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M.Sc. RNLKWC-/203/22

2022

COMPUTER SCIENCE

M.Sc. Second Semester End Examination - 2022

Paper - 203

Full Marks : 40

Time : 2 hours

*The figures in the right-hand margin indicate marks.
Candidates are required to give their answers in their own
words as far as practicable.
Illustrate the answers wherever necessary.*

Group - A

- 1. Answer any five questions. 5×2=10**
- a) Is empty .java file name a valid source file name? – Explain.
 - b) Can we execute a java program without main() method? – Explain.
 - c) What is method overloading? Can we overload the main() method?

(Turn Over)

(2)

- d) What is default constructor? What is its purpose?
- e) What are the differences between the constructors and method? Can you make a constructor final?
- f) What is super keyword in java? What are the main uses of super keyword?
- g) Why does java not support pointers?
- h) What is vector? How is it different from an array?

Group - B

2. Answer any four questions. 4×5=20
- a) What is this keyword in java? Explain its main uses with proper example.
 - b) Explain autoboxing and unboxing with a suitable example. What are its advantages?
 - c) Explain method overriding with a suitable example.
 - d) What is a Package? How do you design a package? Write a java program to design a package.

(3)

- c) What is Exception? How do you define a try and catch block? What is finally block? When and how it is used? give a suitable example.
- f) What is interface? Give an example where interface can be used to support multiple inheritance. Develop a standalone java program for the example.

Group - C

3. Answer any one question. 1×10=10
- a) What is remote applet? Discuss the steps involved in loading and running a remote applet.
 - b) Describe the different stages in the life cycle of an applet. Distinguish between init() and start() methods.
 - c) Develop an applet that receives three numeric values as input from the keyboard and then displays the largest of the three on the screen. Write an HTML page and test the applet. 2+4=4

(4)

4. a) What is abstract method? When do we declare a method or a class abstract? Write a java program to demonstrate abstract fields and methods.
- b) What is multithread? How to create a thread? What is synchronization? When do we use it?
- c) What is string class in java? How does string class differ from the string Buffer class? [5+3+2]