

(i) Printed Pages: 3]

Roll No. ....

(ii) Questions : 9]

Sub. Code : 

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**Bachelor of Computer Applications 4th  
Semester Examination**

**1047**

**UNDERSTANDING UNIX**

**Paper : BCA-403**

**Time : 3 Hours]**

**[Max. Marks : 90**

**Note :-** (1) Attempt *one* question from each Section A, B, C and D and compulsory question No. 9.

(2) Use of non-programmable calculator is allowed.

**Section-A**

1. (a) Define operating system. What is its importance. Explain its various services. 2+3+4
- (b) Explain Unix Kernel and directory system with examples. 4.5+4.5
2. (a) Explain any *three* types of operating systems.
- (b) Compare and contrast Unix and Windows. 3×3=9

**N-246**

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Turn Over

### Section-B

3. (a) Explain how inter-user and inter-machine communication takes place in Unix ? Explain various commands with examples. 4+5
- (b) Define Process. Explain at least four process management commands with examples. 1+8
4. (a) Explain various directory command in detail. 9
- (b) How security and protection is provided in Unix ? Explain. 9

### Section-C

5. How system administration is carried out in Unix. Explain in context of :
- (a) Maintaining User accounts
- (b) Taking Backups
- (c) Managing Disk space. 3+5+5+5
6. How the following facilities are exercised in Unix :
- (a) Maintaining security
- (b) Setting up remote communication
- (c) Installing printers and peripheral devices. 6+6+6

### Section-D

7. (a) How shall programs are written and executed ? Explain with example. 9
- (b) How Network troubleshooting is handled in Unix ? Explain in detail. 9

8. (a) List out any *two* control statements and write the corresponding "AWK" code with examples. 4.5+4.5
- (b) How 'string comparison' and string 'splitting' is performed through shell programming ? Explain with examples. 4.5+4.5

### Compulsory Question

9. Explain :

- (a) IP addresses
  - (b) Classes
  - (c) Special shell parameters
  - (d) Distributed systems
  - (e) Any two piping commands
  - (f) Changing groups in Unix
  - (g) Mounting file system in Unix
  - (h) Regular expressions
  - (i) Grep
- 9×2=18