

CROSS RIVER UNIVERSITY OF TECHNOLOGY, CALABAR
DEPARTMENT OF COMPUTER SCIENCE
SECOND SEMESTER EXAMINATIONS 2015/2016 SESSION

COURSE CODE: CSC 2101

COURSE TITLE: COMPUTER PROGRAMMING I

TIME: 2HRS

INSTRUCTION: Answer any four question

- 1a. Write a Java program that displays the pattern below:

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

- b. Write a Java program that receives two different integer values and produces the results of adding, subtracting, multiplying and dividing the numbers.
- 2a. Write a Java program that uses the BufferedReader class to prompt a user to input his/her name, and produces an output that says 'Hello' to the name.
- b. Show a flowchart and a Java program that receives a number from the user, determines, and displays "even number" or "odd number" accordingly.
- 3a. Write a Java program that calculates the amount to be paid in a transaction, based on the unit price and quantity purchased. The discount rate is 10% for the quantity between 100 and 120 units, and 15% for quantity more than 120 units. If the quantity is less than 100 units, the discount rate is 0%.
- b. Rewrite the mathematical expression below into a Java acceptable statement:
- $$D = \frac{C}{x+B/3} + \frac{5F}{4G-C^2}$$
- 4a. Write a Java program that request for the year and month values, and then produces the number of days in the month.

NOTE:

- January, March, May, July, August, October and December have 31 days
 - April, June, September and November have 30 days.
 - February has 28 days, except in leap years when it has 29 days. A leap year has no remainder when divided by 4.
- b. Explain the roles of the following keywords in Java programming:
(i) Private (ii) Protected (iii) Default (iv) Public access
- 5a. Given a triangle with three sides a, b, c; write a Java program that receives the values representing the three sides, and identifies whether it is equilateral or not.
- b. Write a Java program that allows the user to input name and age, and displays a message that identifies the name as eligible to VOTE or not eligible. To be eligible a voter should be up to 18 years of age.
- 6a. Write Java program to print the table of characters that are equivalent to the ASCII codes from 1 to 22
- b. Java technology contains both compiler and interpreter. What is the essence of combining two translators in one programming language?

CROSS RIVER UNIVERSITY OF TECHNOLOGY, CALABAR
DEPARTMENT OF COMPUTER SCIENCE
FIRST SEMESTER EXAMINATIONS 2016/2017 SESSION

COURSE CODE: CSC 2101

COURSE TITLE: COMPUTER PROGRAMMING I

TIME: 2HRS

INSTRUCTION: Answer all questions in Section A and 4 questions from Section B

1. Java program execution uses _____ and _____ translators.
2. Computer directly execute instructions written in _____ language.
3. Java bytecode is a product of the _____
4. The property of objects that different objects can respond to the same message in different ways is called _____
5. Give an example of a built-in subroutine in Java _____
6. Write correctly three in-built functions that can be executed by Java

SECTION B

1. (a) Using the **While loop**, write a Java program to output the string "Good Luck" ten times.
(b) Using the general syntax show the difference between the **While loop** and the **do....while loop**
2. (a) Write the general syntax of the logic of the **Switch....case** construct. What is the function of the use of **break** statement after each case statement?
(b) Using a flow chart demonstrate the logic of **counter-controlled** repetition
3. (a) Write a Java program that reads a user's age then print "You are a child" if the age is less than 20, "You are an adult" if the age is 20 and less than 60, and "You are a senior citizen" if age is greater than or equal to 60.
(b) Explain the following terms as used in Java Programming
(i) Inheritance (ii) Class (iii) Object (iv) Polymorphism (v) Java interface
4. Design the flowchart and write a Java program to grade 100 students according to the grading system below:

Score %	75-100	60-74	50-59	40-49	Below 40
Grade	A	B	C	D	F

- 5a. In class method, what do you understand by **superclass** and **subclass**. What is overriding and hiding in a subclass.
- b. What is an **instance variable** in Java programming?
- 6a. Describe the three decision construct used in Java programming. Illustrate each using the general syntax.

CROSS RIVER UNIVERSITY OF TECHNOLOGY, CALABAR
DEPARTMENT OF COMPUTER SCIENCE
FIRST SEMESTER EXAMINATIONS 2017/2018 SESSION

COURSE CODE: CSC 2101

COURSE TITLE: COMPUTER PROGRAMMING I

TIME: 2HRS

INSTRUCTION: Answer any 4 questions

1.
 - (a) Illustrate and describe Java programming development process.
 - (b) What is a block in java programming? Illustrate an example of a class, method and statement as a nested block.
2.
 - (a) Using the **While loop**, write a Java program to output the string "Good Luck" twenty times.
 - (b) Write the general syntax of the following selection statement in java with illustrations
(i) Simple if statement (ii) if...else statement (iii) Nested if statement
3.
 - (a) Write the general syntax of the logic of the **Switch....case** construct. What is the function of the use of **break** statement after each case statement?
 - (b) Using a flow chart demonstrate the logic of **counter-controlled** repetition
4.
 - (a) Write a Java program that reads a user's age then print "You are a child" if the age is less than 20, "You are an adult" if the age is 20 and less than 60, and "You are a senior citizen" if age is greater than or equal to 60.
 - (b) Explain the following terms as used in Java Programming
(i) Identifiers (ii) Class (iii) Object (iv) Method (v) Comments
5. Design the flowchart and write a Java program to grade 100 students according to the grading system below:

Score %	75-100	60-74	50-59	40-49	Below 40
Grade	A	B	C	D	F

6.
 - (a) Illustrate and write the general syntax for the following loop statements
(i) while loop (ii) do loop (iii) for loop
 - (b) What are compilation errors in Java programming?

CROSS RIVER UNIVERSITY OF TECHNOLOGY, CALABAR
DEPARTMENT OF COMPUTER SCIENCE
FIRST SEMESTER EXAMINATIONS 2018/2019 SESSION

COURSE CODE: CSC 2101

COURSE TITLE: COMPUTER PROGRAMMING I

TIME: 2HRS

INSTRUCTION: Answer any 4 questions

1. (a) Write the general syntax of the logic of the **Switch....case** construct. What is the function of the use of **break** statement after each case statement?
 (b) Using a flow chart demonstrate the logic of **counter-controlled** repetition
2. (a) Illustrate and describe Java programming development process.
 (b) What is a block in java programming? Illustrate an example of a class, method and statement as a nested block.
3. (a) Using the **While loop**, write a Java program to output the string “Good Luck” twenty times.
 (b) Write the general syntax of the following selection statement in java with illustrations
 (i) Simple if statement (ii) if...else statement (iii) Nested if statement
4. (a) Write a Java program that reads a driver’s speed then print “Safe Driving” if the speed is less than 75 kmph, “You are Cautioned to Control Your Speed” if the speed is between 76-80 kmph, and “You have been given Excess Peed Ticket” if the speed is greater than 81 kmph.
 (b) Explain the following terms with examples as used in Java Programming
 (i) Identifiers (ii) Class (iii) Object (iv) Method (v) Comments
5. (a) Illustrate and write the general syntax for the following loop statements
 (i) while loop (ii) do loop (iii) for loop
 (b) What are compilation errors in Java programming?
6. Design the flowchart and write a Java program to grade 100 students according to the grading system below:

Score %	70-100	60-69	50-59	40-49	40-44	Below 40
Grade	A	B	C	D	E	F