**B.SC. FOURTH SEMESTER (PROGRAMME) EXAMINATIONS, 2021**

**Subject: Mathematics**                                      **Course ID: 42110**

**Course Code: SP/MTH/404/ SEC-2**          **Course Title: Operating System: Linux**

**Full Marks: 40**                                              **Time: 2 Hours**

### The figures in the margin indicate full marks

### Notations and symbols have their usual meaning

1.  Answer any *five* of the following questions:                    $2 \times 5 = 10$

    a)   Name different Linux Shell.

    b)   Mention some Linux/Unix Operating system.

    c)   What are the different file systems used in Linux?

    d)   What is the main difference between Linux and Unix?

    e)   What are the permissions in Linux?

    f)   How can you append one file to another in Linux?

    g)   Can we use Linux OS through windows OS? How?

    h)   What is the maximum length for any file name under Linux?


2.  Answer any *four* of the following questions:                    $5 \times 4 = 20$

    a)   Explain briefly different shells used in different Linux operating systems.

    b)   Why Linux considered as more secured than other OS.

    c)   What are the purposes of following commands in Unix: chmod,chown, chgrp, gzip.

    d)   Explain basic components of Linux.

    e)   What is CLI? Write advantages and disadvantages of it.

    f)   Explain each field of /etc/passwd.


3.  Answer any *one* of the following questions:                    $10 \times 1 = 10$

    a)   Explain some Linux Distributions along with their usage.

    b)   Explain Linux architecture with suitable diagram.


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