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**BV—26—2016**

**FACULTY OF COMPUTER STUDIES**

**M.Sc. (SAN) (Second Year) (Third Semester) EXAMINATION**

**OCTOBER/NOVEMBER, 2016**

**(CBCS Pattern)**

**SYSTEM ADMINISTRATION AND NETWORKING**

**(Elective-III)**

**(Advanced Operating System)**

**(Saturday, 26-11-2016)**

**Time : 2.00 p.m. to 5.00 p.m.**

*Time—Three Hours*

*Maximum Marks—75*

*N.B. :— (i) All questions are compulsory.*

*(ii) Write answers in brief and to the point.*

1. Attempt any *three* of the following : 15
  - (a) Explain architecture of UNIX.
  - (b) Explain structure of the buffer pool.
  - (c) Explain process states and transitions.
  - (d) Explain file times.
  - (e) Discuss allocating dynamic memory.
2. Answer the following (any *three*) : 15
  - (a) Explain system structure in short.
  - (b) Explain sticky bit.
  - (c) Explain inodes.
  - (d) Discuss scenarios for retrieval of a buffer.
3. Solve the following (any *three*) : 15
  - (a) Explain symbolic links.
  - (b) Explain process scheduling.
  - (c) Explain stack-based allocations.
  - (d) Discuss sigsetjmp and siglongjmp.

P.T.O.

- 4. Answer the following (any *three*) : 15
  - (a) Explain kill and raise functions.
  - (b) Explain thread scheduling.
  - (c) Explain locking memory.
  - (d) Discuss concept of pipes in short.
  
- 5. Write short notes on any *three* of the following : 15
  - (a) thread priority levels
  - (b) mkdir and rmdir
  - (c) users and groups
  - (d) the shell
  - (e) abort function.