

**BScIT234 - Paper-IV : Principles of Operating System & Linux**

P. Pages : 1

GUG/W/19/1438

Time : Three Hours



Max. Marks : 80

- Notes :
1. All questions are compulsory and carry equal marks.
  2. Draw neat and labelled diagram and use supporting data wherever necessary.
  3. Avoid vague answer and write specific points / answers related to questions.

1. Either :
- a) What is operating system? Explain its purpose and functions. **8**
  - b) Explain the concept of Time sharing and Real-time operating system. **8**
- OR**
- c) Explain I/O structure of computer system in detail. **8**
  - d) Explain the storage structure & storage hierarchy of computer system. **8**
2. Either :
- a) Define process? Explain various operation on process. **8**
  - b) Explain the concept of file manipulation & Device management. **8**
- OR**
- c) What is system calls? Explain in detail with two system calls. **8**
  - d) Explain system structure with simple Layered Approach in system structure. **8**
3. Either :
- a) Explain the structure of Linux of operating system. **8**
  - b) What is role of system Administrator? Explain in detail. **8**
- OR**
- c) What is shell? Which are the different types of shell in detail. **8**
  - d) Explain the following commands. **8**  
i) mkdir      ii) cd      iii) ls      iv) cat
4. Either :
- a) What is shell script? Explain the shell script variables in detail. **8**
  - b) Explain following with syntax & example. **8**  
i) ps      ii) kill      iii) chmod      iv) chown
- OR**
- c) Explain control flow statement in shell script. **8**
  - d) What is shell parameters? Explain with suitable example. **8**
5. Solve all the questions.
- a) Explain an I/O Interrupt in computer processing system. **4**
  - b) Explain the Information maintenance in detail. **4**
  - c) Explain the directory structure of Linux operating system. **4**
  - d) Write a shell script to add to numbers & display it. **4**

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