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Internal Assignment

MCA Second Year (Computer Science)

प्रिय छात्र,

आपको **MCA Second Year (Computer Science)** के पाठ्यक्रम के विभिन्न प्रश्न पत्रों के सत्रीय कार्य दिए जा रहे है। आपको प्रत्येक प्रश्न पत्र के दिए गए सत्रीय कार्य करने हैं। इन्हें पूरा करके आप निर्धारित अंतिम तिथि से पूर्व अपने क्षेत्रीय केंद्र /अध्ययन केंद्र (जहाँ पर आपने प्रवेश लिया है) पर स्वयं अथवा पंजीकृत डाक से आवश्यक रूप से भिजवा दें। प्रत्येक सत्रीय कार्य 20 अंकों का हैं। इन प्राप्तांको को आपकी सत्रांत परीक्षा के अंकों में जोड़ा जायेगा। सत्रीय कार्य स्वयं की हस्तलिपि में करें। सत्रीय कार्यों का पुनर्मूल्यांकन नहीं होता है और न ही इन्हें सुधारने हेतु दुबारा स्वीकार किया जाता हैं। अतः आप एक बार में ही सही उत्तर लिखें। आप संलग्न निर्धारित प्रपत्र पर वांछित सूचना भरकर सत्रीय कार्य के साथ संलग्न करें।

MCA Second Year (Computer Science) 2014-15

Internal Assignment

1. पाठ्यक्रम कोड (Course Code)..

2. पाठ्यक्रम का नाम ....

3. स्कॉलर संख्या (Scholar No.).......................................

4. छात्र का नाम ....

   Name of Student (in capital letters)

5. पिता का नाम ....

   Name of Father (in capital letters)

6. पत्र व्यवहार का पता ....
   ....
   ....

   Address for Corresponding

7. अध्ययन केंद्र का नाम ....

   Name of Study Centre

8. क्षेत्रीय केंद्र (Regional Centre)...

Ajmer	Bikaner	Jaipur	Jodhpur	Kota	Udaipur

जमा करवाने का दिनांक (Date of Submission) ....

Internal Assignment-2014

Paper Code – MCA-09 (Discrete Mathematics)

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 What is Number System ?

Q. 2 What is Positional Number System?

Q.3 Which one is the Value of ? $(A58)_{16} = (?)_{10}$

Q.4 Which is the value of ? $(100101)_2 = (?)_{10}$

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 Prove that :-

- A U (B U C) =(A U B)$\cap$ C

Q.2 Prove that ?

- A U (B $\cap$ C) = (A U B)$\cap$ (A U C)

Q.3 Prove that

- (A U B)' = A' $\cap$ B'

Q.4 Find the converse, inverse and contra positive of the following conditional "only Mohan teaches good will he get good results"

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.**

Q1.Write the ASCII-7 coding for the word "GIRL" in both binary and hexadecimal notations . How many bytes required to store this word using this coding.

Q2. Find the converse ,Inverse and contra-positive of the following:

- If today is rainy day, then tomorrow is Sunday.
- If A is rectangle ,then P is a square.

If Ram is good , then he is honest.

Internal Assignment-2014

Paper Code – MCA-10 (Object-Oriented Programming through 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 Which type of C++ language?

Q.4 Which Language the maintain of features in C++ ?

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 difference between C and C++?(Min 5)

Q.2 What is the difference between structured and object oriented programming?

Q.3 Describe the features of object oriented programming?

Q.4 What is the Encapsulation?

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 Encapsulation? Describe with a suitable example?

Q.2 What is the Inheritance? Describe the all types of Inheritance?

Internal Assignment-2014

Paper Code – MCA-11 (Operating 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. Write the definition of operating system.
2. What is the main goal of operating system?
3. Which program is responsible for interfacing between the user and computer hardware?
4. What is parallel or multi processing system?

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. Describe the different types of operating system.
2. What are the differences between CUI and GUI?
3. What is system calls? Give one example of system calls.
4. Differentiate between uni-programming and multiprogramming.

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. What is operating system? Define all the types of operating system.
2. What are the various services provided by the operating system. Describe them.

Internal Assignment-2014

Paper Code – MCA-12 (Design and Analysis of Algorithm)

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 Binary search is applied in already------------array.

Q.2 Merge sort algorithm is an-------sorting algorithm

Q.3 The algorithm divides the array into two halves in ---------.

Q.4 Divide and conquer algorithm is applied in a problem when sub-problems are------------------------------.

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 the type of quick sort algorithm? External or internal?

Q2. Why does not quick sort algorithm need to combine the sorted sub-arrays later?

Q3. Compute 37 using divide and conquer method.

Q4. What are the difference between quick sort and merge sort algorithm?

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.**

Q1. Given an array of n integers, write an algorithm to find the smallest element. Find number of instruction executed by your algorithm. What are the time and space complexities?

Q2. How does the binary search algorithm follow the divide and conquer method? Explain with an example

Internal Assignment-2014

Paper Code – MCA-13 (Advanced 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. _____ and _____ are the two types of constraints on a relationship.

2. Cardinality ratio is the _____ number of relationship instances that an entity can participate in.

3. In an ER-diagram, the entities, attributes and relationships are represented as _____, _____ and _____ respectively.

4. Participation constraints in relationships are of two types, _____ and _____ participation.

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. Explain three level database architecture. What are its objectives?
2. What do data independence and its types? How data independence is achieved?
3. What are advantages of DBMS?
4. Discuss the main disadvantages of a Traditional file approach?

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 a JOIN operation? How is it represented? Explain with example.

Q.2 How does a tuple relational calculus differ from domain relational calculus?

Internal Assignment-2014

Paper Code – MCA-14 (Management Accounting)

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 Balance sheet is also known as _____ statement.

Q.2 Expenses which remain unpaid at the end of the accounting period are termed as _____ expenses.

Q.3 Explain the meaning of Ratio analysis.

Q.4 Describe the application of ratio analysis.

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 Explain the meaning of Pass Book.

Q.2 What is double column cash book?

Q.3 Explain the purposes of Accounting

Q.4 What are the components of Financial Statements?

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 do you mean by Final accounts? What are its components?

Name them and briefly explain the purpose of each of them.

Q.2 Give an account of the various ratios used to measure the profitability of a business firm?

Internal Assignment-2014

Paper Code – MCA-15 (System Programming)

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. Terminals are denoted by _____.
2. Natural languages are also called _____.
3. An Assembler is _____.
4. Opcode uses _____ in machine instruction.

Section-B

(Short Answer Questions)

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

5. What is the purpose of Symbol table?
6. Explain three basic features of assembly language programming.
7. What is the difference between compiler and interpreter?
8. Differentiate between
   i. Machine dependent and machine Independent loader feature.
   ii. Dynamic Linking and Dynamic loading

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.**

9. What do you mean by language processor? What is the purpose of it.?
10. What is memory allocation? Discuss static and dynamic memory allocation during compilation of a program.

Internal Assignment-2014

Paper Code – MCA-16 (Programming in Java)

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. A blue print from which individual objects are created is known as?
2. What do you mean by Object?
3. Which type of JAVA language?
4. Which Language has similar features as in JAVA?

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 difference between structured and object oriented programming?

Q.2 Describe the features of object oriented programming?

Q.3 What is polymorphism? Explain it with syntax and example.

Q.4 What is array? Explain it with syntax and example.

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 java? Explain all the features of java.

Q.2 What is inheritance? Explain all the types of inheritance with the help of syntax and example.