Chapter 5: Fundamentals of Programming

Brain Developer
A. Fill in the blanks.
1. Object-Oriented Programming 2. Encapsulation 3. Class 4. Token
5. Assignment
B. Write T for True and F for False.
1. F 2. T 3. T 4. F 5. T 6. F
C. Select the correct option.
1. c 2. a 3. a 4. a 5. c 6. b
D. Application-based questions.
1. To execute the program, right-click on the class icon. Select void main (String[ ]args) option from the pop-up
menu.
2. Arithmetic operator
E. Answer the following questions.
1. Objects are real world entities or items. For example, a pen is an object. Its attributes are brand name,
model, colour, price, etc., and its behaviour (function) is writing.
2. The word Polymorphism means "many forms". Polymorphism helps the programmer to use the same
function name for more than one purpose.
3. Operators are the special symbols that are used to perform calculations. They are applied to the variables
and constants to form an expression.
4. A variable is a named location in the memory, which stores data temporarily. A variable is assigned with a
unique name. The name is a sequence of letters and digits, but first character always starts with a letter or
underscore. Keywords are the reserved words of a Java program with some special meaning, and can be
used for that purpose only. The keywords cannot be used as variable names.
5. To utilise the maximum amount of memory, Java provides different data types, such as int, float, double,
char and Boolean.
6. Relational operators are used to compare two variables whereas logical operators are used to compare the
result of the relational expressions.
7. Abstraction is a very important feature of the Object-Oriented Programming. It is used to manage the

complexity of the system i.e., it provides only the essential features of the system to the user and hides all
the complex processes.
8. When an expression contains more than one operator, it evaluates according to the precedence of
operators. A precedence of an operator depicts the order in which the different operators in an expression are evaluated.

Chapter 6: Control Structures

Brain Developer
A. Fill in the blanks.
1. Selection 2. Control 3. Loop 4. if 5. if…else…if
B. Write T for True and F for False.
1. T 2. T 3. F 4. T 5. T
C. Select the correct option.
1. a 2. b 3. a 4. b 5. b
D. Application-based questions.
1. if… else…if ladder
2. num%2==0
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E. Answer the following questions.
1. A control statement determines whether or not the other statements will be executed. In other words, it
makes it possible to make decisions, perform tasks repeatedly, or jump from one section of the code to
another.
2. Selection statements are used to transfer the flow control to a specific location, depending on the result of
the conditional expression
3. The if statement executes a statement or a block of statements if the condition is true, otherwise it skips the
statements. The if...else control structure is used when either of the two different actions is to be
performed. If the conditional expression evaluates to true, the statements associated with the if block get
executed. Otherwise, the statements associated with the else block get executed.
4. The if...else...if ladder is an extension of the if...else statement. The if...else...if ladder provides a compact
way to check multiple conditions, where every condition has a block of statements.
5. Iterative statements are used to repeat a set of statements for a specific number of times as long as the

given condition is true. Selection statements are used to transfer the flow control to a specific location,
depending on the result of the conditional expression.