# B. C. A. DEGREE END SEMESTER EXAMINATION - OCTOBER 2018

## SEMESTER - 3 : BACHELOR OF COMPUTER APPLICATIONS (B. C. A.)

## COURSE - 15U3CRBCA11 - PROGRAMMING IN JAVA

(For Regular 2017 Admission and Supplementary / Improvement 2016 Admission)

Time: Three Hours

#### PART – A

Answer *all* questions. Each question carries 1 mark.

- 1. Define Polymorphism?
- 2. What is the use of Scanner Class?
- 3. What is a constructor?
- 4. What is JVM?
- 5. What is the purpose of the keyword *this*?
- 6. Write a Java statement for creating an integer array Number of size 30?
- 7. Name any two classes in *util* package?
- 8. What is an *applet*?
- 9. What is the use of *sleep()* function in thread class?
- 10. Define a *class*.

### PART – B

Answer any *eight* questions. Each question carries 2 marks.

- 11. What is data abstraction?
- 12. What is the use of the keyword static?
- 13. How can we compile and run a java programme?
- 14. Describe in brief about thread priorities.
- 15. Differentiate between extends and implements.
- 16. Explain *finalize()* method.
- 17. Write a simple java program to find number of words in a string.
- 18. What is the use of the keyword super?
- 19. Differentiate between '=' and '==' operator?
- 20. Given an example showing polymorphism in java.

(2 x 8 = 16)

### PART – C

### Answer any *five* questions. Each question carries 5 marks.

- 21. Explain the life cycle of thread.
- 22. What is the difference between the following two java statements? *String* S<sub>1</sub> = "Hello"; *String* S<sub>2</sub> = new String("Hello");

Sacred Heart College (Autonomous) Thevara Page 1 of 2 Max. Marks: 75

 $(1 \times 10 = 10)$ 

- 23. What is method overloading? Explain with an example.
- 24. Explain the relation between abstract keyword and method overriding.
- 25. What is the difference between error and exceptions? Explain how exceptions are handled in Java?
- 26. Write a connection statement for connecting a mysql database from a JAVA program. Following are the credentials.

URL	: localhost:3306/mydb
Username	: Scott
Password	: tiger

27. Write a program to illustrate the use of command line arguments in java.  $(5 \times 5 = 25)$ 

#### PART – D

Answer any *two* questions. Each question carries 12 marks.

28.	a) What do you mean by inheritance? Explain with example program. (5 ma	arks)
	b) Explain the following:	
	i) Constructor overloading	(2 marks)
	ii) Method overloading	(2 marks)
	c) Explain packages in java.	(3 marks)
29.	a) Explain any four features of Java	(4 marks)
	b) How platform independence is achieved in java	(4 marks)
	c) Write a program to illustrate the use of nested class.	(4 marks)
30.	a) Explain how parameters are passed in applet with an example?	(3 marks)
	b) What you mean by thread synchronization? How it is implemented in java?	(4 marks)
	c) Write a program to read 'n' strings from the user and write the words which are	2
	palindrome to a file 'PAL.txt'.	(5 marks)
31.	a) Explain about different JDBC Divers.	(8 marks)
	b) Explain Stream classes in JAVA.	(4 marks)
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(12 x 2 = 24)

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