) Add new record

(b) Delete selected record

(c) Edit selected record.

Name of table : item (itemid, name, price, quantity).

2. Explain range validator and regular expression validator control in detail. [10]

3. Draw and explain ADO.Net architecture in detail. [10]

4. Explain the concept of classes, objects, class members in detail.[10]

P.T.O.

5. Explain any *two* login controls in detail. [10]
6. Explain the following controls (any *two*) : [2×5=10]
- (a) Label
 - (b) Check box
 - (c) Panel.
7. Write short notes on the following (any *two*) : [2×5=10]
- (a) XML
 - (b) .Net framework architecture
 - (c) Web services.

Total No. of Questions—6]

[Total No. of Printed Pages—2

Seat No.	
-------------	--

[5367]-305

MCM (Semester-III) EXAMINATION, 2018

(Management Faculty)

303 NT : SERVER AND DESKTOP TECHNOLOGIES

(2013 PATTERN)

Time : 2½ Hours

Maximum Marks : 50

***N.B.* :— (i) Question No. 6 is compulsory.**

(ii) Attempt any *four* from remaining.

1. What is meant by pipelining ? Explain different types of pipelining in detail. [10]
2. Draw overall look of Mother board with their components and various interfaces. [10]
3. Explain with block diagram the 64 bits Pentium Dual Core Architecture. [10]
4. Explain the process of installing auto updates and service packs in windows XP. [10]
5. Explain the working of Laser printer with schematic diagram. [10]

P.T.O.

6. Write short notes on (any *two*) :

[2×5=10]

(a) RISC and CISC

(b) HDD

(c) Bluetooth configuration in Windows-7

Total No. of Questions—10]

[Total No. of Printed Pages—2

Seat No.	
-------------	--

[5367]-306

MCM (Semester-III) EXAMINATION, 2018
(303 ST) SOFTWARE TESTING PROCESSES
& DOCUMENTATION
(2013 PATTERN)

Time : 2½ Hours

Maximum Marks : 50

N.B. :— (i) All questions are compulsory.
(ii) Each question carries 10 marks.

1. What do you understand by Defects ? Explain in detail Process defects, design defects, data defects.

Or

2. Explain the Factors affecting software testing.

3. In brief explain Levels of testing.

Or

4. Explain V Concept of testing with testing stages,

5. Explain Test work processes and Test Tools.

Or

6. Discuss Challenges in testing acquitted software,

7. Explain Principles and concepts of Internal controls. Explain in brief Internal control models.

P.T.O.

Or

8. Explain Contracted software test process.
9. Explain Technique to test security.

Or

10. Discuss on Testing new Technologies

Total No. of Questions—5]

[Total No. of Printed Pages—2

Seat No.	
-------------	--

[5367]-307

M.C.M. (Semester III) EXAMINATION, 2018
303-SD : MOBILE PROGRAMMING USING ANDROID
(2013 Pattern)

Time : 2½ Hours

Maximum Marks : 50

N.B. :— (i) All questions are compulsory.

(ii) Each question carries equal marks.

1. Explain android architecture with diagram. [10]

Or

Explain menus in android with proper example [.xml + .java]. [10]

2. Explain the building block of Android. [10]

Or

Explain with example different layouts in android. [10]

3. Design an activity to display video from SD card. [10]

Or

What is activity ? Explain activity life cycle. [10]

4. What is cursor ? Demonstrate cursors by taking Item-Master database for saving and retrieving data. [10]

P.T.O.

Or

Explain service life cycle in android. [10]

5. Explain the difference between interface and abstract class with example. [10]

Or

Explain method for creating new view with an example. [10]

Total No. of Questions—6]

[Total No. of Printed Pages—2

Seat No.	
-------------	--

[5367]-308

M.C.M. (Semester III) EXAMINATION, 2018

304NT : SYSTEM ADMINISTRATION AND SERVER INTEGRATION
(2013 PATTERN)

Time : 2.5 Hours

Maximum Marks : 50

N.B. :— (i) Question No. 7 is compulsory.

(ii) Answer any *three* questions from remaining.

(iii) Figures to the right side indicate full marks.

(iv) Draw neat diagram wherever necessary.

1. What are the installation steps of Fedora Operating System ? [10]
2. Explain File Management and User Management Command in Linux. [10]
3. Explain Services in Linux. How services are selected for startup in Linux. [10]
4. What are the features of Windows Server 2008 ? Explain functionality. [10]
5. Explain in detail Installation procedure of Windows 2003 Server. [10]

P.T.O.

6. Write short notes on (any *four*) :

[20]

- (a) Package Management
- (b) Firewall of Windows
- (c) Linux Apache Server
- (d) Distributed Operating System
- (e) Windows 2003 Server Role.

Total No. of Questions—7]

[Total No. of Printed Page—1

Seat No.	
-------------	--

[5367]-309

M.B.A. (IT) (Semester III) EXAMINATION, 2018

**304 ST : SOFTWARE TEST PLANNING AND DOCUMENTATION
(2015 PATTERN)**

Time : Two Hours

Maximum Marks : 50

N.B. :— (i) Solve any *five* questions.

(ii) *All* questions carry equal marks.

1. Explain use cases. Write down use cases for android based on line survey of a product. [10]
2. Discuss in details various risks associated with software development. [10]
3. Discuss Test plan standards. [10]
4. Explain Defect Management. [10]
5. Explain Acceptance test plan and execution. [10]
6. Discuss various tools used to prepare test report. [10]
7. Write short notes on (any *two*) : [10]
 - (a) Risk Analysis
 - (b) System Testing
 - (c) Test Matrix.

Total No. of Questions—6]

[Total No. of Printed Pages—2

Seat No.	
-------------	--

[5367]-310

M.C.M. (III Sem.) EXAMINATION, 2018

SOFTWARE DEVELOPMENT SPECIALIZATION

(304-SD : Advanced Java)

(2013 PATTERN)

Time : 2½ Hours

Maximum Marks : 50

N.B. :— (i) Question Nos. 1 and 6 are compulsory.

(ii) Solve any *three* questions from remaining.

(iii) Figures to the right indicate full marks.

1. Solve the following : [10]
 - (A) Interfaces in JDBC.
 - (B) Write possible ways to create sockets.
2. Write Java programs to Create chat application. [10]
3. Write a JDBC code to insert a record in course table. Assume suitable table structure. [10]
4. Write a servlet program to accept user name and password and display 'Hello User' message. [10]

P.T.O.

5. Write a program to display all details of an employee in a tabular format using JSP. [10]
6. Write short notes on (any *two*) : [10]
- (a) Types of JDBC drivers
 - (b) JSTL tags
 - (c) RMI architecture.

Total No. of Questions—6]

[Total No. of Printed Pages—2

Seat No.	
-------------	--

[5367]-401

M.C.M. (Semester IV) EXAMINATION, 2018

401 : CURRENT TRENDS IN IT

(2013 Pattern)

Time : 2½ Hrs

Maximum Marks : 50

NB.:—(i) Question Nos. 1 & 6 are compulsory.

(ii) Attempt any *two* from the remaining.

(iii) Support your answers with relevant examples and diagram.

(ii) Figures to the right indicate full marks.

1. A reputed institute of management want to start PGDM programme only for working professionals. Institute is interested in having online forum, online admission process, online counseling, admission fee payment process, teaching learning process and online examination process. Suggest various models of e-learning and find out best model as per their requirements. [15]
2. Explain Electronic Payment gateways in brief with their entire transaction process. [10]
3. Explain Content Management System (CMS) with their important features and appropriate example. [10]
4. Social Networking media is the need of recent era. Discuss it with the various security issues of social networking apps with example. [10]
5. How E-commerce correlate with Indian Business Scenario. Explain it. [10]

P.T.O.

6. Write a Short Note (any *three*) :

[15]

(i) Cyber Security

(ii) Paytm

(iii) m-commerce

(iv) Mobile banking