Test Bank for Understanding Operating Systems 8th Edition by McHoes
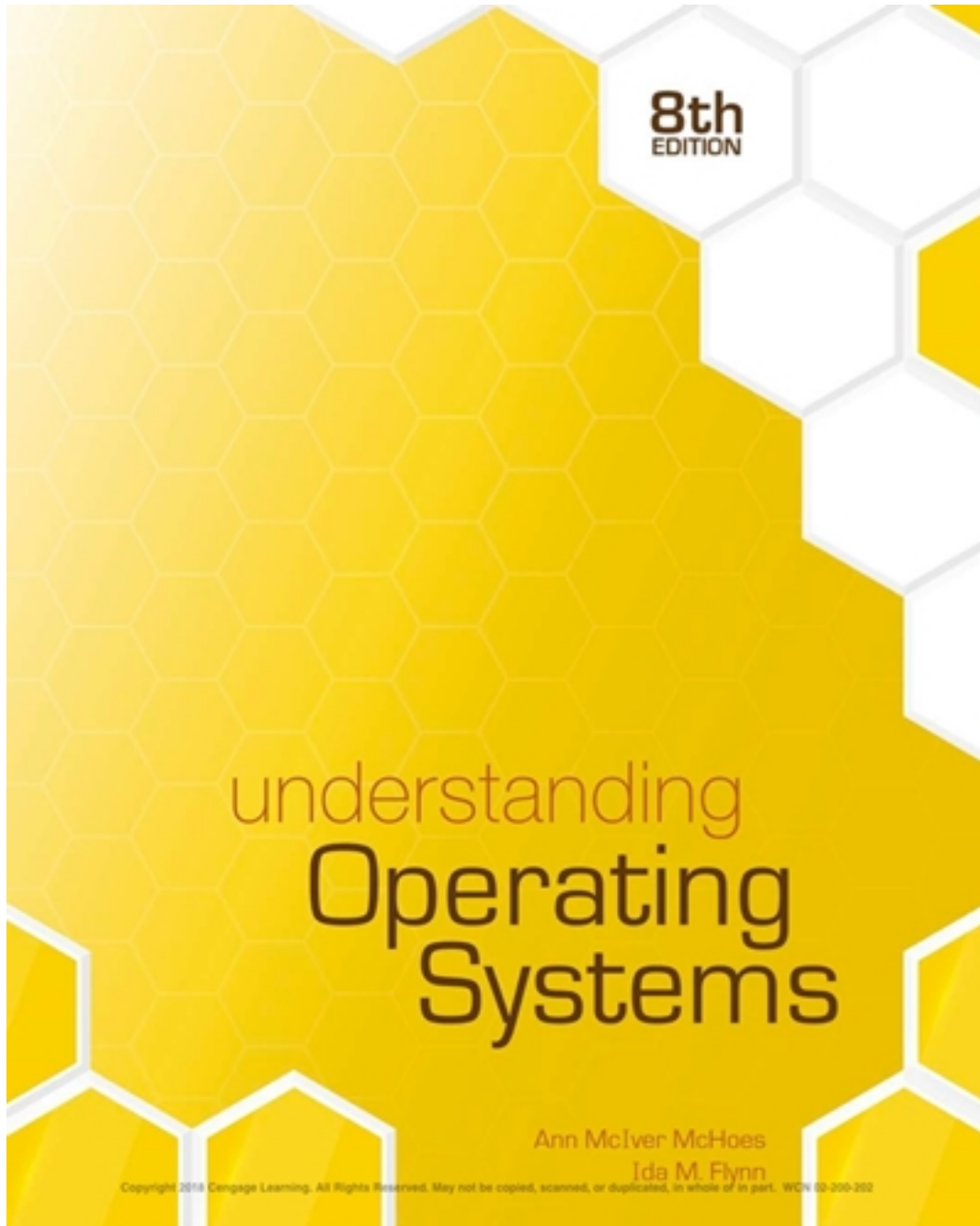
Test Bank

TRUE/FALSE

1 : Single-user systems in a non-networked environment allocate, to each user, access to all available main memory for each job, and jobs are processed sequentially, one after the other.
A : true
B : false

Correct Answer : A

2 : A single-user system supports multiprogramming.
A : true
B : false

Correct Answer : B

3 : The first attempt to allow for multiprogramming used fixed partitions.
A : true
B : false

Correct Answer : A

4 : Single-user contiguous allocation schemes have the problem of partition intrusion.
A : true
B : false

Correct Answer : B

5 : The algorithm used to store jobs into memory in a fixed partition system requires a few more steps than the one used for a single-user system because the size of the job must be matched with the size of the partition to make sure it fits completely.
A : true
B : false

Correct Answer : A

6 : The fixed partition scheme does not require that the entire program be stored contiguously and in memory from the beginning to the end of its execution.
A : true
B : false

Correct Answer : B

7 : The fixed partition scheme works well if all of the jobs run on the system are of the same size or if the sizes are known ahead of time and don't vary between reconfigurations.
A : true
B : false

Correct Answer : A

8 : In a fixed partition scheme, large jobs will need to wait if the large partitions are already booked, and they will be rejected if they're too big to fit into the largest partition.
A : true

B : false

Correct Answer : A

9 : The best-fit allocation method keeps the free/busy lists organized by memory locations, low-order memory to high-order memory.
A : true
B : false

Correct Answer : B

10 : A large job can have problems with a first-fit memory allocation scheme.
A : true
B : false

Correct Answer : A

11 : The first-fit algorithm assumes that the Memory Manager keeps only one list containing free memory blocks.
A : true
B : false

Correct Answer : B

12 : One of the problems with the best-fit algorithm is that the entire table must be searched before the allocation can be made because the memory blocks are physically stored in sequence according to their location in memory.
A : true
B : false

Correct Answer : A

13 : Research continues to focus on finding the optimum allocation scheme.
A : true
B : false

Correct Answer : A

14 : For a fixed partition system, memory deallocation is relatively complex.
A : true
B : false

Correct Answer : B

15 : In a dynamic partition system, a null entry in the busy list occurs when a memory block between two other busy memory blocks is returned to the free list.
A : true
B : false

Correct Answer : A

16 : In the relocatable dynamic partitions scheme, the Memory Manager relocates programs to gather together all of the empty blocks and compact them to make one block of memory large

enough to accommodate some or all of the jobs waiting to get in.
A : true
B : false

Correct Answer : A

17 : Memory defragmentation is performed by the operating system to reclaim fragmented space.
A : true
B : false

Correct Answer : A

18 : After relocation and compaction, both the free list and the busy list are updated.
A : true
B : false

Correct Answer : A

19 : The bounds register is used to store the highest (or lowest, depending on the specific system) location in memory accessible by each program.
A : true
B : false

Correct Answer : A

20 : Compaction should always be performed only when there are jobs waiting to get in.
A : true
B : false

Correct Answer : B

MULTIPLE CHOICE

21 : Main memory is also known as _____.
A : single-user memory
B : random access memory
C : finite memory
D : virtual memory

Correct Answer : B

22 : In a single-user system, jobs are processed _____.
A : sequentially
B : intermittently
C : randomly
D : in order of longest job to shortest job

Correct Answer : A

23 : Fixed partitions are also called _____ partitions.

A : complete

B : static

C : direct

D : sized

Correct Answer : B

24 : In the fixed-partition memory management scheme, the table that the Memory Manager uses to keep track of jobs is composed of the _____.

A : partition size, memory address, and status

B : status, access, and memory address

C : partition size, status, and access

D : partition size, memory address, access, and status

Correct Answer : D

25 : The fixed partition scheme works well when _____.

A : all jobs are of similar size

B : jobs have different sizes

C : job sizes are not known in advance

D : all jobs are under 100K

Correct Answer : A

26 : The phenomenon of less-than-complete use of memory space in a fixed partition is called _____.

A : dynamic fragmentation

B : internal fragmentation

C : external fragmentation

D : fixed fragmentation

Correct Answer : B

27 : _____ consists of fragments of free memory between blocks of allocated memory.

A : An inefficient fit

B : Indirect partitioning

C : External fragmentation

D : Internal fragmentation

Correct Answer : C

28 : The _____ method keeps the free/busy lists organized by memory locations, from low-order memory to high-order memory.

A : fixed partition allocation

B : first-fit memory allocation

C : dynamic fit memory allocation

D : best-fit memory allocation

Correct Answer : B

29 : The goal of the _____ memory allocation algorithm is to find the smallest memory block into which a job will fit.

A : smallest-fit

B : first-fit

C : dynamic-fit

D : best-fit

Correct Answer : D

30 : The release of memory space by the Memory Manager is called ____.

A : fragmentation

B : relocation

C : free memory

D : deallocation

Correct Answer : D

31 : A(n) ____ in the busy list occurs when a memory block between two other busy memory blocks is returned to the free list.

A : blank line

B : null entry

C : joined entry

D : empty entry

Correct Answer : B

32 : ____ of memory is performed by the operating system to reclaim fragmented sections of the memory space.

A : Deallocation

B : Redirection

C : Compaction

D : Reallocation

Correct Answer : C

33 : Memory compaction is also referred to as ____.

A : defragmentation

B : collection

C : reallocation

D : dynamic allocation

Correct Answer : A

34 : Single-user, fixed partition, and dynamic partition memory schemes share unacceptable fragmentation characteristics that were resolved with the development of ____.

A : deallocation

B : best-fit algorithms

C : relocatable dynamic partitions

D : null entry accounting

Correct Answer : C

35 : When reading an instruction, the operating system can tell the ____ of each group of digits by its location in the line and the operation code.

A : function

B : value

C : order

D : assignment

Correct Answer : A

36 : In a relocatable dynamic partition scheme, the _____ ensures that, during execution, a program won't try to access memory locations that don't belong to it.

A : relocation register

B : load register

C : compaction register

D : bounds register

Correct Answer : D

37 : In a relocatable dynamic partition scheme, the _____ contains a value that must be added to each address referenced in a program so that the system will be able to access the correct memory addresses after relocation.

A : bounds register

B : load register

C : relocation register

D : compaction register

Correct Answer : C

38 : By compacting and relocating, the Memory Manager optimizes the use of memory and thus improves throughput. However, it also requires more _____ than the other memory allocation schemes discussed in this chapter.

A : null entries

B : segmentation

C : main memory

D : overhead

Correct Answer : D

39 : One approach to performing compaction is to do it when a certain _____ of memory becomes busy.

A : byte

B : percentage

C : bit

D : area

Correct Answer : B

40 : The four memory management techniques presented in this chapter share the requirement that the entire program being executed must be _____.

A : loaded into memory

B : stored on disk

C : written in a single language

D : relocatable

Correct Answer : A