Started on	Tuesday, 21 November 2023, 6:45 PM
State	Finished
Completed on	Tuesday, 21 November 2023, 7:01 PM
Time taken	15 mins 58 secs
Marks	20.00/20.00
Grade	**10.00** out of 10.00 (**100**%)

Question 1

Correct

Mark 1.00 out of 1.00

Which of the following are true about page table?

- ☐ a.   All processes share a single page table.
- ☑ b.   Each process has its own independent page table. ✔
- ☑ c.   Page table maps the page number referenced by the CPU to the frame number where the page is stored. ✔
- ☑ d.   Page table stores the mapping between virtual addresses and physical addresses. ✔

Your answer is correct.

The correct answers are:
Page table stores the mapping between virtual addresses and physical addresses.,

Page table maps the page number referenced by the CPU to the frame number where the page is stored.,

Each process has its own independent page table.

Question 2

Correct

Mark 1.00 out of 1.00

Which of the following terminology usually refers to computer RAM?

- ☑ a.   Primary. ✔
- ☑ b.   Physical. ✔
- ☐ c.   Secondary.
- ☑ d.   Main. ✔

Your answer is correct.

The correct answers are:
Physical.,

 Primary.,

Main.

Question 3

Correct

Mark 1.00 out of 1.00

Virtual memory is a memory management technique that creates an illusion to users of larger physical memory.

Select one:

◉ True ✓

○ False

The correct answer is 'True'.

Question 4

Correct

Mark 1.00 out of 1.00

Which of the following changes can be observed in contiguous memory allocation?

☑ a.   External fragmentation. ✓

☑ b.   Internal fragmentation. ✓

Your answer is correct.

The correct answers are:
External fragmentation.,

Internal fragmentation.

Question 5

Correct

Mark 1.00 out of 1.00

Virtual memory allows_____

◉ a.   Execution of a process that may not be completely in memory. ✓

○ b.   A program to be smaller than the physical memory.

○ c.   A program to be larger than the secondary storage.

○ d.   Execution of a process without being in physical memory.

Your answer is correct.

The correct answer is:
Execution of a process that may not be completely in memory.

Question 6

Correct

Mark 1.00 out of 1.00

Which of the following is the address generated by the CPU?

- ○ a.   Physical address.

- ⦿ b.   Logical address. ✔

Your answer is correct.

The correct answer is:
Logical address.

Question 7

Correct

Mark 1.00 out of 1.00

Page hit occurs when

- ○ a.   When a requested pages in the secondary memory.

- ○ b.   When a requested page is not in the secondary memory.

- ○ c.   When a requested page is not in the primary memory.

- ⦿ d.   When a requested page is in the primary memory. ✔

Your answer is correct.

The correct answer is:
When a requested page is in the primary memory.

Question 8

Correct

Mark 1.00 out of 1.00

Which of the following is true about the page replacement algorithm.

- ☑ a.   If page hits are equal for multiple process in LFU algorithm, it applies FIFO. ✔

- ☑ b.   LFU replaces the page with the minimum number of previous hits. ✔

- ☑ c.   LRU replaces the page that has not been used to for the longest period of time. ✔

- ☐ d.   LRU replaces the page with the minimum number of previous hits

Your answer is correct.

The correct answers are:
LFU replaces the page with the minimum number of previous hits.,

 LRU replaces the page that has not been used to for the longest period of time.,

If page hits are equal for multiple process in LFU algorithm, it applies FIFO.

Question 9

Correct

Mark 1.00 out of 1.00

The aim of creating page replacement algorithms is to

- ○ a. Replace pages faster.
- ◉ b. Decreases the page fault rate. ✔
- ○ c. Increases the page fault rate.
- ○ d. Allocate multiple pages to processes.

Your answer is correct.

The correct answer is:
Decreases the page fault rate.

Question 10

Correct

Mark 1.00 out of 1.00

The ability to execute a program that is only partially in memory, has benefits like _____

- ☑ a. Throughput increases. ✔
- ☑ b.   Programs for an extremely large virtual space can be created. ✔
- ☑ c. The amount of physical memory cannot put a constraint on a program. ✔

Your answer is correct.

The correct answers are:
The amount of physical memory cannot put a constraint on a program.,

 Programs for an extremely large virtual space can be created.,

Throughput increases.

Question 11

Correct

Mark 1.00 out of 1.00

Which of the following are true about different types of memory allocation?

☑ a.   Non contiguous memory allocation assigns different blocks of memory in a non consecutive manner to a process. ✔

☑ b.   Contiguous memory allocation assigns single contiguous section of memory blocks to a process. ✔

☐ c.   Contiguous memory allocation assigns different blocks of memory in a non consecutive manner to a process.

☐ d.   Non contiguous memory allocation assigns single contiguous section of memory blocks to a process.

Your answer is correct.

The correct answers are:
Non contiguous memory allocation assigns different blocks of memory in a non consecutive manner to a process.,

Contiguous memory allocation assigns single contiguous section of memory blocks to a process.

Question 12

Correct

Mark 1.00 out of 1.00

Assuming three page frames or storing process pages in main memory for the given page references: 1,2,3,2,4,2,5,2,3,4

How many page hits does the LRU page replacement algorithm produce?

◉ a.   3 ✔

○ b.   1

○ c.   2

○ d.   4

Your answer is correct.

The correct answer is:
3

Question 13

Correct

Mark 1.00 out of 1.00

Assuming 3 page frames or storing process pages in main memory for the given page references: 4,7,6,1,7,6,1,2,7,2

How many page hits does the LRU page replacement algorithm produce?

○ a.   6

◉ b.   4 ✓

○ c.   3

○ d.   5

5

5

5

5

Your answer is correct.

The correct answer is:

4

Question 14

Correct

Mark 1.00 out of 1.00

Assuming three page frames for storing process pages in main memory for the given page reference.7,0,1,2,0,3,0,4,2,3,0,3,2,1,2

How many page hits does the LRU page replacement algorithm produce?

○ a.   4

○ b.   6

○ c.   7

◉ d.   5 ✓

Your answer is correct.

The correct answer is:

5

Question 15

Correct

Mark 1.00 out of 1.00

Which of the following are true about memory allocation?

○ a.   Your location is a process by which computer programs are assigned processes to execute.

◉ b.   Your location is a process by which computer programs are assigned memory. ✔

Your answer is correct.

The correct answer is:
Your location is a process by which computer programs are assigned memory.

Question 16

Correct

Mark 1.00 out of 1.00

Assuming three page frames or storing process pages in main memory for the given page references: 1,2,3,2,4,2,5,2,3,4

How many page hits does the LRU page replacement algorithm produce?

○ a.   4

○ b.   2

◉ c.   3 ✔

○ d.   1

Your answer is correct.

The correct answer is:
3

Question 17

Correct

Mark 1.00 out of 1.00

Assuming 3 page frames or storing process pages in main memory for the given page references: 7,0,1,2,0,3,0,4,2,3,0

How many page faults does the LFU page replacement algorithm produce?

○ a.   6

◉ b.   8 ✔

○ c.   5

○ d.   7

Your answer is correct.

The correct answer is:
8

Question 18

Correct

Mark 1.00 out of 1.00

The table contains the base address of each page in physical memory.

○ a. Memory.

◉ b. Page. ✔

○ c. Frame.

○ d. Process.

Your answer is correct.

The correct answer is:
Page.

Question 19

Correct

Mark 1.00 out of 1.00

Assuming 3 page frames for storing process pages in main memory for the given page references : 7,0,1,2,0,3,0,4,2,3,0,3,2,1,2.

◉ a. 10 ✔

○ b. 8

○ c. 7

○ d. 9

Your answer is correct.

The correct answer is:
10

Question 20

Correct

Mark 1.00 out of 1.00

Assuming three page frames or for storing process pages in main memory for the given page reference: 4,7,6,1,7,6,1,2,7,2.

Which of the following page replacement algorithm will produce the minimum number of page faults?

◉ a. LRU ✔

○ b. None of the options

○ c. LFU

Your answer is correct.

The correct answer is:
LRU