

**UNIVERSITY OF NORTH BENGAL** 

B.Sc. General Part-III Examination, 2022

## **COMPUTER SCIENCE**

## PAPER-VII

Time Allotted: 2 Hours

Full Marks: 50

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

## **GROUP-A**

Answer any two questions from the following	$15 \times 2 = 30$
1. (a) Explain how DBMS is better than traditional file system.	6
(b) Explain ANSI/SPARC architecture of DBMS.	6
(c) What is data redundancy?	3
2. (a) Explain different integrity constraints.	10
(b) What are the different components of an ER diagram?	5
3. (a) Differentiate between hierarchical and relational data models.	5
(b) Explain normalization. Explain 1NF, 2NF, 3NF and BCNF.	2+8 = 10
GROUP-B	
Answer any one question from the following	$10 \times 1 = 10$
4. (a) Differentiate between multitasking and multithreading.	5
(b) Discuss class and objects.	5
5. (a) Explain events with the help of examples.	5
(b) Explain MFC.	5
GROUP-C	
Answer any one question from the following	$10 \times 1 = 10$
6. (a) Discuss the different advantages of networking.	5
(b) Why do we need layered protocol architecture?	5
7. (a) Explain the function of DNS.	5
(b) Explain WWW.	5
X	