



UNIVERSITY OF NORTH BENGAL

B.Sc. Honours 4th Semester Examination, 2021

SEC1 (P2)-COMPUTER SCIENCE

Full Marks: 60

ASSIGNMENT

*The figures in the margin indicate full marks.
Candidates should answer in their own words and adhere to the word limit as practicable.
All symbols are of usual significance.*

**The question paper contains SEC-45: E-1 and SEC-45: E-2 and SEC-45: E-3
The candidates are required to answer any *one* from *three* courses
Candidates should mention it clearly on the Answer Book.**

SEC-45: E-1

ANDROID PROGRAMMING

Answer any *three* from the following

20×3 = 60

1. Briefly discuss about the android architecture. 20
2. Briefly discuss OOPs concepts with suitable examples. 20
3. Explain types of android application. Create any small application for android. Explain the steps involved. 20
4. Discuss about different Android Development Tools. 20
5. Write short note on:
 - (a) Java Virtual Machine 10
 - (b) Android Activity life cycle. 10
6. Briefly discuss the history of android and evolution of versions from Android 1.0 to Android 10. 20

SEC-45: E-2

PROGRAMMING IN MATLAB

Answer any *three* from the following

20×3 = 60

1. Explain the different components of a computer. Explain Machine code. With the help of a diagram discuss Software hierarchy. 5+5+10
2. Explain MATLAB Windows, Expressions, Constants, Variables, assignment statement and Arrays in MATLAB. 20

3. Explain Graph Plotting in MATLAB with the help of a suitable example. 20
4. Write a program in MATLAB to multiply two matrix of order 4×4 . 20
5. Write a program in MATLAB to find the inverse of a MATRIX. 20

SEC-45: E-3

VB.NET PROGRAMMING

Answer any *three* from the following

20×3 = 60

1. (a) Explain about Net Framework Architecture. 15
(b) What is CLS? What is console programming? 5
2. Design GUI and write code for the following in VB.Net. 20
(a) Accept a length & height in textbox.
(b) Calculate area of rectangle.
(c) Display result in Msg. box.
3. (a) What are MDI Forms? Write the properties of PARENT and CHILD FORMS. 10
(b) Write code to create a console application in VB.Net that determines whether a number is prime or not. 10
4. (a) Explain the basic operations of ADO.Net in detail. 10
(b) Distinguish between Interface-Based Polymorphism and Inheritance-Based Polymorphism. 10
5. Write short notes on: 5×4=20
(a) Immediate Window
(b) Toolbox
(c) MENU BAR
(d) FORM LAYOUT.

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