

**Multiple Choice Questions**

- 4.1 Which of the following are encompassed within primary memory management operations:
- The allocation of main memory to programs
  - The garbage collection to achieve compaction
  - Managing the process control block
  - Protection to user data when a user exceeds his allocated data area allocation.
  - Transfer of data between devices using buffers.
- 4.2 Who performs the garbage collection?
- The user
  - The memory management system
  - The processor, which switches to the garbage collection mode after termination of every program.
- 4.3 Once a program is compiled, it can be loaded for execution
- Only from the compiler generated starting address
  - Any where in the main memory
  - User needs to specify where the compiled code is to be loaded
  - It is loaded starting from address 0 in the main memory.
- 4.4 After an allocation of space using the first-fit policy the number of holes in memory
- Increases by one
  - Decreases by one
  - Does not change
- 4.5 Against the following statements indicate the policy which best describes the policy characteristics:
- Most holes appear nearer to the beginning of the scan
  - Holes are nearly distributed uniformly through the memory
  - It requires the maximum time to allocate the suitable hole.
  - It leaves the largest holes in size.
- 4.6 The buddy system of memory allocation policy is a dynamic partitioning policy.
- True
  - False

- 4.7 Indicate which amongst the following statements are true for virtual memory.
- It allows for multiple users to use the system
  - It enhances scope for multi-programming
  - It extends the address space
  - It reduces external fragmentation as well as internal fragmentation.
- 4.8 Paging was prompted by what form of reasoning:
- Because on compilation the program code is paginated.
  - Because program display a strong locality of reference.
  - Because we print programs on pages
- 4.9 The typical page size may be
- Usually between 10 and 100 bytes
  - Usually of 512 to 2k bytes
  - More than 100 KB bytes but less than 1 MB
  - Minimally 1 MB
- 4.10 Which of the following are the likely causes of thrashing?
- Because there are too many users connected to the system
  - Because the page size was very small
  - Because we followed a first in first out policy
  - Because we followed a least recently used policy for page replacement.
- 4.11 Segmentation can be supported alongside the paging.
- True
  - False