Seat No.	

MCA (PART-II) (SEMESTER - III) (CBCS)
Examination, April 2024
JAVA PROGRAMMING
Sub. Code : 83603

Day and Date : Thursday, 16/05/2024   **Total Marks : 70**

Time : 10.30 a.m. to 1.30 p.m.

Instructions : 1) Question No. 1 and question No. 7 are compulsory.

2) Attempt any Three question from Q. No. 2 to Q. No. 6.

2) Figures to right indicate Full marks.

Q1) Multiple choice questions   **[08]**

1) Which statement is true about Java?

   A) Platform independent programming language

   B) Platform dependent programming language

   C) Code dependent programming language

   D) Sequence dependent programming language

2) What is mean by 'this keyword in Java

   A) It refers current object

   B) It refers previous object

   C) It is variable which contains value

   D) None of the above

3) Which of the following handles the exception when a catch is not used?

   A) Finally   B) Throw handler

   C) Default handler   D) Java run time system

4) Which of these is a super class of wrappers Long, Character and Integer?

A) Long   B) Digits

C) Float   D) Number

5) Which of these is a type of stream in Java?

A) Integer stream   B) Short stream

C) Byte stream   D) Long stream

6) What is the purpose of the wait () method in Java threads?

A) To pause the execution of a thread.

B) To terminate a thread.

C) To notify other threads to resume execution.

D) To release the lock held by the thread.

7) Which of these classes is not part of Java's collection framework?

A) Maps   B) Array

C) Stack   D) Queue

8) Which method can set or change the text in a Label?

A) setText()   B) getText()

C) changeText()   D) None of the above

Q2) A) Identify the different primitive data types of Java in detail.   [07]

B) What is JVM? Identify the role of JVM in java program execution.   [07]

Q3) A) What is an interface? Explain the role of interface in java.   [07]

B) IIIustrate all the looping statements in java with suitable example.   [07]

Q4) What is Stack? Explain the implementation of stack and different operations   [14]

performed on it.

2

Q5) A) What is exception? How to handle exception in java? [07]

B) What is Multi-threading? How to create thread? Explain with suitable example. [07]

Q6) A) How to use BufferedReader and BufferedWriter classes for input/output stream handling. [07]

B) Explain event-handling mechanism using swing with example. [07]

Q7) Write short notes. (Any Four) [20]

1) Java Garbage Collection

2) Java Packages

3) Date class in Java

4) Inner class

5) Thread priorities.

Seat No.

March-April 2024 Examination
MCA (COMM.) CBCS Part II Sem III
Data Analytics (DATA A)
Subject Code : 83604

Day and Date : Friday, 17-05-2024
Time : 10:30 am to 01:30 pm

Total Marks : 70

Instructions :

- There are seven questions.
- Question No1 and Question No 7 are compulsory.
- Attempt any three questions from Question No 2 to Question No 6

Q.1 Choose correct alternatives for following questions from options given below. 8

1) Using ndim we can find -

   a) We can find the dimension of the array

   b) Size of array

   c) Operational activities on Matrix

   d) None of the mentioned above

2) NumPy arrays can be ....

   a) Indexed

   b) Sliced

   c) Iterated

   d) All of the mentioned above

3) The .... function returns its argument with a modified shape, whereas the .... method modifies the array itself.

a) reshape, resize

b) resize, reshape

c) reshape2, resize

d) all of the mentioned

4) Pandas is an open-source .... Library?

a) Ruby

b) Javascript

c) Java

d) Python

5) Pandas key data structure is called?

a) Keyframe

b) DataFrame

c) Statistics

d) Econometrics

6) What will be output for the following code?

```
import pandas as pd
s=pd.Series([1,2,3,4,5], index = ['a','b','c', 'd','e'])
print s['a']
```

a) 1

b) 2

c) 3

d) 4

7) What will be output for the following code?

```
import pandas as pd
import numpy as np
s = pd.Series(np.random.randn(2))
print s.size
```

a) 0

b) 1

c) 2

d) 3

8) What is the purpose of NumPy in Python?

   a) To do numerical calculations

   b) To do scientific computing

   c) Both A and B

   d) None of the mentioned above

Q.2 a) What is Data Analysis? Explain different types of Data Analysis.   7

   b) Write difference between Data Analysis and Data Reporting.   7

Q.3 Explain Indexing, Selection, and Filtering for series.   14

   a) Describe Panda's data structures.   7

   b) What is missing data? Explain different techniques used to handle missing data.   7

Q.5 a) Describe data transformation with appropriate example.   7

   b) Explain reading and writing data in text Format with appropriate example.   7

Q.6 Write a Pandas program to convert the second column of a Dataframe as a Series.   14

Q.7 **Write short note on any four.**   20

   a) Web Scraping

   b) Universal Functions in Numpy

   c) Pseudorandom Number Generation

   d) Reading Microsoft Excel Files

   e) Characteristics of Data Analysis

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M. C. A. (COMMERCE & MANAGEMENT) Part II (Semester - III)

Examination, April - 2024

Optional Group

Cloud Computing (Paper No. DSE 304.1)

Sub. Code : 83608

Day and Date : Tuesday, 21/05/2024   **Total Marks : 70**

Time : 10.30 a.m. to 1.30 p.m.

Instructions :   1)   Attempt any three from Q. 2 to Q. 6.

2)   Q. 1 and Q. 7 is compulsory.

3)   Figures to the right indicate marks to the question.

Q. 1 Select correct alternative.   **[8]**

1) Which of the following is among the primary uses of cloud computing?

   A) Security   B) Data storage

   C) Data privacy   D) Operational cost

2) Private cloud computing cost productivity depends on_

   A) Economies of scale   B) Higher workload density

   C) Dynamic management   D) All of these

3) What is the risk of cloud computing?

   A) No troubleshooting issues   B) Full control over the data

   C) Storing data without control   D) No government intrusion

4) Which is security aspects consider in cloud services?

   A) Zero infrastructure investment, just-in-time infrastructure

   B) Access control, identity management, authentication and authorization

   C) Quick and easy setup, smooth organization system, single management environment

   D) Calculable cloud architecture, provide manageable workload dynamics

5) Which service is a cloud computing infrastructure that creates a development environment upon which application may be build.

   A) Infrastructure   B) Platform

   C) Service   D) All of these

6) Which VMs does not simulate the underlaying hardware?

   A) Hardware-Assisted Virtualization   B) Full Virtualization

   C) Para Virtualization   D) Network Virtualization

7) The example of IaaS service model.

   A) Cloudera   B) Azure

   C) AWS   D) All of these

8) Which one of the following refers to the non-functional requirements like disaster recovery, security, reliability, etc?

   A) Service Development   B) Quality of service

   C) Plan Development   D) Technical Service

Q. 2 What is the Cloud computing? Explain types of cloud computing models.   [14]

Q. 3 a) List and discuss various types of virtualization.   [7]

   b) What is Cloud Hypervisors? Explain its types in detail.   [7]

Q. 4 a) Discuss in detail Emerging Cloud Management Standards.   [7]

   b) Explain storage area network with its types.   [7]

Q. 5 a) Explain the Risk Assessment and Management in cloud.   [7]

   b) What is cloud vendor lock-in? How do you avoid the risk of getting locked in? [7]

Q. 6 a) What is Load Balancing? Explain its types in detail.   [7]

   b) Explain Virtual Machine Provisioning process in cloud computing.   [7]

Q. 7 Write short notes on (Any Four) [20]

a) *Cloud Architecture*

b) Advantages and disadvantages of cloud computing

c) Live Storage Migration of Virtual Machines

d) Disaster Recovery in Clouds

e) Risk with Application Licensing

f) Risk of Multi-tenant environment