



- Notes :
1. All questions are compulsory and carry equal marks.
  2. Draw neat and labelled diagrams wherever necessary.
  3. Avoid vague answers and write answers relevant and specific to questions only.

Either:

1. a) Define Operating System. Explain the function of Operating System in detail. **4**
- b) Write a note on Time sharing Operating System. **4**

**OR**

- c) What is I/O interrupt? Explain. **4**
- d) Explain the concept of Batch Operating System in detail. **4**

Either:

2. a) What is Secondary Storage Management? Explain. **4**
- b) Write a note on Device Management. **4**

**OR**

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|----|------------------------------|----------|
| c) | Define System Call? Explain. | <b>4</b> |
| d) | Write a note on Main Memory. | <b>4</b> |

Either:

3. a) Explain the structure of Linux Operating System. **4**
- b) Write a note on Korn and C – Shells. **4**

**OR**

- c) Write a note on. **4**  
 i) Is            ii) mkdir        iii) rmdir        iv) cd
- d) Explain how to name files and directories in Linux. **4**

Either:

4. a) Write a note on. 4  
     i) grep ii) sort  
     b) Explain Shell Parameters in detail. 4

**OR**

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|----|---|-----------|
| c) | Write a note on.                              | <b>4</b>  |
| i) | chmod   | ii) chgrp |
| d) | Explain arithmetic in Shell Script in detail. | <b>4</b>  |

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|----|---|---|
| 5. | Attempt all the questions.                |   |
| a) | Describe the purpose of Operating System. | 2 |
| b) | Define Networking.                        | 2 |
| c) | Explain pwd and mv in detail.             | 2 |
| d) | What is Shell Script Variable? Explain.   | 2 |

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