

# CS & IT ENGINEERING

## Operating System

Process Management

DPP 01 Discussion Notes



By- Anjnee Bhatnagar ma'am

A stylized illustration of a laptop with an orange base and a blue frame. The screen is white and contains the text 'TOPICS TO BE COVERED' in a dark blue, hand-drawn font.

# TOPICS TO BE COVERED

A vertical dashed orange line with arrows at the top, bottom, and a horizontal arrow pointing right from the laptop screen.

01 Question

02 Discussion

## Q.1

Consider the following statements:

- (i) In Uni-programming, CPU can run only one program at a time. *True*
- (ii) In Multi-programming, CPU can run multiple program at a time. *False*

Which of the following is correct?

[MCQ]

- ☒ A. (i) is correct (ii) is incorrect.
- ☐ B. (i) is incorrect (ii) is correct.
- ☐ C. Both (i) and (ii) are correct.
- ☐ D. Both (i) and (ii) are incorrect.

Q.2

Which of the following is/are incorrect?



[MSQ]

A.

Multiprogramming enhances CPU throughput. *True*

☒ B.

Non-preemptive processes may have forceful deallocation. *False*

☒ C.

Non-preemptive multiprogramming is equivalent to uni-programming.

*False*

D.

Multiprogramming is of two types preemptive and non-preemptive.

*True.*

Q.3

(Fork) system call is converted by compiler and also know as \_\_\_\_.



[MCQ]

A.

Supervisory call. ✓

B.

Privileged instruction. ✓

C.

Software interrupt instruction. ✓

✓ D.

All of the above.

Q.4



Consider the following statement:

- (i) User program gets blocked when fork call is executed. *True*
  - (ii) Dispatch table contains information regarding all system call. *True*
  - (iii) Fork system call can execute non-atomically in system. *False*
- Which of the following is/are correct?

[MCQ]

- A. Only (i) is correct. *X*
- ☒ B. (i) and (ii) are correct.
- C. (i) and (iii) are correct.
- D. (ii) and (iii) are correct.



Q.5

Which of the following is/are correct?



[MSQ]



- ☒ A. Changing mode from user to kernel need an interrupt. *True*
- ☐ B. Changing mode from kernel to user needs an interrupt. *False.*
- ☒ C. ISR (Interrupt Service Routine) is responsible for mode shifting (user to kernel) *True*
- ☐ D. ISR (Interrupt Service Routine) is responsible for changing the mode kernel to user. *False*

Q.6



Consider the following statements:

- (i) Static data have fixed size and memory allocated during run-time. *False* ✓ ✗
- (ii) Dynamic data have different size and memory allocated during load-time. ✗ *False*.

Which of the following is/are correct?

[MCQ]

- A. Only (i) is correct. ✗
- B. Only (ii) is correct. ✗
- C. Both (i) and (ii) are correct. ✗
- ✓ D. Both (i) and (ii) are incorrect.



Q.7

Match the following



[MCQ]

(i) Program	1. Active entity
(ii) Process	2. Resides in main memory
	3. Passive entity
	4. Resides in disk

- A. (i) - 1, 3      (ii) - 2, 4
- B. (i) - 2, 4      (ii) - 1, 3
- C. (i) - 1, 2      (ii) - 1, 4
- ✓ D. (i) - 3, 4      (ii) - 1, 2

(i) - 3, 4  
(ii) - 1, 2

Q.8

Program counter holds \_\_\_\_\_.



[MCQ]

A. Address of previous executed instruction. ✗

B. Address of current executing instruction. ✗

✓ C. Address of next instruction to be executed. ✓

D. None of these.

