**MCA First Year (Computer Science)**

**Internal Assignment-2014**

**Paper Code – MCA-01 (Computer Fundamentals and PC Software)**

**Max Marks: 20**

**Note: The Question paper is divided into three sections A, B, and C. Write Answer as per the given instruction.**

 **Section-A**

**(Very Short Answer Type Questions)**

**Note: Answer all questions. As per the nature of the question you delimit your answer in one word, one sentence or maximum up to 30 words. Each question carries 1mark. 4x1=04**

Q.1 Which is an electronic device that stores and process data ,according to a list of instruction ?

Q.2 Computer accepts the information from the user, this process is called as ?

Q.3 How many generation computer have been classified ?

Q.4 Which device was used in first Generation (1940-1956) ?

**Section-B**

**(Short Answer Questions)**

**Note: Answer any 2 questions. Each answer should not exceed 200 words. Each question carries 4 marks. 2x4=08**

Q.1 What is Computer ?

Q.2 What is the Computer tasks?

Q.3 What is advantage of computer?

Q.4 Explain the generations of computer in short?

**Section ‘C’**

**(Long Answer Questions)**

Note: Answer **any one** question. You have to delimit your each answer maximum up to 800 words. **Each question carries 08 marks.**

Q.1What is Computer? Describe the various tasks of computer in detail?

Q.2 Describe the Generation of computer in detail?

**Internal Assignment-2014**

**Paper Code – MCA-02 (Digital Logic)**

 **Max Marks: 20**

**Note: The Question paper is divided into three sections A, B, and C. Write Answer as per the given instruction.**

**Section-A**

**(Very Short Answer Type Questions)**

**Note: Answer all questions. As per the nature of the question you delimit your answer in one word, one sentence or maximum up to 30 words. Each question carries 1mark. 4x1=04**

1. What charge an electron has?
2. The smallest and lightest particle in Atom is known as?
3. Define electric current
4. What is meant by resistance?

**Section-B**

**(Short Answer Questions)**

**Note: Answer any 2 questions. Each answer should not exceed 200 words. Each question carries 4 marks. 2x4=08**

1. Discuss electric charge and electric current.
2. Explain different methods of electricity generation.
3. Explain mean free path, relaxation time and drift velocity. Establish relation between drift velocity and current of free electron.
4. State Ohm’s Law. A potential difference of 200V is applied across the ends of conductor of resistance 50Ω. Calculate the number of electron flowing throufh it in 1 second.

**Section ‘C’**

**(Long Answer Questions)**

**Note: Answer any one question. You have to delimit your each answer maximum up to 800 words. Each question carries 08 marks.**

Q.1 What is resistance? What are parameters on which resistance of conductor depends? Calculate the electrical conductivity of the material of a conductor of lenght 3 meter, area of cross-section 0.02mm having a resistance of 2 ohm.

Q.2 Two resistances with the value of R1, R2 are connected in (i) series and (ii) parallel. What is the equivalent resistance?

**Internal Assignment-2014**

 **Paper Code – MCA-03 (Computer Programming using C)**

**Max Marks: 20**

**Note: The Question paper is divided into three sections A, B, and C. Write Answer as per the given instruction.**

**Section-A**

**(Very Short Answer Type Questions)**

**Note: Answer all questions. As per the nature of the question you delimit your answer in one word, one sentence or maximum up to 30 words. Each question carries 1mark. 4x1=04**

Q.1 Which Year C is Developed ?

Q.2 Who was the developer of C?

Q.3 How many Keywords are used in C?

Q.4 where C is developed ?

**Section-B**

**(Short Answer Questions)**

**Note: Answer any 2 questions. Each answer should not exceed 200 words. Each question carries 4 marks. 2x4=08**

Q.1 what is flow chart? Explain the symbol used in Flow Chart.

Q.2 what is algorithm? What are Different characteristics of Algorithm?

Q3 Explain the difference between compiler and interpreter.

Q.4 Explain different control instruction in C Language.

**Section ‘C’**

**(Long Answer Questions)**

Note: Answer **any one** question. You have to delimit your each answer maximum up to 800 words. **Each question carries 08 marks.**

Q.1 What is the use of algorithms in computer programming ?

Q.2 Explain All symbols used in Flow Chart?

**Internal Assignment-2014**

**Paper Code – MCA-04 (Fundamentals of Networking and Web Technology)**

**Max Marks: 20**

**Note: The Question paper is divided into three sections A, B, and C. Write Answer as per the given instruction.**

**Section-A**

**(Very Short Answer Type Questions)**

**Note: Answer all questions. As per the nature of the question you delimit your answer in one word, one sentence or maximum up to 30 words. Each question carries 1mark. 4x1=04**

1. What is Computer Network?

2. Who created the first wide area network?

3. What is XML?

4. What is HTML?

**Section-B**

 **(Short Answer Questions)**

**Note: Answer any 2 questions. Each answer should not exceed 200 words. Each question carries 4 marks. 2x4=08**

1. What are the advantages of network ?

2. What is network architecture? Describe in brief.

3. How many types of network strategies? Define each in brief.

4. What are the disadvantages of XML?

**Section ‘C’**

**(Long Answer Questions)**

Note: Answer **any one** question. You have to delimit your each answer maximum up to 800 words. **Each question carries 08 marks.**

1. Describe the different mode of data transmission?

2. Describe optical fiber cable in detail?

**Internal Assignment-2014**

**Paper Code – MCA-05 (Computer Organization and Architecture)**

**Max Marks: 20**

**Note: The Question paper is divided into three sections A, B, and C. Write Answer as per the given instruction.**

**Section-A**

**(Very Short Answer Type Questions)**

**Note: Answer all questions. As per the nature of the question you delimit your answer in one word, one sentence or maximum up to 30 words. Each question carries 1mark. 4x1=04**

Q.1\_\_\_\_\_\_\_\_\_\_\_ performs arithmetic and logic operations?

Q.2 How many buses are used to interconnect the CPU, memory and I/O devices?

Q.3 What are the parts of Instruction format?

Q.4 Why are transfer of control instructions needed?

**Section-B**

**(Short Answer Questions)**

**Note: Answer any 2 questions. Each answer should not exceed 200 words. Each question carries 4 marks. 2x4=08**

Q.1 What is the purpose of System Bus?

Q.2How floating point operations perform?

Q.3 Explain overlap register window ?

Q.4 What is the difference between the microprogramming and hardwired control?

**Section ‘C’**

**(Long Answer Questions)**

Note: Answer **any one** question. You have to delimit your each answer maximum up to 800 words. **Each question carries 08 marks.**

Q.1Describe combinational and sequential ALU in brief?

Q.2What are the main principles used to construct a RISC machine ?

**Internal Assignment-2014**

**Paper Code – MCA-06 (Data Structure through C Language)**

**Max Marks: 20**

**Note: The Question paper is divided into three sections A, B, and C. Write Answer as per the given instruction.**

**Section-A**

**(Very Short Answer Type Questions)**

**Note: Answer all questions. As per the nature of the question you delimit your answer in one word, one sentence or maximum up to 30 words. Each question carries 1mark. 4x1=04**

Q1. What is data?

Q2. What is meant by array?

Q3. What is data structure?

Q4. Name the various types of arrays?

**Section-B**

**(Short Answer Questions)**

**Note: Answer any 2 questions. Each answer should not exceed 200 words. Each question carries 4 marks. 2x4=08**

 Q1. What is need of data structure

Q2. What is the difference between static and dynamic data structure?

Q3. Give the algorithm for insertion and deletion in array

Q4. List the advantages and disadvantages of arrays?

**Section ‘C’**

**(Long Answer Questions)**

Note: Answer **any one** question. You have to delimit your each answer maximum up to 800 words. **Each question carries 08 marks.**

Q.1 Give the C program to delete the first occurrence of given element in array.

Q.2 Write a C program To calculate grade of n students whose roll number, name and percentage is given.

**Internal Assignment-2014**

**Paper Code – MCA-07 (Fundamentals of Database Management System)**

**Max Marks: 20**

**Note: The Question paper is divided into three sections A, B, and C. Write Answer as per the given instruction.**

**Section-A**

**(Very Short Answer Type Questions)**

**Note: Answer all questions. As per the nature of the question you delimit your answer in one word, one sentence or maximum up to 30 words. Each question carries 1mark. 4x1=04**

 1.  What is Database?

1. What is Database System?
2. What is data?
3. What are the advantages of dbms?

**Section-B**

**(Short Answer Questions)**

**Note: Answer any 2 questions. Each answer should not exceed 200 words. Each question carries 4 marks. 2x4=08**

1.What is E-R model with its component?

2. What is data model? Explain its types?

3. Explain in detail network model with the help of diagram?

4. Explain in detail Hierarchical model with the help of diagram?

**Section ‘C’**

**(Long Answer Questions)**

Note: Answer **any one** question. You have to delimit your each answer maximum up to 800 words. **Each question carries 08 marks.**

1. With a schematic diagram, explain a database management system.
2. Describe the various components of a database system.