I/96—22   Roll No. ....

Annual Examination, 2022

B.C.A. Part II

B.C.A.-205

Paper V

(Operating Systems with Linux)

Time : 3 Hours]   [MAXIMUM MARKS : 80

Note : *Attempt any **two** parts from each unit. All questions carry equal marks.*

Unit–I

1. (a) What is operating system ? Explain its feature.

   (b) Differentiate between multiprogramming and multiprocessing operating system.

   (c) Write notes on :

   (i) Batch processing

   (ii) Spooling.

Unit–II

2. (a) What is process ? Explain the process control block.

   (b) What is queuing diagram ? Explain with example.

P.T.O.

(c) Write notes on :

(i) Context switching

(ii) Dispatcher.

Unit–III

3. (a) Differentiate between contiguous and non-contiguous memory location.

(b) Explain the FIFO page replacement algorithms.

(c) Write notes on :

(i) Demand paging

(ii) Page segmentation.

Unit–IV

4. (a) What is unix operating system ? Explain its feature and benefits.

(b) What is kernel ? Explain its function.

(c) Explain the following unix command with example :

(i) Chmod

(ii) Grep

(iii) Pwd

(iv) Awk.

Unit–V

5. (a) What is system variable ? Explain any four system variable with example.

(b) Write a shell script to calculate the factorial of any number.

(c) Write a shell script to find the greatest number among any three numbers.

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