

OPEN ELECTIVE

(COMPUTER SCIENCE AND ENGINEERING)

18SOE519 / 18SOE719 - PROGRAMMING IN JAVA

TIME: 3 HOURS

MAX. MARKS : 100

ANSWER ALL QUESTIONS**PART – A****(10 X 2 = 20)**

1. Write a program using for loop to calculate the product of all elements in an integer array.
2. How to create a user defined exception?
3. Write the use of Autoboxing.
4. State the use of pushback data input stream.
5. Sketch lifecycle of applet.
6. Which Layout manager can be used to arrange four buttons (a,b,c and d) one after another in a line? Justify your answer.
7. How to get graphics context in your java program?
8. List the four types of JDBC drivers.
9. Write a java program to get the IP address of a given website.
10. Which classes in java help to establish client /server communication using TCP?

PART – B**(5 X 16 = 80)****(QUESTION NO.11 IS COMPULSORY)**

11. (a) Write a java program to create Menu “Course” with menu items as given in Figure 1. (8)

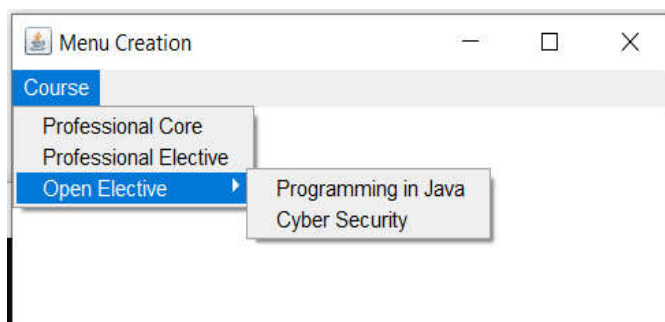


Figure 1 :Menu

- (b) Design a basic calculator as given in Figure 2, which reads the two numbers from user and displays the result based on the operation selected by the user. (8)



Figure 2 :Calculator

12. Differentiate overriding and overloading a method with suitable example. (16)

(OR)

13. (a) Is it possible for Class "C" to reuse the properties and methods of Class "A" and Class "B" through inheritance in java? Justify your answer. (8)

(b) How to create and use packages in java? (8)

14. (a) How to create multiple threads? Explain. (8)

(b) Write a java program to create enum constants for days of the week. (8)

(OR)

15. (a) Write a java program to read a sentence and display only the palindrome words in uppercase. (8)

(b) Discuss any two Input and Output stream classes in java. (8)

16. (a) How Double Buffering in java helps to avoid flickering? (8)

(b) Discuss the role of ImageConsumer and ImageProducer Interface in handling images. (8)

(OR)

17. (a) Explain different JDBC-Drivers in detail. (8)

(b) Write a program to display an image from memory at path "X". (8)

18. Explain the components of RMI program (Client, Server, Remote interface and its implementation) with an example. (16)

(OR)

19. (a) Explain the java beans with suitable example. (8)

(b) Create a simple servlet program to display server time and discuss its execution procedure. (8)
