

# **Bajaj College of Science, Wardha**

## **Practice Sheet During Lockdown**

### **B.Sc. Sem IV**

**Subject:** Computer Science

#### **Unit - I**

#### **Long answer type questions:**

1. Explain the features of java in detail.
2. Define JVM. Explain it with suitable diagram
3. What are the differences between applet and application?
4. What is variable? List rules for declaring variable.
5. Explain all types of operators in java with suitable example.
6. Explain? i) final variable ii) final methods iii) final class
7. What are the advantages of OOP paradigm?
8. Design a class to represent a bank account. Including following members.

Data/attributes:

- \* Name of depositor
- \* Account number
- \* Type of account
- \* Balance amount in the account

Methods:

- \* To assign initial values
- \* To deposit an amount
- \* To withdraw an amount after checking balance
- \* To display name and balance.

9. Write a java program to convert Degree into Fahrenheit.
10. Write a program in java to find the number is prime or not.

#### **Short answer type questions:**

1. Explain compilation and execution process of a java program.
2. What is Java Virtual Machine? Explain in brief.
3. What are tokens?

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4. List data types supported by java.
5. What is class and object?
6. What do mean by method overloading?
7. Explain the short i) static variable ii) static method.
8. List modifiers supported by java.
9. What is Hot java?
10. What are the differences between JVM, JDK and JRE?

## Unit-II

### Long answer type questions:

1. Define Interface. Write a program to implement multiple interfaces in a class
2. Define Applet. Explain lifecycle of applet with well labelled diagram.
3. What is Package? What are the steps to create user defined package?
4. Define Thread. Write a program to demonstrate multithreading.
5. Explain Lifecycle of a Thread with well labelled diagram.
6. Explain the following methods related to thread i) sleep() ii)wait() iii)notify()
7. Explain Exception handling mechanism in java.
8. Write a program to print: 1 1 2 3 5 8 13 21.
9. Write a java program to print:

```
*  
**  
***
```

10. Draw Floyd's triangle:

```
1  
2 3  
4 5 6
```

### Short answer type questions:

1. Write a program to find the maximum numbers in an array.
2. Explain nested loop in java.
3. Draw sketch of all types of inheritance in java.

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4. How do we declare method or class as abstract?
5. How do we declare method or class as final?
6. What is the difference between an interface and an abstract class?
7. Explain various String methods in java.
8. List predefined packages in java.
9. List predefined exceptions in java
10. What is thread synchronization?

### Unit-III

#### Long answer type questions:

1. Explain Graphics class and it's all methods in detail with example.
2. Explain Font and Color class with suitable example.
3. Write a program to demonstrate click event.
4. Explain input and output stream in java.
5. Write a program to create menu in java.
6. What are the various types of layout? Explain any one.
7. What is Frame? Demonstrate it with example.
8. Explain i)Label ii) Textbox iii)Button
9. Write a code for:



10. Write a code using graphics class for:



#### Short answer type questions:

1. What is a Container? Explain any one.
2. List layout managers in java.

3. List various classes available in java.awt package.
4. Write any two classes and interface present in Even class
5. Explain GUI in short.
6. What do you mean by stream?
7. List various classes available in Graphics class.
8. List Predefined event in java.
9. What is menu?
10. What are the various types of image in java?

## **Unit-IV**

### **Long answer type questions:**

1. Explain the process of logging in and logging out in Linux O.S.
2. Explain the anatomy of Linux O.S.
3. Describe the directory structure of Linux O.S.
4. State the process of exploring /usr directory.
5. Explain steps of creating temporary user account in Linux O.S.
6. What is a vi editor? Explain.
7. Explain the process of exploring home directory.
8. Explain searching and replacing text using vi editor.
9. Explain the steps of formatting a floppy disk.
10. How to gather important system information in Linux?

### **Short answer type questions:**

1. List the various features of Linux O.S.
2. What does Bogomips stands for?
3. How the shell prompt is displayed when logged in as a root?
4. Explain three types of files used in Linux.
5. What is a shell program?
6. Enlist various shells found in Linux.
7. What is the use of Alt+F1 and Alt+F2?
8. Explain the ls command.

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9. State the use of cp command.
10. List different text editors used in Linux.

## **Unit-V**

### **Long answer type questions:**

1. How to perform simple backup on floppy disk? Explain.
2. Explain gzip and gunzip commands with suitable example.
3. Explain tar command with suitable example.
4. Write a short note on naming conventions for user accounts in Linux.
5. How to deal with name changes for user accounts in Linux?
6. Write a procedure to change user password in Linux.
7. Write a short note on granting access to a file.
8. Explain changing file ownership in Linux.
9. What is a process? Explain various types of processes.
10. Describe the exec family for creating processes in Linux.

### **Short answer type questions:**

1. Draw a diagram showing printing process in Linux.
2. Explain in short about three types of users in Linux.
3. Write the three tests for which a weak password fails.
4. Describe the symbols used for identities in Linux.
5. State and explain permissions for granting access to a file.
6. State and explain actions for granting access to a file.
7. State the use of chown command.
8. Describe chgrp command in short.
9. What is the use of ps command?
10. Explain the use of free and top utility.

## Unit-VI

### Long answer type questions:

1. What is a parted utility? Explain its any five commands.
2. Explain desktop application and CLI application for disk management in Linux.
3. Write short notes on df, du and fdisk commands.
4. How to create additional free disk space in Linux?
5. How to locate unused files in Linux. Explain.
6. How to set system clock in Linux?
7. Explain X Window System in detail.
8. Write a detailed note on KDE in Linux.
9. What is a GNOME? State its features.
10. Write a short note on GTK+.

### Short answer type questions:

1. List names of any five file system types.
2. What is the use of mkfs and parted command?
3. Explain who command with suitable example.
4. What is the use of finger command?
5. State the use of mesg command.
6. How write command is used? Explain with example.
7. Describe wall command and its usage.
8. For what purpose the ping is used? Explain with example.
9. State the use of traceroute.
10. Differentiate between whoami and who.

For any queries, feel free to contact us on E-mail/ Whats App No.:

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