



UNIVERSITY OF NORTH BENGAL

B.Sc. Honours Part-III Examination, 2021

COMPUTER SCIENCE

PAPER-VI (Revised New Syllabus)

Full Marks: 100

ASSIGNMENT

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

Answer any four questions from the following

25×4 = 100

1. (a) Discuss the principle of separation and responsibility based design. 8
(b) Discuss the classical waterfall model in details. 10
(c) What is software maintenance? Discuss different types of software maintenance. 7
2. (a) Define polymorphism. Discuss different types of polymorphism with example. 7
(b) Discuss the different features of OOPs. 10
(c) Discuss constructor overloading with suitable example. 8
3. (a) What is ERD? Why ERD is important? Design an ERD for Banking System. 10
(b) List and explain different software quality attributes. 7
(c) Discuss different types of cohesion and coupling in software engineering. 8
4. (a) What is normalization? Why is normalizations needed? Discuss the different types of functional dependencies. 10
(b) What do you mean by structural analysis? Why is structural analysis needed? Justify your answer. 5
(c) Discuss the main characteristics of the DBMS and how it differs from traditional file systems. 10
5. (a) What is ODBC driver? Further explain the use of ODBC driver with the help of a suitable example. 10
(b) What are the advantages of relational data model over other data model? Explain. 8
(c) What are the various advantages of SQL? When are null values used? 7
6. (a) Discuss about List box controls and Combo box controls of VB. 5
(b) Write steps involved in VB application development. 5
(c) Give the advantages of OLEDB. 5
(d) Write short note on Video conferencing. 5
(e) Discuss briefly about DNS and ISP. 5

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