Code: 9A05602

B.Tech III Year II Semester (R09) Supplementary Examinations May/June 2017
UNIX INTERNALS
(Computer Science and Engineering)

Time: 3 hours   Max. Marks: 70

Answer any FIVE questions
All questions carry equal marks
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1   Write short notes on the following:
(a)   Process utilities.
(b)   Disk utilities.

2   (a)   Explain how searching is done in Hash Queue.
(b)   Explain about *read* and *write* operations of Kernel to the Buffer.

3   (a)   Explain the procedure of requesting & freeing disk blocks.
(b)   Write and explain the algorithm for Freeing Inode.

4   Design a system call that truncates an existing file to arbitrary sizes, supplied as an argument and
describe an implementation.

5   (a)   Explain the stack configuration for creating the system call.
(b)   Write and explain the steps for context switch.

6   (a)   Draw and explain the logical format of an executable file.
(b)   Write a C program to implement the Setuid system call.

7   (a)   Design an algorithm for swapper to swap the pages.
(b)   Discuss in detail about the scheduling parameters used in process scheduling.

8   (a)   Write an algorithm for Login for a I/O subsystem.
(b)   Explain in detail about the stream for open operation.

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