**Roll No.** ..... Total No. of Printed Pages : 4

# Code No. : BC-295 Online Annual Examination, 2022 B.C.A. Part II

# B.C.A.-205

## Paper - V

## **OPERATING SYSTEMS WITH LINUX**

Time : Three Hours ] [ Maximum Marks : 80

Note: Section 'A', containing 10 very short answer type questions, is compulsory. Section 'B' consists of short answer type questions and Section 'C' consists of long answer type questions. Section 'A' has to be solved first.

### Section 'A'

Answer the following very short answer type questions in one or two sentences.  $1 \times 10 = 10$ 

- 1. Who was created first operating system ?
- 2. What do you understand by spooling ?
- **3.** Define process stack in O.S.
- **4.** What is dispatcher in O.S. ?

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- 5. Write the full form of LRU.
- **6.** Name the types of non-contiguous memory management scheme.
- 7. Define kernel of O.S.
- 8. Write the use of mkdir command of unix.
- **9.** What is shell variable ?
- 10. List out logical operators in Linux.

### Section 'B'

Answer the following short answer type questions with word limit 150-200.  $4 \times 5 = 20$ 

1. What is Multi-programming ? Write features of it.

### Or

What is batch processing ? How does it work ?

2. Explain queuing diagram.

### Or

Discuss context switching.

3. What is the role of fragmentation in O.S. ?

### Or

Explain the concept of swapping in O.S.

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4. Write the features of unix O.S.

Or

Explain the concept of *i*-node table in unix.

5. What is input and output redirection in Linux ?

Or

Discuss choice making using case.....esac.

### Section 'C'

Answer the following long answer type questions with word limit 300-350.  $10 \times 5 = 50$ 

1. What is meant by multi-processing system ? Explain its working system.

#### Or

Write advantages and disadvantages of time sharing O.S.

**2.** Discuss CPU scheduling algorithm.

### Or

Explain multilevel feedback queues with the help of example.

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**3.** Explain the concept of compaction.

#### Or

Write brief note on demand paging.

4. What are system calls ? How does a system call work ?

#### Or

What is text processing in Linux ? Discuss any *two* text processing commands.

5. Explain standard error redirection.

#### Or

Write a shell program to find sum of first n natural numbers.

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