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आन्तरिक मूल्यांकन

Internal Assignment

BCA Second Year

प्रिय छात्र,

आपको BCA Second Year 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 30 अंकों का हैं। इन प्राप्तांको को आपकी सत्रांत परीक्षा के अंकों में जोड़ा जायेगा। सत्रीय कार्य स्वयं की हस्तलिपि में करें। सत्रीय कार्यो का पुनर्मूल्यांकन नहीं होता है और न ही इन्हें सुधारने हेतु दुबारा स्वीकार किया जाता हैं। अत: आप एक बार में ही सही उत्तर लिखें। आप संलग्न निर्धारित प्रपत्र पर वांछित सूचना भरकर सत्रीय कार्य के साथ संलग्न करें। सत्रीय गृह कार्य सादे अथवा रेखायुक्त A-4 आकार के पृष्ठों पर किया जा सकता है प्रत्येक पाठ्यक्रम जैसे BCA-07 के सत्रीय गृह कार्य करने के उपरान्त उसमें मुख पृष्ठ जोड़े जिस पर पाठ्यक्रम कोड ,पाठ्यक्रम नाम , स्कॉलर संख्या ,छात्र का नाम ,क्षेत्रीय केन्द्र का नाम इत्यादि विवरण अंकित करे व सत्रीयकार्य को स्टेपल (पिन) कर संयुक्त करे । इसके उपरान्त इस पर A-4 आकार के प्लास्टिक पारदर्शी स्ट्रिप कवर का उपयोग किया जा सकता है। इसी तरह BCA-08, BCA-09 …. इत्यादि के पृथक पृथक सत्रीय गृह कार्य करे ।

1. पाठ्यक्रम कोड (Course Code).....

B	C	A	-		

2. पाठ्यक्रम का नाम (Course Name) .....

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	Bharatpur

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

Internal Assignment- July 2026 - January 2027

Paper Code – BCA-07 (Operating System –I)

Max Marks: 30

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 **one** mark**.** **6 x 1 = 6**

Q.A.1 What is the concept of batch processing?
Q.A.2 What do you mean by GUI?
Q.A.3 Name some examples of Operating System.
Q.A.4 What is Socket?
Q.A.5 What do you mean by kernel?
Q.A.6 Define Encryption.

Section-B

(Short Answer Questions)

Note: Answer **any four** questions. Each answer should not exceed 200 words. Each question carries **three** marks. **4 x 3 = 12**

Q.B.1 Write short notes on PCB (Process Control Block).
Q.B.2 Compare Process with Thread. Also explain with example.
Q.B.3 Explain hierarchy of memory organization in a computer with neat diagram.
Q.B.4 What is thrashing? Explain with example.
Q.B.5 Discuss various Program and System Threads.

Section 'C'

(Long Answer Questions)

Note: Answer **any two** question. You have to delimit your each answer maximum up to 500 words. Each question carries **six** marks. **2 x 6 = 12**

Q.C.1 Why scheduling is important in Operating System? Explain two scheduling Algorithm with example.
Q. C.2 What are the necessary condition for deadlock? How can we avoid deadlock? Explain with example.
Q. C.3 What are the principle of Protection? Discuss various methods for enforcement of protection mechanism.
Q. C.4 What is Paging? Explain Segmentation with Paging mechanism in detail.

Internal Assignment- July 2026 - January 2027

Paper Code – BCA-08 (Software Engineering)

Max Marks: 30

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 **one** mark**.** **6 x 1 = 6**

Q.A.1 Define software engineering.
Q. A.2 What do you mean by function point?
Q. A.3 What is a Software reliability?
Q. A.4 What is the concept of Testing?
Q. A.5 Explain the term software reengineering?
Q. A.6 What is White box testing?

Section-B

(Short Answer Questions)

Note: Answer **any four** questions. Each answer should not exceed 200 words. Each question carries **three** marks. **4 x 3 = 12**

Q. B.1 What are the advantages of Incremental Model in software development process.
Q. B.2 Explain software management activities?
Q. B.3 What are the elements of Software Project Management Plan (SPMP)?
Q. B.4 Write short note on COCOMO model.
Q. B.5 Distinguish between DFD and flow charts.

Section-C

(Long Answer Questions)

Note: Answer **any two** question. You have to delimit your each answer maximum up to 500 words. Each question carries **six** marks. **2 x 6 = 12**

Q.C.1 Give a comparison of Waterfall, Prototyping and Iterative software process model?
Q. C.2 What is Software Requirements Specifications (SRS)? Outline its goals.
Q. C.3 What is the concept of data modelling? Discuss the concept of E-R diagram along with its symbols.
Q. C.4 Explain Design concepts in software engineering. What are the steps followed in software design phase.

Internal Assignment- July 2026 - January 2027

Paper Code – BCA-09 (Database Management System)

Max Marks: 30

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 **one** mark**.** **6 x 1 = 6**

Q.A.1 List four significant differences between file processing system and a DBMS.
Q.A.2 Name any three valid Relational databases.
Q.A.3 Define DBMS.
Q.A.4 What is the use of metadata?
Q.A.5 Write the syntax to update a field value in a table.
Q.A.6 What is the use of self join feature of SQL?

Section-B

(Short Answer Questions)

Note: Answer **any four** questions. Each answer should not exceed 200 words. Each question carries **three** marks. **4 x 3 = 12**

Q.B.1 What do you mean by specialization? Explain giving examples.
Q.B.2 What do mean by E-R Model? Explain E-R Modelling Symbols.
Q.B.3 Define relation. Explain different types of relations
Q.B.4 Explain the terms- Primary Key, Foreign Key and Candidate Key.
Q.B.5 Explain the client server technology in terms of DBMS.\

Section 'C'

(Long Answer Questions)

Note: Answer **any two** question. You have to delimit your each answer maximum up to 500 words. Each question carries **six** marks. **2 x 6 = 12**

Q.C.1 What do you mean by normalization? What are the advantages and disadvantages?
Q.C.2 Write a note on SQL data types and literals. Discuss different types of joins of SQL.
Q.C.3 What are the advantages of relational data base software packages? Mention one of them in brief.
Q.C.4 What are different normalization forms? Write a note on relational calculus.

Internal Assignment- July 2026 - January 2027

Paper Code – BCA-10 (Object Oriented Programming in C++)

Max Marks: 30

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 **one** mark**.** **6 x 1 = 6**

Q.A.1 What is Object?
Q.A.2 What are the operators that cannot be overloaded?
Q.A.3 How many destructors can a class have?
Q.A.4 Give example of data hiding.
Q.A.5 How many Keywords are used in C++ ?
Q.A.6 Name any two Object Oriented Language?

Section-B

(Short Answer Questions)

Note: Answer **any four** questions. Each answer should not exceed 200 words. Each question carries **three** marks. **4 x 3 = 12**

Q.B.1 What is Copy Constructor? What are the advantages of copy constructor? Give examples.
Q.B.2 Why do we need virtual function?
Q.B.3 Define a class of square matrix nXn of integers. Define the necessary constructor/descructors and othe members. Write a program to find the trace (sum of the diagonal elements) of a matrix.
Q.B.4 What is the Encapsulation?
Q.B.5 What are Classes and how do they differ from ordinary data structure like structures.

Section 'C'

(Long Answer Questions)

Note: Answer **any two** questions. You have to delimit your each answer maximum up to 500 words. Each question carries **six** marks. **2 x 6 = 12**

Q.C.1 Explain the concept of operator overloading? Illustrate with suitable example?
Q.C.2 What is exception? How is an exception handled in C++?
Q.C.3 Explain the major features of OOP with example? How OOP does differ from traditional Programming Language.
Q.C.4 What is the Inheritance? Describe the all types of Inheritance?

Internal Assignment- July 2026 - January 2027

Paper Code – BCA-11 (Programming in Visual Basic)

Max Marks: 30

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 **one** mark**.** **6 x 1 = 6**

Q.A.1 What is the use of MsgBox() function in VB?
Q.A.2 How you can declare an array in VB?
Q.A.3 What do you mean by docking?
Q.A.4 What are the different types of error?
Q.A.5 What are the Style Properties of Combo Box?
Q.A.6 What is Friend Variable?

Section-B

(Short Answer Questions)

Note: Answer **any four** questions. Each answer should not exceed 200 words. Each question carries **three** marks. **4 x 3 = 12**

Q.B.1 Discuss some of the controls contain in the Toolbox?
Q.B.2 Write short note on Sub procedures and function used in VB.
Q.B.3 What are the basic purpose of using Crystal Report?
Q.B.4 Explain how we can initialize an object in class?
Q.B.5 What is the difference between picture box and image box?

Section 'C'

(Long Answer Questions)

Note: Answer **any two** question. You have to delimit your each answer maximum up to 500 words. Each question carries **six** marks. **2 x 6 = 12**

Q.C.1 What is bounded and unbounded controls. Write the steps to activate the ADODC.
Q.C.2 What is the use of form in VB? What are the different properties method and events of form.
Q.C.3 What methods are used in event handling? Write a program in VB to accept values in an array and display the values using Input Box.
Q.C.4 Describe MS Flexgrid control. Write a note on ODBC and how it is useful?

Internal Assignment- July 2026 - January 2027

Paper Code – BCA-12 (Data Structures and Algorithms)

Max Marks: 30

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 **one** mark**.** **6 x 1 = 6**

Q.A.1 What is abstract data type?
Q.A.2 Define Heap.
Q.A.3 What is spanning tree?
Q.A.4 Write the condition when stack is full and empty?
Q.A.5 What is pendent vertex?
Q.A.6 What do you understand by degree of a vertex?

Section-B

(Short Answer Questions)

Note: Answer **any four** questions. Each answer should not exceed 200 words. Each question carries **three** marks. **4 x 3 = 12**

Q.B.1 Write the algorithm for PUSH and POP operation on stack?
Q.B.2 Convert Z = (A+B)*C-D expression into postfix and prefix. Also write the steps.
Q.B.3 Create AVL tree form the following A, Z, B, Y, C, X. Also write the steps
Q.B.4 Compare Static and Dynamic Memory Allocation.
Q.B.5 Write short note on Greedy Algorithm Design Strategies.

Section 'C'

(Long Answer Questions)

Note: Answer **any two** question. You have to delimit your each answer maximum up to 500 words. Each question carries **six** marks. **2 x 6 = 12**

Q.C.1 What do you mean by Circular Queue? Explain the array implementation of a Circular Queue.
Q.C.2 What is linked list? Write an algorithm to build a linked list by adding new nodes at the beginning, at the end or in the middle of the linked list. Also to display all the nodes present in the linked list.
Q.C.3 Define hashing. Explain different hashing technique.
Q.C.4 What is External Sorting? Explain bubble sort with the help of example.