



'সমানো মন্ত্র: সমিতি: সমানী'

UNIVERSITY OF NORTH BENGAL
B.Sc. Honours 4th Semester Examination, 2022

GE2-P2-COMPUTER SCIENCE

Time Allotted: 2 Hours

Full Marks: 40

*The figures in the margin indicate full marks.
All symbols are of usual significance.*

**The question paper contains GE-4A and GE-4B.
The candidates are required to answer any *one* from *two* courses.
Candidates should mention it clearly on the Answer Book.**

GE-4A

PROGRAMMING IN JAVA

GROUP-A

Answer any *five* questions

1×5 = 5

1. What is Java virtual machine?
2. What is Java String?
3. What is exception handling?
4. Why Java is called object oriented?
5. Define package in Java.
6. What is 'final' keyword in Java?"?
7. What is 'super' keyword in Java?
8. What do you mean by JSP page in Java?

GROUP-B

Answer any *three* questions

5×3 = 15

9. Mention major differences between an interface and a class.
10. Write a Java program to check whether a given number is prime or not.
11. Discuss Logical operators and arithmetic operators used in Java.
12. Explain method overriding with proper example.
13. Explain operator precedence with proper example.

GROUP-C

Answer any *two* questions

10×2 = 20

14. What do you mean by inheritance? Discuss multilevel inheritance with example. Write a short note on method overloading. 2+5+3

15. Discuss different types of loops used in java with examples. 10
16. What is constructor in java? What are the different types of constructors in java? Describe them with example. 2+1+7
17. Write short notes on: 5+5
- (a) Unboxing
- (b) Autoboxing.

GE-4B
PYTHON PROGRAMMING

GROUP-A

Answer any five questions

1×5 = 5

1. Which type of programming does python support?
2. What will be the value of the following python expression?
 $4 + 3 \% 5$
3. Which keyword is used for function in python language?
4. Which character is used to give single line comment in python?
5. What does PIP stands for python?
6. What is truncation division operator in python?
7. Write the statement to create an empty set in python.
8. Which loops are not supported in python?

GROUP-B

Answer any three questions

5×3 = 15

9. Explain the data types in python programming language.
10. What is meant by package in python? Explain.
11. Discuss the flow execution of a python function.
12. Discuss the use of logical operator by taking suitable example.
13. Discuss any five application areas of python.

GROUP-C

Answer any two questions

10×2 = 20

14. What are the different steps involved in python debugging? Explain.
15. What are the different loop control statements available in python? Explain with suitable example.
16. Write a python program to check whether a given number is prime or not.
17. Illustrate the different types of control flow statements available in python with flowcharts.

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