

Total No. of Questions : 6]

SEAT No. :

**P1925**

**[4772]-1001**

[Total No. of Pages : 1

**M.C.M.**

**FIT-101 : FUNDAMENTAL OF INFORMATION TECHNOLOGY  
(2013 Pattern) (Semester-I)**

*Time : 2<sup>1</sup>/<sub>2</sub> Hours]*

*[Max. Marks : 50*

*Instructions to the candidates:*

- 1) *Question No. 1 and 6 are compulsory.*
- 2) *Solve any three from the remaining.*
- 3) *Figures to the right indicate full marks.*

**Q1) a) Explain Primary Storage. [5]**

b) What do you mean by OMR? Give any two application of OMR. [5]

**Q2) a) Differentiate between High Level Language and Low Level Language. [5]**

b) Explain different types of Computers. [5]

**Q3) Explain in detail OSI Model (Seven layers). [10]**

**Q4) a) Explain various types of printer. [5]**

b) Convert the following numbers (Any Two): [5]

i)  $1110001 = ?_{10}$

ii)  $CAD = ?_8$

iii)  $34 = ?_{16}$

**Q5) Explain different types of Networks. [10]**

**Q6) Write short notes on (Any Two): [10]**

a) Network Topologies.

b) Floppy Disc.

c) ASCII.



Total No. of Questions : 7]

SEAT No. :

P1926

[4772] - 1002

[Total No. of Pages : 2

M.C.M.

**‘C’ PROGRAMMING AND DATA STRUCTURE**

**(2013 Pattern) (Semester - I)**

*Time : 2.30 Hours]*

*[Max. Marks : 50*

*Instructions to the candidates:*

- 1) *Question No. 1 is compulsory.*
- 2) *Solve any four from the remaining.*
- 3) *Figures to the right indicate full marks.*

**Q1) a)** Find and explain output of the following programs. Assume suitable header files. **[6]**

i) 

```
# define CUBE (x) x* x* x
void main ( )
{
    int a,b =3;
    a = CUBE (b++);
    print f ("%d, %d", a,b);
}
```

ii) 

```
int rev (int);
void main ( )
{
    int no = 5;
    rev (no);
}
int rev (int no)
{
    if (no ==  $\phi$ )
        return  $\phi$ ;
    else
        print f ("% d", no);
        rev (- - no);
}
```

**P.T.O.**

- b) Explain the following (Any two) [4]
- i) Stack
  - ii) Data Types in C
  - iii) Tertiary if statement

**Q2)** Write a program to display following pattern using nested loops. [10]

```
ABCDCBA
ABC CBA
AB BA
A A
```

**Q3)** Write a program to accept two 3×3 matrices and display addition on the screen. [10]

**Q4)** Write a recursive function which receives a number and return the sum of digits of a number. [10]

**Q5)** Write a program to accept itcode, desc, rate and qty of 30 items. Display all the records having qty greater than 100. [10]

**Q6)** Write a program to accept the two file names as command line arguments and copy the contents of second file at the end of first file. [10]

**Q7)** Write a program to accept the 10 numbers and display the numbers by sorting them in descending order. [10]



Total No. of Questions : 5]

SEAT No. :

**P1927**

**[4772]-1003**

[Total No. of Pages : 2

**M.C.M.**

**103 : SOFTWARE ENGINEERING WITH UML  
(Theory) (2013 Pattern) (Semester-I)**

*Time : 2½ Hours]*

*[Max. Marks : 50*

*Instructions to the candidates:*

- 1) *Q. 1 & Q. 5 are compulsory.*
- 2) *Solve any two from remaining.*
- 3) *Neat diagram carry marks.*

**Q1)** STAR Scooter Ltd. has issued an advertisement calling application for various posts. After receiving application scrutiny will made and interview and will be appointed as regular employees.

- Draw ER Diagram. [7]
- Design File Layout. [7]

**Q2)** a) In a shopping mall following scheme is introduce.

If you are a regular customer on every shopping of Rs. 5000 and above, you will get 1 point. On collecting such 10 points you get a free tour package. For point below 10 you get a gift coupon. The collected points bet<sup>n</sup> 1 January 2014 to 31 March 2014 are only consider. Draw decision tree for the case. [6]

- b) Explain RVP in detail. [6]

**Q3)** Consider an auction website (eg eBay), the customer might:

Register for an account, search for items by keyword, place a bid on an item, put an item up for auction, check the status of this item.

- a) Draw use-case Diagram. [6]
- b) Activity Diagram. [6]

**P.T.O.**

**Q4) a) Explain different sections of SRS. [6]**

b) Explain spiral model of SDLC. [6]

**Q5) Write short notes (Any Three): [12]**

a) Functional & non-functional Requirements.

b) Association & Aggregation.

c) CRC.

d) Role of System Analyst.



Total No. of Questions : 5]

SEAT No. :

**P1928**

**[4772] -1004**

[Total No. of Pages : 1

**M.C.M.**

**104: DATABASE MANAGEMENT SYSTEM (DBMS)  
(2013 Pattern) (Semester - I)**

*Time : 3 Hours ]*

*[Max. Marks : 50*

*Instructions to the candidates:*

- 1) *Q.Nos.1 and 5 are compulsory.*
- 2) *Solve any two from Q.2 to Q.4 from the remaining.*

**Q1)** Tele company providing mobile services is working in a following manner. To give the membership (subscription) to the customer following procedure is used. There are various schemes of subscription. Pune region is divided into various area sales office. As per the subscription type the customer fills the form and submits the payment to the sales office. After form verification customer gets a mobile no. & the equipment.

Draw an E-R Diagram for the above case and normalize upto 3NF. **[15]**

**Q2)** Explain Database architecture in detail. **[10]**

**Q3)** Explain locking Techniques. **[10]**

**Q4)** Explain log base recovery with explain. **[10]**

**Q5)** Write short notes: Any three. **[15]**

- a) E-F coddrules [Any five]
- b) Functions of DBA.
- c) Generalization
- d) Data Independence
- e) Database security issues.



Total No. of Questions : 5]

SEAT No. :

**P1929**

**[4772] - 2001**

[Total No. of Pages : 1

**M.C.M.**

**201: BUSINESS APPLICATION AND ERP TOOLS  
(2013 Pattern) (Semester - II)**

*Time : 2.5 Hours]*

*[Max. Marks : 50*

*Instructions to the candidates:*

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

**Q1)** Explain EOQ, EBQ and Calculation of labour efficiency. **[10]**

OR

Explain process of receipt of material with the help of First level DFD.

**Q2)** Draw format of Quotation. **[10]**

OR

Explain sales Budgeting.

**Q3)** Draw format of Balance sheet and explain purpose of Balance sheet. **[10]**

OR

Explain Employee Appraisal methods.

**Q4)** Draw format of payslip and explain statutory earnings and Deductions. **[10]**

OR

Explain need and advantages of ERP.

**Q5)** Explain ERP Implementation Life cycle. **[10]**

OR

Explain Post Implementation Review of ERP packages in service organization.



Total No. of Questions : 5]

SEAT No. :

**P1930**

[4772] - 2002

[Total No. of Pages : 1

**M.C.M.**

**202: PRINCIPLES OF MANAGEMENT AND  
ORGANIZATIONAL BEHAVIOUR  
(2013 Pattern) (Semester - II)**

*Time : 2.5 Hours]*

*[Max. Marks : 50*

*Instructions to the candidates:*

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

**Q1)** Define Management. Explain various managerial levels.

OR

Differentiate between Line and Staff Managers.

**Q2)** Elaborate the contributions put forth by Henry Fayol towards evolution of management thoughts.

OR

Explain system approach to Management.

**Q3)** Explain Herbert Simon's model for Decision Maker.

OR

Define organization and need for organization. What are the types of organization?

**Q4)** Define OB.State need and importance of OB.

OR

Explain Johari Window in brief.

**Q5)** Define Leadership. Explain the various styles of leadership.

OR

Explain Z theory of Motivation.





Total No. of Questions : 5]

SEAT No. :

**P1931**

**[4772] - 2003**

[Total No. of Pages : 2

**M.C.M.**

**ADVANCED RELATIONAL DATABASE MANAGEMENT  
SYSTEM (RDBMS) USING ORACLE  
(2013 Pattern) (Semester - II)**

*Time : 2 Hours]*

*[Max. Marks : 50*

*Instructions to the candidates:*

- 1) *Question No. 1 is compulsory.*
- 2) *Attempt any three from the remaining.*
- 3) *Figures to the right indicate full marks.*

Consider the following tables to solve Queries and PL/SQL given below:-

EMPLOYEE (E\_No, Ename, Job, Mgr, Hiredate, Salary, Comm, DeptNo)

DEPARTMENT (Deptno, Dname, Location)

**Q1)** Solve any ten Queries given below:

**[20]**

- a) Create the above two tables with constraints.
- b) Name the employees who are working in 'PUNE'.
- c) Name the employees whose first letter starts with "A".
- d) Find the average salary of employees location -wise.
- e) Display Name of the employee. Who is getting highest salary.
- f) Display the Name of the employee who is getting lowest salary.
- g) Display the Name of the employees, Who joined after 1<sup>st</sup> January, 2014.
- h) Name the employees of 'RESEARCH' department.
- i) Display the total No. of employees working in each department.

**P.T.O.**

- j) Find the location where the average salary of the employees is highest.
- k) Display the name of CLERK who is getting lowest salary.
- l) Display the name of employees who are working in 'PUNE'.

**Q2)** Write a cursor to display top 5 salaried employees. (Display only three columns: E-No, Ename, salary). **[10]**

**Q3)** Write a function Display\_info ( ) to accept the E\_No and display its following details of that employee: (E\_No, Ename, Dname, Salary). **[10]**

**Q4)** Write a PL/SQL procedure to select employees from EMPLOYEE table who get a salary of Rs. 10,000. Give them an increment of 10%. But if more than one employee exist then give a message "Too many numbers". If no employee is selected then also display a message "No such employee". **[10]**

**Q5)** Write a trigger that will not allow user to update record in EMPLOYEE table on "SUNDAY" **[10]**



Total No. of Questions : 7]

SEAT No. :

**P1932**

[4772] - 2004

[Total No. of Pages : 2

**M.C.M.**

**204: JAVA PROGRAMMING**

**(2013 Pattern) (Semester - II)**

*Time :2 ½ Hours]*

*[Max. Marks : 50*

*Instructions to the candidates:*

- 1) *Q.1 is compulsory.*
- 2) *All questions carry equal marks.*
- 3) *Solve any '4' from remaining.*

**Q1)** Solve the following:

- a) Explain protected access specifier.
- b) What is JVM?
- c) Explain abstract keyword
- d) What is adapter class
- e) List methods of inter thread communication.

**Q2)** Write an application which will accept '2' file names from command line and append the contents of file 1 to other file.

**Q3)** Write a applet program to move strin from left to right.

**Q4)** Write an application which will accept age from command line. If the given age is less than '18' years , then throw. "NotEligible for Driving" user defined exception.

**P.T.O.**

**Q5)** Write a multithreaded application to show following threads.

- a) Display table of '20'
- b) Display even numbers between '20' to '100'.

**Q6)** Explain with example function overloading and overriding.

**Q7)** Short notes any Two.

- a) Wrapper class
- b) Vector class
- c) How final, finally, finalize () used.



Total No. of Questions : 6]

SEAT No. :

**P1933**

**[4772] - 3001**

[Total No. of Pages : 1

**M.C.M.**

**301: INFORMATION SECURITY AND AUDIT  
(2013 Pattern) (Semester - III)**

*Time : 2 ½ Hours]*

*[Max. Marks : 50*

*Instructions to the candidates:*

- 1) *Question No.6 is compulsory.*
- 2) *Solve any 3 from the remaining.*

**Q1)** Explain Different Kinds of Biometric Security Available for Securing a Server Room. **[10]**

**Q2)** What is a Digital Certificate, and why do you need one? **[10]**

**Q3)** What are the Security Threats in the E-commerce Environment? **[10]**

**Q4)** Explain the security of electronic mailing systems. **[10]**

**Q5)** Discuss SSE-CMM model in detail. **[10]**

**Q6)** Write short notes on any 4. **[4×5 = 20]**

- a) Digital signature.
- b) SAS 70
- c) Firewall and its types
- d) Intrusion detection system
- e) Copy right
- f) Disaster recovery planning



Total No. of Questions : 5]

SEAT No. :

**P1934**

**[4772] - 3002**

[Total No. of Pages : 1

**M.C.M.**

**302 NT: BASICS OF NETWORK TECHNOLOGIES  
(2013 Pattern) (Semester - III)**

*Time : 2.5 Hours]*

*[Max. Marks : 50*

*Instructions to the candidates:*

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

**Q1)** Explain virtual Private Network and various Tunneling protocols. **[10]**

OR

Compare various topologies in detail. **[10]**

**Q2)** Explain functioning of switches, Routers and modems. **[10]**

OR

Explain File and print services and storage management in windows 2003 server. **[10]**

**Q3)** Explain steps for configuration of DHCP server in windows 2003. **[10]**

OR

Explain various mail protocols. **[10]**

**Q4)** Explain various user management commands in Linux. **[10]**

OR

Explain configuration of Apache web server in Linux. **[10]**

**Q5)** Explain Linux File system and default Directories in Linux. **[10]**

OR

Explain installing and configuring packages in Linux. **[10]**



Total No. of Questions : 6]

SEAT No. :

**P1935**

**[4772] - 3003**

[Total No. of Pages : 1

**M.C.M.**

**302-ST: QUALITY CONTROL & ASSURANCE**

**(New 2013 Pattern) (Semester - IV)**

*Time : 2 ½ Hours]*

*[Max. Marks : 50*

*Instructions to the candidates:*

- 1) *Solve any five Questions.*
- 2) *Figures on the right show marks.*

**Q1)** Define Software Project Management. Explain components of management system. **[10]**

**Q2)** Define Software Quality. Describe reason for poor quality. Explain concept of product quality and process quality. **[10]**

**Q3)** a) Explain different features of ISO9001 and ISO 9003. **[5]**

b) What do you mean by contract review? **[5]**

**Q4)** Define and explain software errors, software faults and software failures with example. **[10]**

**Q5)** What do you understand by SQA? Describe major activities necessary for effective SQA. **[10]**

**Q6)** Write short notes: (Any Two) **[10]**

- a) Staff training.
- b) Software testing
- c) SEI CMM.



Total No. of Questions : 7]

SEAT No. :

**P1936**

**[4772] - 3004**

[Total No. of Pages : 2

**M.C.M.**

**SOFTWARE DEVELOPMENT SPECIALIZATION**

**302SD: Program and Design with ASP.NET**

**(2013 Pattern) (Semester - III)**

*Time : 2 Hours]*

*[Max. Marks : 50*

*Instructions to the candidates:*

- 1) *Question 1 is compulsory.*
- 2) *Solve any FOUR questions from Q.No.2 to Q.No.7*
- 3) *Figures to the right side indicate full marks.*

**Q1)** Design a form and write code to: **[10]**

- a) Add a record
- b) Delete Selected Record
- c) Edit Selected Record

Use connected architecture. Name of Server: MyAspDB (SQL Server)

Name of Table: BookMaster (BookID, Title, Author, Publisher, Price)

**Q2)** Explain Tree View and Menu Control in detail. **[10]**

**Q3)** Explain Login Control and Create User Wizard Control in detail. **[10]**

**Q4)** Draw and Explain ASP.NET architecture in detail. **[10]**

**Q5)** Define a class Book with appropriate attributes. Write parameterized constructor for the same. write a method to check book is available in library or not. Write a main program to demonstrate your functionality. **[10]**

**P.T.O.**



**Q6)** Explain the following controls: (Any TWO)

**[10]**

- a) Bulleted List Control
- b) Range Validator Control
- c) CheckBox Control

**Q7)** Write short notes on following: (Any TWO)

**[10]**

- a) Creating and Applying Themes
- b) Web Service
- c) Ajax Server Control



Total No. of Questions : 5]

SEAT No. :

**P1937**

**[4772]-3005**

[Total No. of Pages : 1

**M.C.M.**

**303-NT : SERVER & DESKTOP TECHNOLOGIES  
(2013 Pattern) (Semester-III)**

*Time : 2.5 Hours]*

*[Max. Marks : 50*

*Instructions to the candidates:*

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

**Q1)** Explain USB, Serial and Parallel ports with their functioning.

OR

Explain various types of RAM.

**Q2)** Explain various addressing modes with example.

OR

Explain pipelining with example.

**Q3)** Explain 32-Bit Architecture with diagram.

OR

Explain steps in repairing Windows XP.

**Q4)** Explain steps for Windows 7 clean install.

OR

Explain network installation and Wi-Fi configuration in Windows 7.

**Q5)** Explain various types of printers with their functioning.

OR

Explain any one Antivirus Tool.



Total No. of Questions : 6]

SEAT No. :

**P1938**

**[4772]-3006**

[Total No. of Pages : 1

**M.C.M.**

**303-ST : SOFTWARE TESTING PROCESSES AND  
DOCUMENTATION**

**(2013 Pattern) (Semester-III)**

*Time : 2<sup>1</sup>/<sub>2</sub> Hours]*

*[Max. Marks : 50*

*Instructions to the candidates:*

- 1) Question Nos. 1 and 6 are compulsory.*
- 2) Solve any three of the remaining.*
- 3) Figures to the right indicate full marks.*

- Q1)** a) Explain software Testing constraints. [5]  
b) Explain Tester's workbench. [5]
- Q2)** Explain Verification and Validation in detail. [10]
- Q3)** Explain White box and black box testing in detail. [10]
- Q4)** Discuss Contracted software test process [10]
- Q5)** Discuss Internal control models. [10]
- Q6)** Write short notes on (Any Two): [10]  
a) Technique to test security.  
b) Test work processes.  
c) Functional and structural testing.



Total No. of Questions : 5]

SEAT No. :

**P1939**

**[4772]-3007**

[Total No. of Pages : 1

**M.C.M.**

**303 SD : MOBILE PROGRAMMING USING ANDROID  
(2013 Pattern) (Semester-III)**

*Time : 2.5 Hours]*

*[Max. Marks : 50*

*Instructions to the candidates:*

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

**Q1)** Explain Android SDK versions and their features.

OR

Explain Building Blocks of Android.

**Q2)** Write xml file code to create login form using vertical and horizontal orientation property of LINEAR LAYOUT.

OR

Write .java code file for displaying list view of array values.

**Q3)** Write .java code file for creating DrawView and sets it as activity's main content. Also sets the borderless window.

OR

How to Play Audio and Video files in Android? Explain with example.

**Q4)** Explain method for creation, insertion and fetching SQLite Database in android.

OR

Explain use of Content Provider with example.

**Q5)** Explain service life cycle in android.

OR

What are preferences? Explain any three common preferences in android.



Total No. of Questions : 7]

SEAT No. :

**P1940**

**[4772] - 3008**

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

**M.C.M.**

**304 NT: SYSTEM ADMINISTRATION AND SERVER**

**INTEGRATION**

**(2013 Pattern) (Semester - III)**

*Time : 2 Hours 30 Mins.]*

*[Max. Marks : 50*

*Instructions to the candidates:*

- 1) *Question 1 is compulsory.*
- 2) *Answer any three questions from the remaining.*
- 3) *Figures to the right side indicate full marks.*

**Q1) a)** Explain concept of Domains and Active Directory. Explain steps for Active Directory Installation. **[10]**

b) Explain steps for Samba Server Installation. **[10]**

**Q2)** Explain how to manage Groups and Computer Account in Window Server 2008. **[10]**

**Q3)** Explain default Directory structure and their purpose in Fedora Linux. **[10]**

**Q4)** Set by step explain DHCP server installation in Window 2003. **[10]**

**Q5)** Illustrate package management in Linux. **[10]**

**Q6)** Draw and explain Architecture of Linux with reference to Kernel and Shell. **[10]**

**P.T.O.**

**Q7)** Write short notes (any TWO).

**[10]**

- a) Distributed O.S.
- b) Virtual Private Networks
- c) Boot loader.
- d) Secure Administration.
- e) X-Window System



Total No. of Questions : 6]

SEAT No. :

**P1941**

**[4772] - 3009**

[Total No. of Pages : 1

**M.C.M.**

**304ST: SOFTWARE TEST PLANNING AND DOCUMENTATION  
(New 2013 Pattern) (Semester - III)**

*Time : 2½Hours]*

*[Max. Marks : 50*

*Instructions to the candidates:*

- 1) *Q.Nos.1 &6 are compulsory.*
- 2) *Solve any three from the remaining.*
- 3) *Figures to the right indicate full marks.*

**Q1)** Explain pre-requisite of test planning. **[10]**

**Q2)** What is test plan? Explain test objective and acceptance criteria. **[10]**

**Q3)** Explain Functional test cases, Structural test cases in detail. **[10]**

**Q4)** Discuss uses of tools in testing. **[10]**

**Q5)** Explain defect management in detail. **[10]**

**Q6)** Write short notes on: (Any Two). **[10]**

- a) user acceptance testing
- b) test result reporting
- c) Histogram



Total No. of Questions : 6]

SEAT No. :

**P1942**

**[4772] - 3010**

[Total No. of Pages : 1

**M.C.M. -II**

**SOFTWARE DEVELOPMENT SPECIALIZATION**

**304SD: Advanced Java**

**(2013 Pattern) (Semester - III)**

*Time : 2 ½ Hours]*

*[Max. Marks : 50*

*Instructions to the candidates:*

- 1) *Q.Nos.1 & 6 are compulsory.*
- 2) *Solve any three questions from the remaining.*
- 3) *Figures to the right indicate full marks.*

**Q1)** Solve the following. **[10]**

- a) What is RMI Registry?
- b) Write two methods from Result set Metadata with an example.

**Q2)** Write a client server socket program to accept a string from the client. The server will reverse the string and print it. **[10]**

**Q3)** Write servlet code to accept information of students registered for 'MCM' course. **[10]**

**Q4)** Write JDBC code to print the number of employees. Display the attributes also. **[10]**

**Q5)** Write a HTML page which will accept details about patient. Insert details into patient table using JSP. **[10]**

**Q6)** Write short notes: (Any Two). **[10]**

- a) JSP Directives.
- b) Session tracking in servlets.
- c) JNDI.

