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H-075001

Seat No. _____

B. C. A. (Sem. V) Examination

October - 2019

BCA CC - 301 : Java (Core)

Time : **3** Hours] [Total Marks : **70**

Instructions

1) Figures on the right indicate the marks.
2) All Questions are compulsory.
3) Answer of each question must start on a new page.
4) Answer of all sub-questions of a question should be written in continuous order.

1 Do as Directed(Any 14): **14**

(1) Define the term: Portable.
(2) Define the term: Interpreted.
(3) Define the term: finalize.
(4) What does mean by block initializer?
(5) To stop inheritance class should be declared _____.
(6) *Explain* the use of toString() method.
(7) Define the term: Bytecode.
(8) Define the term: Boxing.
(9) What does mean by class?
(10) What does mean by Object?
(11) Define the term: Exception.
(12) Define the term: Method Overriding.
(13) Briefly explain the use of charAt().
(14) Briefly explain the use of indexOf().
(15) What is the use of isUpperCase()?
(16) What is the use of replace()? Briefly explain it.

2 Explain Any Two. **14**

(a) Explain features of Java.
(b) Explain: this, super and static keyword with suitable example.
(c) Differentiate between constructor and method of class. Define method overloading and its purpose. Write a program to demonstrate the constructor overloading.

3 Explain Any Two. **14**

(a) What are the applications of inheritance? Explain various types of inheritance with the help of suitable example.

(b) Explain package in java. List out all packages with short description.

(c) Answer the following:

(1) Explain the java garbage collection mechanism. **04**

(2) Justify the statement: JVM is platform dependent. **03**

4 Explain Any Two. **14**

(a) Explain the following term with respect to exception handling with suitable example:

(1) try (2) catch (3) throw (4) finally

(b) Compare String with StringBuffer. Also write a program to count occurrence of character in a string.

(c) Explain dynamic method dispatch using suitable example.

5 Answer Any Two. **14**

(a) Differentiate between abstract class and interface with suitable example.

(b) Discuss public, private, protected and default access modifier with example.

(c) Explain life cycle of applet using suitable example.

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* H A - 0 7 5 0 0 2 *

HA-075002

Seat No. _____

B. C. A. (Sem. V) Examination

October - 2019

BCA CC - 302 : Advanced Visual & Windows Programming

Time : 3 Hours] [Total Marks : 70

Instructions

1) Figures on the right indicate the marks.
2) All Questions are compulsory.
3) Answer of each question must start on a new page.
4) Answer of all sub-questions of a question should be written in continuous order.

1 Answer the following: (Any 5) **10**

(1) Define the term: Class and Object.
(2) Define the term: MSIL.
(3) What is CLR?
(4) What is meant by Constructor?
(5) What is meant by Inheritance?
(6) Write a use of Rich Text Box control.
(7) What is full form of XML? Briefly explain it.

2 Explain Any Four. **20**

1. What is exception? Explain Try...Catch...Finally statement in brief with example.
2. What is inheritance? Create VB .Net console application to define person class and derive student and employee from it to demonstrate inheritance
3. Explain ImageList with suitable example.
4. Explain Timer Controller with its properties and suitable example.
5. Explain Scrollbar control with suitable example.

3 (a) Explain Any Two. **10**

1. Write a function which finds the maximum value from an array. Pass the array as an argument in the function and return the maximum value. (design a form of your choice).
2. Answer the following with suitable example (Any Five)
   1. AppendFormat()
   2. Remove()
   3. RemoveRange()
   4. GetRange()
   5. GetSystemDirectories()
   6. GetLogicalDrives().

3. Answer the following functions with example(Any Five)
   1. Concate().
   2. LastIndexOf()
   3. Insert()
   4. Copy().
   5. CreateDirectory().
   6. GetFiles().

4 Explain Any Four. **20**

1. How the variables are declared in VB.NET and describe the different types of variables with example.
2. What is the use of attribute in XML? Explain the following term with suitable example:
   (a) Empty Tag (b) Empty Element (c) How comment work in XML documents.
3. Explain the method "open" of file class with all arguments.
4. Explain function overloading with suitable example.
5. Write a VB.NET program that will read a string and count the total number of words in a string. Also write a code to count all occurrences of a particular word enter by user

5 Answer Any Two. **10**

1. What is DataSet? Explain its advantage. Give code to work with it.
2. Explain how we read the data with the DataReader object in VB.Net.
3. What is the use of Data Adapters? Explain Data Adapter with suitable example and syntax.

* H B - 0 7 5 0 0 3 *

HB-075003

Seat No._____

B. C. A. (Sem. V) Examination

October - 2019

BCA CC - 303 : Python Programming

Time : **3** Hours] [Total Marks : **70**

Instructions : (1) Figures on the right indicate the marks.
(2) All Questions are compulsory.
(3) Answer of each question must start on a new page.
(4) Answer of all sub-questions of a question should be written in continuous order.

1 Do as Directed : (Any **14**) **14**

(1) Define the term: global variable.
(2) List built in data types in python.
(3) Is Python case sensitive when dealing with identifiers? [True/False]
(4) What is the return value of trunc() ?
(5) List is _____ object of python.
(6) How to comment in python? Briefly explain it.
(7) How return statement works in python?
(8) Explain the function title().
(9) Suppose list 1 is $[1,3,2]$, What is list 1 * 2 ?
(10) To remove string "hello" from list I, we use which command?
(11) Operators with the same precedence are evaluated in which manner?
(12) If format() function applied on a string then which value return by it?
(13) What is the use of isupper() method?
(14) What will be the output of $L = ['a','b','c','d']$ print"".join(L).
(15) What is the maximum possible length of identifier in python?
(16) Evaluate the expression $A\%B // A$, *if* $A = 16$ and $B = 15$.

2 Explain Any **Two** : **14**

(a) What are the difference between C and Python?

(b) Answer the following:

(1) Explain the use of assert statement with a python program. **4**

(2) Explain the following python regular expression function with an example: match() and search(). **3**

(c) Answer the following :

(1) Explain while statement with suitable example. **3**

(2) What is the use of if elif else statement in python? Explain it with suitable example. **4**

3 Explain Any **Two** : **14**

(a) Write a Python program which finds the addition of n-numbers using recursive functions.

(b) Write a Python program to find reverse of given number using user definedfunction.

(c) Answer the following :

(1) Give the output of following Python code: **4**

$$1 = \left[(x, y) \; for \; x \; in \left[1, 2, 3 \right] for \; y \; in \left[3, 1, 4 \right] if \; x \; ! = y \right]$$

print 1

(2) Give the syntax and significance of string functions: title() and strip(). **3**

4 Explain Any **Two** : **14**

(a) Explain filter() and reduce() with suitable example.

(b) Write a Python program to check whether the given no. is prime or not using user defined function.

(c) Answer the following :

(1) Explain in operator in Python with an example. **3**

(2) How append() and extend() are different with reference to list in Python? **4**

5 Answer Any **Two** : **14**

(a) Is String a mutable data type? Also explain the string operations length, indexing and slicing in detail with an appropriate example.

(b) List and explain built-in methods of Lists in detail with example.

(c) Answer the following :

(1) Explain sort() with an example. **4**

(2) What is the difference between raw_input( ) and input() in Python? **3**

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HC-075004

Seat No._____

B. C. A. (Sem. V) Examination

October - 2019

EC-301: Cyber Crime

Time : **3** Hours] [Total Marks : **70**

Instructions : (1) Figures on the right indicate the marks.
(2) All Questions are compulsory.
(3) Answer of each question must start on a new page.
(4) Answer of all sub-questions of a question should be written in continuous order.

1 (A) Explain following terms : (Any **Seven**) **7**

(1) Active attack.
(2) Passive attack.
(3) Spamming.
(4) Anonymizers.
(5) E-mail Bombing
(6) Cyber Law
(7) SQL Injection
(8) Identity Theft.
(9) Pornographic Offense

(B) What is cybercrime? How do you define it? Give the classification of cybercrimes. **7**

2 Explain Any **Two** : **14**

(a) What is cyberstalking? Explain the types of stalkers. How stalking works?

(b) Explain popular types of attacks against 4G mobile networks.

(c) What is "Backdoor"? Write any five functions of "Backdoor".

3 Explain Any **Two** : **14**

(a) What is Phishing? How Phishing works? List and explain types of phishing.

(b) What are the parameters for Strong, Medium and Weak passwords. How password can be cracked?

(c) What are the different components of wireless network? How can wireless networks be secured?

4 Explain Any **Two** : **14**

(a) List and explain the categorization of computer viruses based on attacks on various elements of the system.

(b) What is the difference between Trojan Horses and Backdoors? How to protect from Trojan horse and Backdoors?

(c) What are DoS and DDoS attacks? Give the classification of DoS attack. Write various measures to protect from being a victim of DoS attack.

5 Answer Any **Two** : **14**

(a) Differentiate between virus and worms.

(b) State the strong and weak areas of ITA 2000

(c) Write amendments to the Indian IT Act.
