

Class 9

Chapter -2 (2026-27)

Introduction to Java

✓ A. Tick (✓) the correct answer

1. Automatic memory management instructs JVM to _____ unused objects automatically.

Answer: remove ✓

2. In which of the following platform Java runs?

- a. Windows Platform
- b. Linux Platform
- c. Mac OS Platform
- d. All of these

Answer: d. All of these ✓

3. Compile button located at the _____ of the code editor window.

Answer: top ✓

4. During compilation process, Java Source code is converted to bytecode which is _____.

Answer: Machine-independent code ✓

5. Applets are codes in Java which are downloaded from a website on a _____.

Answer: Client computer ✓

✓ B. Fill in the blanks

1. Java source code is finally converted to _____ for execution on a specific hardware.

Answer: machine code

2. Memory space is allocated when an _____ is created.

Answer: object

3. _____ is open source application and it is an IDE for beginners.

Answer: BlueJ

4. Java is a platform _____ programming language.

Answer: independent

5. Java does not provide any options of _____ up of data.

Answer: backup

✓ C. Answer the following questions

1. What is BlueJ?

Answer:

BlueJ is an **integrated development environment (IDE)** used for learning and developing Java programs. It is specially designed for beginners.

2. Write difference between Java Application and Java Applet.

Answer:

| Java Application | Java Applet |
|---------------------------|-----------------------------|
| Runs independently | Runs inside a browser |
| Requires JVM | Requires browser support |
| Has main() method | Does not use main() |
| Used for general programs | Used for web-based programs |

3. How do you create a Java project in BlueJ?

Answer:

1. Open BlueJ
 2. Click on **Project** → **New Project**
 3. Enter project name
 4. Click **Create**
 5. Project window opens
-

4. Write disadvantages of Java.

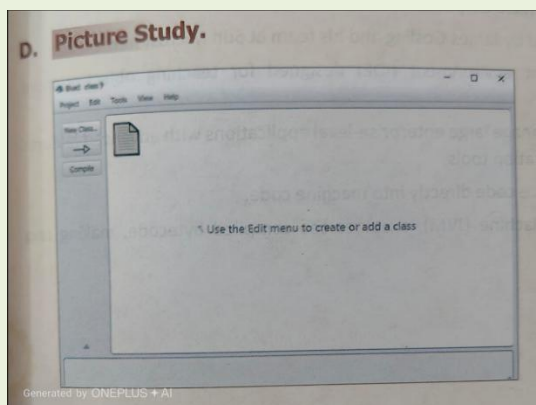
Answer:

- Slower than languages like C++
 - Requires more memory
 - No direct hardware control
 - GUI is less attractive compared to modern frameworks
-

5. Who developed Java? What was it initially called?

Answer:

Java was developed by **James Gosling** at **Sun Microsystems**.
It was initially called **Oak**.



D. Picture Study (MCQs)

1. What is the use of New Class button?

- a. To create a class
- b. To compile a file
- c. To delete a file
- d. None of these

Answer: a. To create a class ✓

2. Why compile button is required?

- a. To change from source code to machine code
- b. To convert from source code to byte code
- c. To use Java Compiler
- d. Both a and c

Answer: b. To convert from source code to byte code ✓

3. To create a new project, we should click on the _____ button/menu.

- a. New Class
- b. Compile
- c. Arrow symbol
- d. Project

Answer: d. Project ✓

4. What is the use of Project icon?

- a. To write the source code
- b. To keep the byte code
- c. To keep the documentation of the project
- d. To display the executable file

Answer: c. To keep the documentation of the project ✓

5. After writing the source code we should:

- a. Compile the file
- b. Execute the file
- c. Delete the file
- d. Interpret the file

Answer: a. Compile the file ✓

✓ E. Case Study

1. Give one example of OOP language apart from Java.

Answer: C++ / Python

2. Name the persons who developed Java.

Answer: James Gosling and his team

3. Name the software firm from where Java was developed.

Answer: Sun Microsystems

4. What is the full form of WORA?

Answer: Write Once Run Anywhere

5. What are the places where Java is useful?

Answer:

- Mobile applications
 - Web applications
 - Desktop applications
 - Enterprise systems
-

✓ F. Assertion and Reasoning

1.

Assertion (A): Java was developed in the 1980s by Oracle Corporation.

Reason (R): The original development of Java was led by James Gosling at Sun Microsystems.

Answer: d. A is false, but R is true ✓

2.

Assertion (A): BlueJ is an IDE designed for teaching object-oriented programming.

Reason (R): BlueJ allows developers to create and manage large enterprise-level applications.

Answer: d. A is true, but R is false ✓

3.

Assertion (A): The Java compiler translates Java source code directly into machine code.

Reason (R): The JVM executes bytecode, making Java platform-independent.

Answer: d. A is false, but R is true ✓

Class 9 Chapter 2 (2025-26)

Introduction to Java

A. Tick (✓) the Correct Answer

- Automatic memory management instructs JVM to
 - d. remove unused objects automatically. (✓)**
- Java can run on
 - d. All of these (✓)**
- Compile button is located at the _____ of the code editor window.
 - b. top (✓)**
- During compilation process, Java source code is converted to
 - c. Bytecode (✓)**
- Applets are codes in Java which are downloaded from a website on a
 - a. Client computer (✓)**

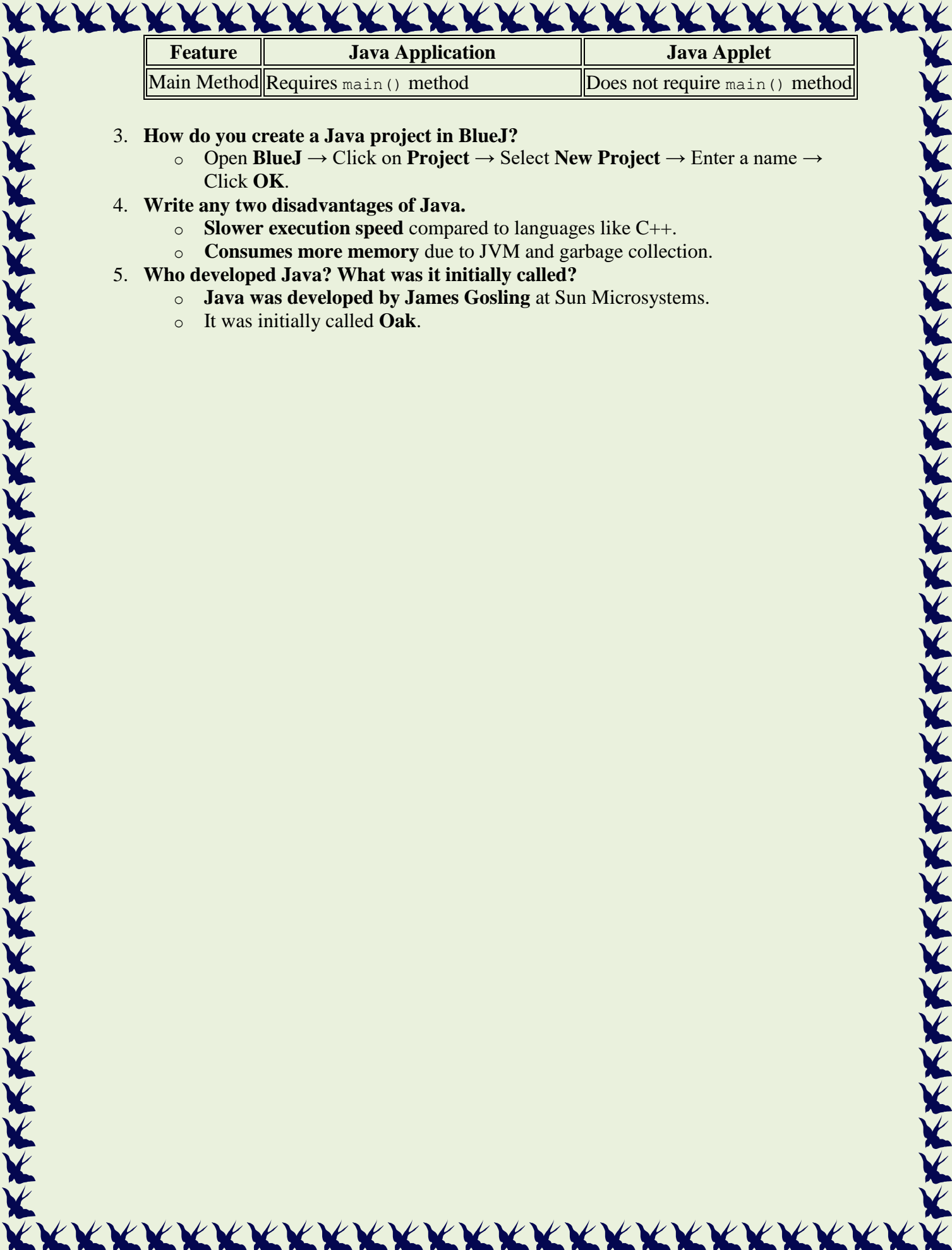
B. Fill in the Blanks

- The extension of Java bytecode is **.class**.
- Two types of Java programs are **Java Application** and **Java Applet**.
- BlueJ** is a freely downloadable application.
- Java is a platform-**independent** programming language.
- The println()** method displays the given string along with a line feed.

C. Short Answer Type Questions

- What is BlueJ?
 - BlueJ** is an integrated development environment (IDE) designed for Java programming, mainly used for teaching and learning object-oriented programming.
- Write one difference between Java Application and Java Applet.

| Feature | Java Application | Java Applet |
|-----------|-------------------------------------|---------------------------|
| Execution | Runs on JVM as a standalone program | Runs inside a web browser |



| Feature | Java Application | Java Applet |
|-------------|-------------------------------------|---|
| Main Method | Requires <code>main()</code> method | Does not require <code>main()</code> method |

3. **How do you create a Java project in BlueJ?**
 - Open **BlueJ** → Click on **Project** → Select **New Project** → Enter a name → Click **OK**.
4. **Write any two disadvantages of Java.**
 - **Slower execution speed** compared to languages like C++.
 - **Consumes more memory** due to JVM and garbage collection.
5. **Who developed Java? What was it initially called?**
 - **Java was developed by James Gosling** at Sun Microsystems.
 - It was initially called **Oak**.