

NS – 364

V Semester B.A./B.Sc. Examination, November/December 2016  
(Repeaters) (Semester Scheme) (Prior to 2015 – 16)  
**COMPUTER SCIENCE – VI**  
**Java Programming and Unix/Linux Operating System**  
(70 Marks 2013 – 14 & Onwards)

Time : 3 Hours

Max. Marks : 70

**Instruction :** Answer all Sections.

SECTION – A

BMSCW

I. Answer any 10 questions :

(1×10=10)

- 1) Define an object and a class.
- 2) What are abstract classes ?
- 3) What is the difference between class and package ?
- 4) Define a constructor.
- 5) What are literals ? Give an example.
- 6) What is the difference between '&' and '&&' operators ?
- 7) What is multitasking feature ?
- 8) Name the kinds of file permission in unix.
- 9) What does fork ( ) do in unix ?
- 10) What is 'mail' command ?
- 11) What is Internet ?
- 12) Name the metacharacters in shell programming.

SECTION – B

II. Answer any 5 questions.

(3×5=15)

- 13) What are static variables and static methods ?
- 14) Write a note on this ( ) keyword and super ( ) keyword.
- 15) Write any 3 differences between C++ and Java.



- 16) What is the difference between string and string buffer ?
- 17) Mention the features of unix operating system.
- 18) Explain any three filter commands in unix.
- 19) Write a shell program to count the number of vowels.

## SECTION - C

III. Answer **any 5** questions.

(5×7=35)

- 20) What is a constructor ? Explain with an example.
- 21) Write a program to implement all string operations.
- 22) Explain the life cycle of threads.
- 23) What is an interface ? Explain implementing interface with an example.
- 24) Explain the different types of inheritance in Java.
- 25) Write notes on types of file system in unix.
- 26) Explain any three control structures available in unix with examples.
- 27) What is the significance of grep command ? Explain with an example.

BMSCW

## SECTION - D

IV. Answer **any one** question.

(1×10=10)

- 28) a) What is method overriding in Java ? Explain with an example. 5
- b) Explain different access protection specifies in Java. 5
- 29) a) Explain different process states with a neat diagram. 5
- b) Explain the different types of test commands with examples. 5