REGISTRATION NUMBER

SRINIX COLLEGE OF ENGINEERING

2ND INTERNAL EXAMINATION-2020-21

Subject-JAVA   Semester-3rd   Branch-All

Full Mark-100   Time-**2.30Hrs**

ANSWER ALL THE QUESTIONS   (GROUP-A)   **[2*10=20]**

(a) Can java run on any machine? What is needed to run java on a computer?

(b) What is the statement to display a string on the console? What is the

statement to display the message "Hello world" in a message dialog box?

(c) What is y after the following switch statement is executed?

X=3 ; y=3 ;

switch (x+3){

case 6: y=1;

default: y+=1;

}

(d) Is it possible to declare a class as both abstract and final? Explain your answer.

(e) What are the steps to add a class to a package?

(f) Explain the difference between method overloading and method overriding.

(g) What are the states of java Applet life cycle?

(h) What is the difference between doGet() and doPost()?

(i) Why doesn't a JComboBox send out change events?

(j) State two ways to create threads in Java.

ANSWER Any Eight QUESTIONS   (GROUP-B)   **[6*8=48]**

2. What do you mean by object oriented programming techniques? Explain how Java

language facilitate better structured programming design by using class and object

constructors over traditional languages like C and C++.

3. What is Synchronization? Why is it important? Give one example.

4. Write a Java applet program to display Fibonacci series of first 10 terms inside a label.

5. Write a program to accept a number from the keyboard and check whether the number is prime or not. ?

6.Explain how a thread is created by implementing Runnable interface.

7. Describe the <applet> HTML tag. How do you pass parameters to an applet? Explain with one example.

8. State true or false with proper justification:

i. A subclass is a subset of a superclass.

ii. When invoking a constructor from a subclass, its superclass's no-arg constructor is always invoked.

iii. You can override a private method defined in a superclass.

iv. You can override a static method defined in a superclass.

9. State the differences between Swing and AWT. Explain important components and container in AWT.

10. What is the layout manager used in JToolBar? Can you change the layout manager?

11. Write a Java program to find out factorial of a number using I/O Exception.

12. Define thread. Discuss the life cycle of a thread with neat diagram.

13. Explain the meaning of each keyword: try, catch, throw, throws and finally.

ANSWER Any Two QUESTIONS   (GROUP-C)   **[16*2]**

14. Write short notes on any two:

a) TCP/IP Server Sockets

b) this keyword

c) Runtime memory management

d) Object cloning.

15. Discuss exception handling mechanism.

16. Java supports multiple inheritances through interface. Discuss.

17. Explain the usage of Java packages.