Question 1

Object Oriented

Programming

→→ Object Oriented Programming is a computerized Programming which designs the

>

Tusing the goloup of data con obrestware"

Object Oriented Programming designs the software woing

object's classes but not using the logics on the functions.

functions

Rojgarageal

→→ Object Oriented Programming based languages are C++ and Java.

→ Object Oriented programming has many of the features like is Abstraction: Implementation data is hidden, and functionality! data is represented to the i Inheritance. The process where the methods

the "class acquire

the acquire `the`

like <u>Polymorphism</u> :- The process

where <u>the</u> methods

methods of supercales

porties and

can be used <u>in</u> many

forms.code

IV
E

pont is reusable

in the programode

Encapsulation - The process of binding up

Or wraping up of the data and methods together is known

as

Encapsulation

Q. Now

Features of Java

Programming language @Object

Object Oriented

• Platform

Indipendence

C Simple secure

Architectural Neutral

C Portable @Robusth

@ Multithreading

@ Interpreted

@ High performance

@Dynamics

® Distributed .

Object Oriented

Kremy

T

→ Java Programming language is <u>completely</u> based en <u>Object </u>Oriented concept's like objects, classes, <u>methods</u> as well <u>as</u> abstraction, encapsulation, imheritance, <u>polymorphism</u>

com

@ Platform Independencen etor →
Programming language $like$ C, C++ are platform
she dependence But Java 13 platform Indipendent
→ Java produces a bytecode using the
complication,
this bytecode is excecutable in any web

brower Support (SVM) Java Visual Machine

→ So Java is platform Independent © Java is Simple a

• As Java is based on the Object Oriented Program -ming concepts, of the programmers understans

If

OOP's concept, then Java is simple

4 Secure

- As the implementation code is hidden from the user. Only the functionality code is viewed by the user. The Java is maintaining a security! to hide the

most important code from the user
access

© Architectural Neutral

the

→Java program generates the bytecode using t complication *process*, `this bytecode fly to` the nearby
machine architecture and executes `the` program
→Hence, Java is architectural neutral.

Portable
•Bince Java `is architecturally` neutral, the code of `the` Java can be easily pobitable to the l

multiple platform

Robust

The Java programes designed in such a way that she the code is prone to <u>be error free,</u> simple, `portable` and `robust` in nature.

R

Multithreading.

→ <u>The Java</u> progelam is designed such that the program solves <u>multiple </u>problems at a time This fer

feature 13 called as

"multithreading.

This

Nos.

@interacted

Java is per interpreted by both inairelater and competer to produced bytecode whe is **excecutable** in any platforen

Olligh

performance

→ As gava is rample, **robust**, portable platfor independence and **earon** face the Java to best in the performance and **most** efficiently

us

Dynamich

A Java 13 dynamic in nature enabling **a** the best **catures** for the user

℗ Distributedade posa

an

→ Java 13 well distributed **as** performed in **any**

web browser

Program Java

Brogram

Jaya Compiler

compilation of

the Jand

Program

[Byte Code

Intermediate

code

(04) byte coders

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compilation

Window Lonuse Mac Executiong

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1870 the **Java** code bus orare con

program tr

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neoplatforms.