Seat
No.

[5267]-101

M.C.M (Semester-I) EXAMINATION, 2017
101 : FUNDAMENTALS OF INFORMATION TECHNOLOGY
(2013 PATTERN)

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

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

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

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

1. Explain OSI Model in networking. [10]

2. Explain different functions of Operating System. [10]

3. (*a*) Distinguish High Level Language and Low Level Language. [5]

　　(*b*) What is Number system ? Explain Hexadecimal. [5]

4. (*a*) What is batch processing ? Explain it. [5]

　　(*b*) Differentiate between Windows and Open source Operating
　　　　System. [5]

5. What are output devises ? Explain any *two* output devises. [10]

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

　　(*a*) Cathode ray tube

　　(*b*) Pen drive

　　(*c*) Graphics coprocessor.

Seat
No.

[5267]-102

MCM (First Semester) EXAMINATION, 2017
102 : "C" PROGRAMMING AND DATA STRUCTURE
(2013 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 programs :
　　　　Assume suitable header files :　　　　　　　　　[6]

　　　　(*a*)　Void main () { int *a* = 25;

　　　　　　　printf ("%d" %d %d", *a* > 25, *a* = 50, *a* = 50);}

　　　　(*b*)　Void main () {int *i* = 3, *j*;

　　　　　　　j = ++*i* * + + *i*;

　　　　　　　printf (" \n *i* = %d, *j* = %d", *i*, *j*);}

　　　　(*c*)　Void main () { void swap (int, int);

　　　　　　　int *a* = 5, *b* = 7;

　　　　　　　swap (*a*, *b*);

　　　　　　　printf(" \n *a* = %d, *b* = %d", *a.b*);}

　　　　　　　void swap (int a, int b) {int *c*;

　　　　　　　c = *a*; *a* = *b*; *b* = *c*;}

　　(B)　Explain the following (any *two*) :　　　　　　　[4]

　　　　(*a*)　Stack

　　　　(*b*)　Recursion

　　　　(*c*)　Dynamic Memory Allocation.

　　　　　　　　　　　　　　　　　　　　　　　　P.T.O.

2. Write a C program to accept 20 integer numbers from the user and store them in an array. The program should then short numbers in descending order and print minimum and maximum of the numbers. [10]

3. Write a function which accept a string the converts alternate characters in Upper case and Lower case. [10]

4. Write a C program to accept two 3 × 3 matrices and print substraction of them. [10]

5. Accept information of 50 items in an array of structure with field item_no, name and stock. Print name of the items having stock > 1000. [10]

6. Write a C program to copy contents of "*abc. txt*" to "*xyz. txt*". [10]

7. Write a C program to print the following pattern using nested loops :

$$
\begin{array}{ccccc}
 & & & & 1 \\
 & & & 1 & 2 \\
 & & 1 & 2 & 3 \\
 & 1 & 2 & 3 & 4 \\
1 & 2 & 3 & 4 & 5
\end{array}
$$
[10]

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

Seat
No.

[5267]-103

M.C.M. (First Semester) EXAMINATION, 2017

103 : SOFTWARE ENGINEERING WITH UML

(2013 PATTERN)

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

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

(*ii*) Solve any *two* questions from the remaining.

(*iii*) Neat diagrams carry marks.

1. Petrol Pump inventory and accounting system provides new dimension in the world of pump management to reduce the work strain and the time factor this system is been developed. And our system is implemented as such we can add any feature to it whenever it required. So it's very flexible thus to avoid above mentioned problem there is need to computerization and which our system has perform. The Petrol Pump Inventory and accounting system required the number of validations and report generation which helps in decision-making and performance of the system. The computerized system helps to cut down the lime required for order processing issuing and billing generation. The computerized system can be used to provide error free procedure of file which is otherwise difficult in manual system :

(*a*) ERD [7]

(*b*) File Design i.e. Design Normalized File Layout. [7]

2. (*a*) Explain Decision Tree with suitable example. [6]

(*b*) Explain Rational Unified Process with four major phases. [6]

P.T.O.

3. A system is need to be design for departmental store dealing with consumer items. Member enjoys credit facility and can purchase items as and when he or she needs them. Sore has several counters and one can almost get all kinds of consumers items after visiting these counters. He becomes members by paying initial membership amount and get credit card. He has to pay his outstanding on quarterly basis. System sends remainders to the members. Defaulters are not allowed to purchase items until the defaulter amount is cleared. Consider different aspects of above problems and model them appropriately :

(*a*) Draw Use case Diagram. [6]

(*b*) State Transition Diagram. [6]

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

(*b*) Explain RAD. [6]

5. Write short notes on (any *three*) : [12]

(*a*) Role of System Analyst

(*b*) Object and Class

(*c*) Requirements Analysis

(*d*) Association and Aggregation.

Total No. of Questions—5]

[Total No. of Printed Pages—2

Seat No.

[5267]-104

MCM (I Semester) EXAMINATION, 2017

104 : DATABASE MANAGEMENT SYSTEM

(2013 PATTERN)

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

N.B. :— (*i*) Q. No. **1** and Q. No. **5** are compulsory.

(*ii*) Solve any *two* from Q. No. **2** to Q. No. **4**.

1. (*a*) Newtons Academy conduct various short term diploma courses. Each diploma course has various subjects. One faculty can teach more than one subject and one subject can be taught by more than one faculty. The students can pay the fees in maximum 3 installments.

For the above case, normalize the data upto 3NF.   [10]

(*b*) Explain primary key, candidate key and foreign key with examples.   [5]

2. Describe ACID properties with proper examples.   [10]

3. Explain log-based recovery technique in detail.   [10]

P.T.O.

4. Explain various locking techniques. [10]

5. Write short notes on (any *three*) : [15]

   (*i*) Generalization

   (*ii*) Data warehousing

   (*iii*) Any *five* codds' rules

   (*iv*) Database security

   (*v*) Encryption.

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

Seat
No.   **[5267]-201**

M.C.M. (II Semester) EXAMINATION, 2017

201 : BUSINESS APPLICATION AND ERP TOOLS

(2013 PATTERN)

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

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

(*ii*) *All* questions carry equal marks.

1.   Explain the process of stock accounting. Draw format of Material
      Issue Note.   [10]

Or

Explain EOQ and EBQ with example.   [10]

2.   Explain the process of customer order processing with the help of
      First Level DFD.   [10]

Or

Draw *two* reports of Sales Analysis.   [10]

3.   Explain account receivable and account payable.   [10]

Or

What is the purpose of P&L statement ? Draw format of P&L
statement.   [10]

P.T.O.

4. Explain employee appraisal methods. [10]

Or

Explain the process of preparation of payroll. Draw format of Payslip. [10]

5. What is ERP ? Explain the need and advantage of ERP. [10]

Or

Explain post-implementation review of ERP packages in manufacturing organization. [10]

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

<table>
<tr><td>Seat
No.</td><td></td></tr>
</table>

[5267]-202

M.C.M. (Second Semester) EXAMINATION, 2017

204 : PRINCIPLES AND PRACTICES OF MANAGEMENT AND ORGANIZATIONAL BEHAVIOR

(2013 PATTERN)

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

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

        (*ii*) Draw neat diagrams wherever applicable.

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

1.   What do you mean by Management ? Explain the need and importance
      of Management.   [15]

2.   Define Skill. Explain the skills of manager required at different levels
      of Management.   [10]

3.   Explain the Contribution of F. W. Taylor to the Scientific
      Management.   [10]

4.   Define Conflict. What is meant by interpersonal and intrapersonal
      conflict ? Give suitable examples.   [10]

5. Write short notes on (any *three*) : [15]

    (*a*)   Authority and Responsibility

    (*b*)   Johari Window

    (*c*)   Levels of Management

    (*d*)   System Approach Theory

    (*e*)   Ego States.

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

Seat
No.

[5267]-203

M.C.M. (Second Semester) EXAMINATION, 2017
203 : ADVANCED RDBMS USING ORACLE
(2013 PATTERN)

Time : Two Hours   Maximum Marks : 50

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

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

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

Consider the following tables of solve queries and PL|SQL given below :

Sailor (Sid, Sname, Rating, DOB)

Boat (Bid, Bname, Color)

Reserve (Sid, Bid, date-of-booking)

1.   (*a*)   Create above tables with constraints and add two records in each.   [6]

(*b*)   Solve any *seven* SQL Query for the following :   [14]

(*i*)   Display name of the sailors who have reserved boat # 103.

(*ii*)   Display the name of sailors who have a reserved a Red boat before "10-July-2014".

(*iii*)   Display the name of sailors who have reserved a Red or a Green boat.

(*iv*)   Display the Sid, Sname, Bname, Color and date-of-booking.

(*v*)   Name the sailor who has reserved all the boats.

(*vi*)   Name the sailor who has the highest rating.

P.T.O.

(*vii*) Display the name of the sailor who did not reserve a Red colour boat.

(*viii*) Display the name of the sailor who is 20 years old and booked a Red boat.

2. Write a funciton Display_Reserve( ) to accept the bid and display color of that boat. [10]

3. Write a package specifiction and body which contains the following : [10]

   (*a*) A procedure which accept a number and display factorial of that number.

   (*b*) A function which Accept the number and return square of it.

4. Write a trigger that will allow user to reserve the boat between 9:00 AM to 6:00 P.M. [10]

5. Write short notes on any *two* : [10]
   (*i*) Types of Join
   (*ii*) Explicit and Implicit cursor
   (*iii*) Predefined and User defined Exceptions.

Seat
No.

[5267]-204

M.C.M. (Second Semester) EXAMINATION, 2017

204 : JAVA PROGRAMMING

(2013 PATTERN)

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

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

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

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

1.　Solve the following :　　　　　　　　　　　　　　　　[10]

(1)　What is null interface ?

(2)　What is method overriding ?

(3)　What are adapter classes ?

(4)　What is use of final keyword ?

(5)　What are wrapper classes ?

2.　Write program to accept file name from user. Check if file exists or not. If exist, count number of characters in a file. Display contents of file and count of characters in file.　　　　[10]

3.　Write program to create the following threads.　　　　[10]

(1)　To print sum of alternate natural numbers.

(2)　To print string in reverse order (Accept string from user)

4. Write applet which accepts *n* as parameter and displays *n* rectangles.

[10]

5. Create class "BOOK" with attributes bookid, title, author, no_of_copies, price. Accept details of 10 books in an array of objects and display the accepted details. [10]

6. Write notes on (any *two*) : [10]
    (1)   String functions
    (2)   Access modifiers
    (3)   Thread synchronization
    (4)   User defined exceptions

Total No. of Questions—5]   [Total No. of Printed Pages—3

Seat
No.

[5267]-301

M.C.M. (Semester-III) EXAMINATION, 2017
301 : INFORMATION SECURITY AND AUDIT
(2013 PATTERN)

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

N.B. :— (*i*) *All* Questions are compulsory.

(*ii*) Figures to the right indicate full marks.

1. (*a*) What is information system ? Explain why we need to manage security of information system.   [10]

Or

(*b*) Explain role of Internet and World Wide Web in the evolution of Global Information Systems.

2. (*a*) How to protect networking and digital communications in the organization ?   [10]

Or

(*b*) Explain the importance of physical security and biometric controls for protecting information security assets.

3. (*a*) Explain the security of electronic mailing systems.   [10]

Or

(*b*) What is Firewall ? How does it help to secure the information assets ?

4. (*a*) Explain COBIT security model and its framework.   [10]

Or

    (*b*)   Explain privacy issues in application based web services.

5.   (*a*)   Explain business continuity planning and asset management.

                                                                 [10]

Or

    (*b*)   Explain the disaster recovery planning management in detail.

Total No. of Questions—7]   [Total No. of Printed Pages—1

Seat
No.

[5267]-302

MCM (Semester-III) (Specialization) EXAMINATION, 2017
302–NT : BASICS OF NETWORK TECHNOLOGIES
(2013 PATTERN)

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

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

(*ii*) *All* questions carry equal marks.

1. Explain steps for installation of Linux Server.

2. Explain Bus, Star and Ring Topologies.

3. Explain network protocol TCP/IP in detail.

4. Explain Windows Rights Management Service and Group Policy in windows server 2003.

5. Explain various partitions and purposes in Linux.

6. What is Internet Service Provider ? Explain various types of ISP.

7. Write short notes on (any *two*) :
(*a*) Connectors RG45, CAT 6
(*b*) Storage Management
(*c*) Microsoft .NET Framework

Total No. of Questions—7]   [Total No. of Printed Pages—1

Seat
No.

[5267]-303

MCM (Semester-III) (Mgt. Faculty) EXAMINATION, 2017
302–ST : SOFTWARE QUALITY ASSURANCE
(2013 PATTERN)

Time : Two Hours   **Maximum Marks : 50**

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

(*ii*) *All* questions carry equal marks.

1. Explain Software Project Life Cycle in detail.   [10]

2. Explain Mccall's Quality Model.   [10]

3. Discuss Inspections and Walkthrough.   [10]

4. Explain Software Configuration Management with all its components. [10]

5. Explain Risk Management in detail.   [10]

6. Differentiate between Software Quality Assurance and Software Quality
    Control.   [10]

7. Write short notes on (any *two*) :   [10]
    (*a*) Verification and Validation
    (*b*) Contract Review
    (*c*) Impact of CASE Tools.

Total No. of Questions—7]

[Total No. of Printed Pages—2

Seat No.

[5267]-304

M.C.M. (Third Semester) EXAMINATION, 2017
SOFTWARE AND DEVELOPMENT SPECIALIZATION
(302 SD : Program and Design with Asp.NET)
(2013 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 : customer (cid, cname, cadd)

2.   Explain required field validator and comparison validator validation
     control in detail.   [10]

3.   Draw and explain Dot NET Framework in detail.   [10]

4.   Explain concept of overloading and overriding with suitable
     example.   [10]

5.   Explain steps to create master pages.   [10]

6. Explain the following controls (any *two*) : [10]

   (*a*)   Tree View

   (*b*)   File Upload

   (*c*)   Hyper Links.

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

   (*a*)   LINQ

   (*b*)   WCF

   (*c*)   Crystal Reports-Creating Crystal Report

   (*d*)   ASP.NET Web Services.

Seat No.	

M.C.M. (Third Semester) EXAMINATION, 2017
303-NT : SERVER AND DESKTOP TECHNOLOGIES
(2013 PATTERN)

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

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

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

1. What is Drive ? Enlist and discuss different types of drives. [10]

2. What is Interrupt ? What are the different types of Interrupts ? Explain. [10]

3. Explain with block diagram the 80286 bits microprocessor Architecture. [10]

4. Explain the stepwise process of installing Windows XP. [10]

5. Explain different partition types in Windows 7. Discuss the process of network installation in Windows 7. [10]

6. Write short notes (any *two*) : [2×5=10]
   (*a*) USB
   (*b*) RISC
   (*c*) Hardware Installation in Windows-XP.

Total No. of Questions—6]

[Total No. of Printed Page—1

Seat
No.

[5267]-306

M.C.M. (Third Semester) EXAMINATION, 2017

303-ST : SOFTWARE TESTING PROCESS AND DOCUMENTATION

(2013 PATTERN)

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

N.B. :— (*i*) Attempt any *five* questions.
      (*ii*) Figures to the right indicate full marks.

1.   Explain in detail Testing constraints, Life cycle testing and Tester's
     workbench   [10]

2.   Explain functional and structural testing.   [10]

3.   Explain Structural testing techniques and Functional testing
     techniques.   [10]

4.   Explain Test work processes and Test Tools   [10]

5.   Describe Internal control models.   [10]

6.   Explain Testing e-Commerce application.   [10]

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

Seat
No.

[5267]-308

MCM (Third Semester) EXAMINATION, 2017

304 NT : SYSTEM ADMINISTRATION AND SERVER INTEGRATION

(2013 PATTERN)

Time : 2½ Hours　　　　　　　Maximum Marks : 50

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

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

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

　　　　(*iv*)　Draw neat diagram wherever necessary.

1.　Explain Installation steps for Fedora core operating system in graphical mode.　　　　[10]

2.　Explain function of DHCP server in Windows 2003 server and state procedure for configuring it.　　　　[10]

3.　Explain the installation procedure of Windows 2003 server.　[10]

4.　Explain steps for implementing web services using IIs in Windows server 2003　　　　[10]

5.　Explain group management and user management commands in Linux.　　　　[10]

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

    (*a*)   Windows Firewall

    (*b*)   Architecture of Linux

    (*c*)   Distributed and centralized O.S

    (*d*)   Linux partition type

    (*e*)   Package management in Linux.

Seat
No.

[5267]-309

MBA (Third Semester) EXAMINATION, 2017
304 ST : SOFTWARE TEST PLANNING AND DOCUMENTATION
(2013 PATTERN)

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

N.B. :— (*i*) Solve any **5** questions.
      (*ii*) All questions carry equal marks.

1. Explain use cases. Write down use cases for android based on line
    quiz system.   [10]

2. Discuss in detail various risks associated with software
    development.   [10]

3. Explain functional and structural test cases.   [10]

4. Discuss the role of various tools in testing.   [10]

5. Explain Test Plan standards.   [10]

6. Explain User Acceptance Testing.   [10]

7. Discuss various Tools used to prepare test report.   [10]

8. Write short notes on (any *two*) :   [10]
    (*a*) Test Matrix
    (*b*) System Testing
    (*c*) Test plan standards

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

Seat
No.

[5267]-310

MCM (Third Semester) EXAMINATION, 2017

ADVANCED JAVA

(2013 PATTERN)

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

N.B. :— (*i*)   Question No. **1** and **5** are compulsory.

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

1.   Solve the following :   [15]

(*a*)   Write method signature of service method.

(*b*)   Explain marshalling and unmarshalling.

(*c*)   Explain prepared statement in Java.

(*d*)   Life-cycle methods of Bean.

(*e*)   Write any *three* JSP actions.

2.   Write a client server socket program to accept a string from the client. The server will convert the string into uppercase and display it as well as the number of vowels present in it.   [10]

3.   Write a HTML page which will accept order number. Display the complete details of that order using JSP. Assume suitable table.   [10]

4. Write a JDBC code to display list of employees working SALES department. [10]

5. Write short notes on (any *three*) : [15]
   (*a*) JDBC drivers
   (*b*) RMI architecture
   (*c*) Java beans
   (*d*) JNDI
   (*e*) Life-cycle of servlet.

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

M.C.M. (IV Sem.) EXAMINATION, 2017

401 : CURRENT TRENDS IN IT

(2013 PATTERN)

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

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

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

　　　(*iii*) Support your answer with relevant examples and diagram.

　　　(*iv*) Figures to the right indicate full marks.

1. An autonomous management institute has started distance learning executive MBA programme for working professional. Institute is interested in conducting online admission process, placement portal, virtual teaching and exam. As an IT consultant suggest various models of e-learning and justify your suggestion. [15]

2. What are the different e-learning tools and technologies ? [10]

3. Explain various electronic payment gateway. Explain paypal. [10]

4. What is cloud storage ? Explain the issues of storage security with example. [10]

5. What is m-Commerce ? Discuss the various applications of m-Commerce. [10]

6. Write short notes on (any *three*) : [15]

(*i*) Spoofing

(*ii*) Virtual school systems

(*iii*) Point of sales system (POS)

(*iv*) m-wallet.