

B.C.A. - I (CBCS Pattern) Semester-II
UBCAT204 - Paper-IV : Operating System and Linux

P. Pages : 2

Time : Three Hours



GUG/W/24/11715

Max. Marks : 80

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- Notes :
1. All questions **are** compulsory and carry equal marks.
 2. Draw neat and labelled diagram and use supporting data whenever necessary.
 3. Avoid vague answer and write specific answer related in question.

Either :

1. a) Define operating system. Explain the function of operating system in detail. 8
- b) Explain the concept of time sharing and real time operating system in detail. 8

OR

- c) What is Interrupt? Explain the I/O interrupt in detail. 8
- d) Describe dual mode operation and CPU protection in detail. 8

Either :

2. a) Write a note on 8
 - i) File manipulation
 - ii) Device management.
- b) Describe secondary storage management in operating system in detail. 8

OR

- c) What is system call? Explain any two system call in detail. 8
- d) Explain file I/O system in detail. 8

Either :

3. a) Explain the Naming files and directions in operating system. 8
- b) Write the note on following 8
 - i) cat
 - ii) rm
 - iii) mkdir
 - iv) ls

OR

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|----|---|----------|
| c) | What is shell? Explain the Bourne shell & Korn shell in detail. | 8 |
| d) | Explain the directory structure in Linux operating system. | 8 |

Either :

4. a) Explain any two control flow statement in shell script. 8
- b) Write the detail note for following 8
- i) sort ii) egrep
- iii) grep iv) chown

OR

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|------|--|-----------|
| c) | What is shell script? Explain the shell script variable in detail. | 8 |
| d) | Explain the following in detail. | 8 |
| i) | chmod | ii) ps |
| iii) | kill | iv) chgrp |

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| 5. | Solve all the questions. | |
| a) | Explain multiprogrammed operating system in detail. | 4 |
| b) | Explain protection system in brief. | 4 |
| c) | Explain how to name directories and files in Linux. | 4 |
| d) | Write a note on shell parameters. | 4 |
