



- Notes :
1. All questions carry marks as indicated.
 2. Solve Question 1 OR Questions No. 2.
 3. Solve Question 3 OR Questions No. 4.
 4. Solve Question 5 OR Questions No. 6.
 5. Solve Question 7 OR Questions No. 8.
 6. Solve Question 9 OR Questions No. 10.
 7. Solve Question 11 OR Questions No. 12.
 8. Due credit will be given to neatness and adequate dimensions.
 9. Illustrate your answers whenever necessary with the help of neat sketches.

1. a) Explain the key features of mainframe computers. 7
- b) What are the different operating systems supported by mainframe computers. 6

OR

2. a) Explain basic IBM mainframe Architecture. 7
- b) Explain in mainframe. 6
- i) Batch Processing.
 - ii) Online Transaction processing.
3. a) List several defining characteristics of the Z/OS operating system. 7
- b) What is VSAM? Write its advantages & disadvantages. 7

OR

4. a) Explain in brief:- Z-OS operating system. 8
- b) What are the three major types of storage used by Z/OS. 6
5. a) Explain the Job control language along with its structure. 7
- b) Explain the following JCL statement with proper syntax. 6
- i) EXEC
 - ii) DD

OR

6. a) What are JCL procedures? Explain In-stream and catalog procedure in brief. 8
- b) Write short note on: SORT/MERGE utilities. 5

7. a) Write the syntax of all Divisions in COBOL program. 8
b) Explain different COBOL conditional statements. 6

OR

8. a) Write the syntaxes of REDEFINE, RENAME and USAGE clause. Also give example of each. 9
b) Explain arithmetic verbs of COBOL with example. 5
9. a) Write and explain syntax with example for following. 13
i) SORT verb. 4
ii) STRING verb. 3
iii) UNSTRING verb. 3
iv) INSPECT verb. 3

OR

10. a) Explain the following term in detail. 10
i) Physical Record. ii) Logical Record.
iii) Block iv) Blocking factor.
v) Buffering.
- b) Explain occurs clause for Table Handling. 3
11. a) Explain different datatypes used in DB2. 6
b) With neat sketch, Explain DB2 application development overview. 7

OR

12. a) Write short note on. 13
i) DB2 Interfaces. 4
ii) Cursor programming. 4
iii) Locking and concurrency. 5
