

Unit III – Memory

MCQs with Answers / बहुविकल्पीय प्रश्न उत्तर सहित

1. Memory hierarchy का मुख्य उद्देश्य क्या है?
What is the main objective of memory hierarchy?

- A. केवल storage capacity बढ़ाना
- B. केवल speed बढ़ाना
- C. Speed, capacity और cost के बीच balance बनाना
- D. केवल cost कम करना

Answer: C. Speed, capacity और cost के बीच balance बनाना

2. निम्न में से सबसे तेज memory कौन-सी है?
Which of the following is the fastest memory?

- A. RAM
- B. Cache
- C. Register
- D. Hard Disk

Answer: C. Register

3. Memory hierarchy में सबसे ऊपर कौन-सी memory होती है?

Which memory is at the top of memory hierarchy?

- A. Secondary Memory
- B. Cache Memory
- C. Register
- D. RAM

Answer: C. Register

4. Memory hierarchy में नीचे जाने पर capacity क्या होती है?

What happens to capacity when moving downward in memory hierarchy?

- A. Decreases
- B. Increases
- C. Remains same
- D. Becomes zero

Answer: B. Increases

5. Memory hierarchy में नीचे जाने पर speed क्या होती है?

What happens to speed when moving downward in memory hierarchy?

- A. Increases
- B. Decreases
- C. Remains same
- D. Doubles

Answer: B. Decreases

6. निम्न में से Primary Memory कौन-सी है?
Which of the following is primary memory?

- A. Hard Disk
- B. RAM
- C. DVD
- D. Magnetic Tape

Answer: B. RAM

7. Primary Memory को और किस नाम से जाना जाता है?

Primary memory is also known as:

- A. Auxiliary Memory
- B. Main Memory
- C. Backup Memory
- D. External Memory

Answer: B. Main Memory

8. RAM का full form क्या है?
What is the full form of RAM?

- A. Read Access Memory
- B. Random Access Memory
- C. Rapid Access Memory
- D. Readable Access Memory

Answer: B. Random Access Memory

9. RAM किस प्रकार की memory है?
RAM is which type of memory?

- A. Non-volatile
- B. Volatile
- C. Optical
- D. Permanent

Answer: B. Volatile

10. Power off होने पर RAM का data क्या होता है?

What happens to RAM data when power is switched off?

- A. सुरक्षित रहता है
- B. Lost हो जाता है
- C. ROM में चला जाता है
- D. Hard Disk में automatically save हो जाता है

Answer: B. Lost हो जाता है

11. SRAM का full form क्या है?
What is the full form of SRAM?

- A. Static Random Access Memory
- B. Sequential Random Access Memory
- C. Simple Random Access Memory
- D. Stored Random Access Memory

Answer: A. Static Random Access Memory

12. DRAM का full form क्या है?

What is the full form of DRAM?

- A. Direct Random Access Memory
- B. Dynamic Random Access Memory
- C. Digital Random Access Memory
- D. Double Random Access Memory

Answer: B. Dynamic Random Access Memory

13. SRAM में data किसमें store होता है?

SRAM stores data using:

- A. Capacitor
- B. Flip-Flop
- C. Magnetic Disk
- D. Laser

Answer: B. Flip-Flop

14. DRAM में data किसमें store होता है?

DRAM stores data mainly using:

- A. Flip-Flop
- B. Capacitor
- C. Optical Cell
- D. Magnetic Head

Answer: B. Capacitor

15. कौन-सी RAM refresh की आवश्यकता रखती है?

Which RAM requires refreshing?

- A. SRAM
- B. DRAM
- C. ROM
- D. PROM

Answer: B. DRAM

16. Cache memory में सामान्यतः कौन-सी RAM technology उपयोग होती है?

Which RAM technology is commonly used for cache memory?

- A. DRAM
- B. SRAM
- C. ROM
- D. EEPROM

Answer: B. SRAM

17. ROM का full form क्या है?

What is the full form of ROM?

- A. Random Only Memory
- B. Read Only Memory
- C. Read Open Memory
- D. Rapid Output Memory

Answer: B. Read Only Memory

18. ROM किस प्रकार की memory है?

ROM is which type of memory?

- A. Volatile
- B. Non-volatile

C. Temporary

D. Cache

Answer: B. Non-volatile

19. PROM का full form क्या है?

What is the full form of PROM?

- A. Programmable Read Only Memory
- B. Permanent Random Output Memory
- C. Primary Read Only Memory
- D. Program Random Only Memory

Answer: A. Programmable Read Only Memory

20. EPROM को erase करने के लिए सामान्यतः क्या उपयोग किया जाता है?

What is commonly used to erase EPROM?

- A. Magnetic field
- B. Ultraviolet light
- C. Heat
- D. Sound waves

Answer: B. Ultraviolet light

21. EEPROM को erase करने के लिए क्या उपयोग किया जाता है?

EEPROM is erased using:

- A. UV light
- B. Electrical signals
- C. Magnetic head
- D. Mechanical process

Answer: B. Electrical signals

22. Secondary Memory का मुख्य उपयोग क्या है?

What is the main use of secondary memory?

- A. Temporary calculation
- B. Long-term storage
- C. CPU instruction decoding
- D. Cache handling

Answer: B. Long-term storage

23. निम्न में से Secondary Memory का example कौन-सा है?

Which is an example of secondary memory?

- A. Register
- B. Cache
- C. SSD
- D. RAM

Answer: C. SSD

24. Secondary Memory सामान्यतः कैसी होती है?

Secondary memory is generally:

- A. Volatile
- B. Non-volatile

C. Temporary
D. Register-based
Answer: B. Non-volatile

25. Cache Memory कहाँ स्थित होती है?

Cache memory is located between:

- A. CPU and RAM
- B. RAM and HDD
- C. Keyboard and CPU
- D. Monitor and CPU

Answer: A. CPU and RAM

26. Cache Memory का मुख्य उद्देश्य क्या है?

What is the main purpose of cache memory?

- A. Permanent storage
- B. CPU और RAM के speed gap को कम करना
- C. Backup लेना
- D. Input देना

Answer: B. CPU और RAM के speed gap को कम करना

27. Cache Hit क्या है?

What is a cache hit?

- A. Data cache में नहीं मिला
- B. Data cache में मिल गया
- C. Cache full हो गई
- D. CPU बंद हो गया

Answer: B. Data cache में मिल गया

28. Cache Miss क्या है?

What is a cache miss?

- A. Requested data cache में नहीं मिलता
- B. Cache automatically clear होती है
- C. CPU RAM को skip करता है
- D. Cache read-only हो जाती है

Answer: A. Requested data cache में नहीं मिलता

29. L1, L2 और L3 किससे संबंधित हैं?

L1, L2 and L3 are related to:

- A. RAM Types
- B. Cache Levels
- C. ROM Types
- D. Disk Levels

Answer: B. Cache Levels

30. सबसे तेज cache level कौन-सा है?

Which is the fastest cache level?

- A. L1
- B. L2

C. L3
D. L4
Answer: A. L1

31. Virtual Memory क्या है?

What is virtual memory?

- A. CPU register
- B. Secondary storage का वह भाग जो RAM extension की तरह काम करे
- C. ROM का part
- D. Cache memory का type

Answer: B. Secondary storage का वह भाग जो RAM extension की तरह काम करे

32. Virtual Memory का मुख्य उद्देश्य क्या है?

What is the main purpose of virtual memory?

- A. CPU clock speed बढ़ाना
- B. Limited RAM होने पर larger logical memory provide करना
- C. ROM को replace करना
- D. Keyboard input store करना

Answer: B. Limited RAM होने पर larger logical memory provide करना

33. Virtual Memory में virtual memory blocks को क्या कहते हैं?

Virtual memory blocks are called:

- A. Sectors
- B. Pages
- C. Tracks
- D. Registers

Answer: B. Pages

34. Physical memory blocks को क्या कहते हैं?

Physical memory blocks are called:

- A. Frames
- B. Pages
- C. Sectors
- D. Nodes

Answer: A. Frames

35. Page Fault कब होता है?

When does a page fault occur?

- A. जब page RAM में मौजूद हो
- B. जब required page RAM में मौजूद न हो
- C. जब CPU बंद हो
- D. जब cache hit हो

Answer: B. जब required page RAM में मौजूद न हो

36. Page Table किसके बीच mapping रखती है?

Page table stores mapping between:

- A. CPU and ALU
- B. Virtual Pages and Physical Frames
- C. Hard Disk and Keyboard
- D. Cache and Register

Answer: B. Virtual Pages and Physical Frames

37. DASD का full form क्या है?

What is the full form of DASD?

- A. Direct Access Storage Device
- B. Digital Access Storage Drive
- C. Direct Auxiliary Storage Data
- D. Data Access System Device

Answer: A. Direct Access Storage Device

38. DASD का प्रमुख गुण क्या है?

What is the main characteristic of DASD?

- A. केवल sequential access
- B. Direct/Random access
- C. केवल read operation
- D. No storage

Answer: B. Direct/Random access

39. निम्न में से DASD का example कौन-सा है?

Which is an example of DASD?

- A. Magnetic Tape
- B. HDD
- C. Register
- D. Cache

Answer: B. HDD

40. Magnetic Tape किस प्रकार का access device है?

Magnetic tape is which type of access device?

- A. Direct Access
- B. Sequential Access
- C. Random Cache Access
- D. Primary Access

Answer: B. Sequential Access

41. HDD में data कैसे store होता है?

How is data stored in HDD?

- A. Magnetic platters पर
- B. Capacitors में
- C. Flip-flops में
- D. CPU registers में

Answer: A. Magnetic platters पर

42. SSD किस technology पर आधारित होती है?

SSD is based on which technology?

- A. Magnetic tape
- B. Flash memory
- C. Optical disc
- D. Vacuum tube

Answer: B. Flash memory

43. Destructive Readout में क्या होता है?

What happens in destructive readout?

- A. Data unchanged रहता है
- B. Reading के बाद data disturb या destroy हो सकता है
- C. Data permanent हो जाता है
- D. Data encrypted हो जाता है

Answer: B. Reading के बाद data disturb या destroy हो सकता है

44. Destructive Readout के बाद क्या आवश्यक हो सकता है?

What may be required after destructive readout?

- A. Rewriting/Restoring data
- B. Formatting disk
- C. Restarting CPU
- D. Deleting memory

Answer: A. Rewriting/Restoring data

45. Non-destructive Readout में क्या होता है?

What happens in non-destructive readout?

- A. Data destroy हो जाता है
- B. Data unchanged रहता है
- C. Memory erase हो जाती है
- D. Data RAM से हट जाता है

Answer: B. Data unchanged रहता है

46. Program Memory का मुख्य उपयोग क्या है?

What is the main use of program memory?

- A. Program instructions store करना
- B. केवल images store करना
- C. Temporary results store करना
- D. Input devices control करना

Answer: A. Program instructions store करना

47. Data Memory किसे store करती है?

Data memory stores:

- A. केवल instructions
- B. Data, variables and intermediate results

C. केवल boot program

D. केवल firmware

Answer: B. Data, variables and intermediate results

48. Program Memory सामान्यतः किस प्रकार की होती है?

Program memory is generally:

A. Mostly non-volatile

B. Always volatile

C. केवल magnetic

D. केवल cache

Answer: A. Mostly non-volatile

49. Data Memory सामान्यतः किससे संबंधित है?

Data memory is generally associated with:

A. ROM

B. RAM

C. CD

D. Tape

Answer: B. RAM

50. Program Counter किससे related है?

Program Counter is related to:

A. अगली instruction का address

B. Secondary storage capacity

C. Hard disk speed

D. Cache miss

Answer: A. अगली instruction का address

51. MMU का full form क्या है?

What is the full form of MMU?

A. Main Memory Unit

B. Memory Management Unit

C. Memory Mapping Utility

D. Main Management Utility

Answer: B. Memory Management Unit

52. MMU का मुख्य कार्य क्या है?

What is the main function of MMU?

A. Keyboard input लेना

B. Virtual address को physical address में translate करना

C. Printer control करना

D. Hard Disk format करना

Answer: B. Virtual address को physical address में translate करना

53. Virtual Address किसके द्वारा generate किया जाता है?

Virtual address is generated by:

A. CPU

B. Hard Disk

C. Printer

D. Monitor

Answer: A. CPU

54. Physical Address किसे indicate करता है?

Physical address indicates:

A. Actual RAM location

B. Cache level

C. File name

D. Disk sector only

Answer: A. Actual RAM location

55. TLB का full form क्या है?

What is the full form of TLB?

A. Translation Lookaside Buffer

B. Temporary Logical Buffer

C. Transfer Location Block

D. Table Lookup Bus

Answer: A. Translation Lookaside Buffer

56. TLB का उपयोग किसलिए किया जाता है?

TLB is used for:

A. Frequently used address translations store करने के लिए

B. Images store करने के लिए

C. Backup लेने के लिए

D. ROM erase करने के लिए

Answer: A. Frequently used address translations store करने के लिए

57. TLB Hit का अर्थ क्या है?

What does TLB Hit mean?

A. Translation TLB में मिल गई

B. Page disk में नहीं है

C. RAM full है

D. CPU slow है

Answer: A. Translation TLB में मिल गई

58. MMU memory protection में क्या करती है?

What does MMU do in memory protection?

A. Unauthorized access को restrict करती है

B. Hard Disk format करती है

C. CPU speed बढ़ाती है

D. Program compile करती है

Answer: A. Unauthorized access को restrict करती है

59. R/W/X permissions का अर्थ क्या है?

What do R/W/X permissions mean?

- A. Run/Wait/Exit
- B. Read/Write/Execute
- C. Read/Work/Exchange
- D. Register/Write/Extra

Answer: B. Read/Write/Execute

60. MMU और Operating System मिलकर किसमें मदद करते हैं?

MMU and Operating System together help in:

- A. Memory Management
- B. Printing only
- C. Display resolution
- D. Keyboard layout

Answer: A. Memory Management

Quick Answer Key

1-C, 2-C, 3-C, 4-B, 5-B, 6-B, 7-B, 8-B, 9-B, 10-B
11-A, 12-B, 13-B, 14-B, 15-B, 16-B, 17-B, 18-B,
19-A, 20-B
21-B, 22-B, 23-C, 24-B, 25-A, 26-B, 27-B, 28-A,
29-B, 30-A
31-B, 32-B, 33-B, 34-A, 35-B, 36-B, 37-A, 38-B,
39-B, 40-B
41-A, 42-B, 43-B, 44-A, 45-B, 46-A, 47-B, 48-A,
49-B, 50-A
51-B, 52-B, 53-A, 54-A, 55-A, 56-A, 57-A, 58-A,
59-B, 60-A

create more question answer i want to provide
this mcq to my students they can prepare for
exam

Bilkul. Neeche main **Unit III – Memory** ke liye
aur **80 additional MCQs** de raha hoon, taaki
aap students ko ek strong practice bank de
saken. Ye **Hindi-English bilingual**, UG level,
exam-oriented hain.

Unit III – Memory

**Additional MCQ Question Bank with Answers
Questions 61–140**

A. Memory Hierarchy

61. Memory hierarchy में cost per bit सबसे अधिक कहाँ होती है?

In memory hierarchy, cost per bit is highest in:

- A. HDD
- B. RAM
- C. Registers
- D. Magnetic Tape

Answer: C. Registers

62. Memory hierarchy में सबसे अधिक storage capacity सामान्यतः किस level पर होती है?
Which level generally provides the largest storage capacity?

- A. Register
 - B. Cache
 - C. RAM
 - D. Secondary/Backup Storage
- Answer: D. Secondary/Backup Storage**
-

63. Access time का अर्थ क्या है?

What is meant by access time?

- A. Memory बनाने का समय
- B. Data locate और access करने में लगने वाला समय
- C. Computer start होने का समय
- D. Data delete करने का समय

Answer: B. Data locate और access करने में लगने वाला समय

64. Memory hierarchy में top से bottom जाने पर access time:

Moving from top to bottom in memory hierarchy, access time:

- A. Decreases
- B. Increases
- C. Remains constant
- D. Becomes zero

Answer: B. Increases

65. CPU के सबसे निकट कौन-सी memory होती है?

Which memory is closest to the CPU?

- A. Hard Disk
- B. Registers
- C. DVD
- D. Magnetic Tape

Answer: B. Registers

66. Memory hierarchy का उपयोग primarily किसलिए किया जाता है?

Memory hierarchy is primarily used to:

- A. Increase monitor resolution
- B. Balance speed, cost and capacity
- C. Control printer
- D. Increase keyboard speed

Answer: B. Balance speed, cost and capacity

67. निम्न में से कौन memory hierarchy का सही क्रम है?

Which is the correct order of memory hierarchy?

- A. HDD → RAM → Cache → Register
- B. Register → Cache → RAM → Secondary Memory

C. RAM → Register → HDD → Cache
D. Cache → HDD → RAM → Register
Answer: B. Register → Cache → RAM → Secondary Memory

68. Faster memory generally होती है:

Faster memory is generally:

- A. Cheaper and larger
- B. Costlier and smaller
- C. Slower and larger
- D. Non-electronic

Answer: B. Costlier and smaller

B. Primary Memory

69. Primary memory का मुख्य काम क्या है?

What is the main function of primary memory?

- A. Permanent backup only
- B. CPU को currently required data और instructions provide करना
- C. Printing करना
- D. Internet connect करना

Answer: B. CPU को currently required data और instructions provide करना

70. कौन-सी memory CPU द्वारा directly accessible होती है?

Which memory is directly accessible by CPU?

- A. Primary Memory
- B. Magnetic Tape only
- C. DVD only
- D. External Hard Disk only

Answer: A. Primary Memory

71. RAM को Random Access Memory क्यों कहा जाता है?

Why is RAM called Random Access Memory?

- A. Data random होता है
- B. Any memory location can be accessed directly
- C. Data automatically changes
- D. It works randomly

Answer: B. Any memory location can be accessed directly

72. RAM का सामान्य उपयोग है:

RAM is commonly used for:

- A. Currently running programs
- B. Permanent archival only
- C. Optical storage
- D. BIOS chip manufacture

Answer: A. Currently running programs

73. कौन-सी memory read और write दोनों operations support करती है?

Which memory supports both read and write operations?

- A. RAM
- B. Traditional ROM only
- C. CD-ROM only
- D. PROM only

Answer: A. RAM

74. SRAM, DRAM की तुलना में:

Compared with DRAM, SRAM is:

- A. Slower
- B. Faster
- C. Always larger
- D. Optical

Answer: B. Faster

75. DRAM का major advantage क्या है?

What is a major advantage of DRAM?

- A. No refresh required
- B. Higher density and lower cost
- C. Permanent storage
- D. No power needed

Answer: B. Higher density and lower cost

76. SRAM का major disadvantage क्या है?

What is a major disadvantage of SRAM?

- A. Very slow
- B. Expensive
- C. Non-readable
- D. Sequential access only

Answer: B. Expensive

77. DRAM में refresh की आवश्यकता क्यों होती है?

Why does DRAM require refresh?

- A. Capacitor charge gradually leaks
- B. CPU stops
- C. ROM becomes full
- D. HDD becomes slow

Answer: A. Capacitor charge gradually leaks

78. Main memory में commonly कौन-सी RAM use होती है?

Which RAM is commonly used as main memory?

- A. SRAM
- B. DRAM
- C. PROM
- D. EPROM

Answer: B. DRAM

C. ROM

79. ROM में stored data power off होने पर:

Data stored in ROM after power off:

- A. Lost हो जाता है
- B. Remains stored
- C. RAM में transfer हो जाता है
- D. Cache में चला जाता है

Answer: B. Remains stored

80. Firmware सामान्यतः कहाँ store किया जाता है?

Firmware is commonly stored in:

- A. ROM/Flash
- B. CPU Register only
- C. Magnetic Tape only
- D. Cache only

Answer: A. ROM/Flash

81. PROM की विशेषता क्या है?

What is a characteristic of PROM?

- A. It can normally be programmed once
- B. It is volatile
- C. It needs constant refresh
- D. It is a cache memory

Answer: A. It can normally be programmed once

82. EPROM की पहचान किससे जुड़ी है?

EPROM is associated with:

- A. UV erasing
- B. Magnetic erasing
- C. Mechanical erasing
- D. Audio signals

Answer: A. UV erasing

83. EEPROM का मुख्य लाभ क्या है?

What is the main advantage of EEPROM?

- A. Electrically erasable and reprogrammable
- B. Cannot be rewritten
- C. Requires UV light always
- D. Volatile nature

Answer: A. Electrically erasable and reprogrammable

84. निम्न में से non-volatile memory कौन-सी है?

Which of the following is non-volatile?

- A. SRAM
- B. DRAM
- C. ROM
- D. Cache

Answer: C. ROM

D. Secondary Memory

85. Secondary memory को क्या भी कहा जाता है?

Secondary memory is also called:

- A. Auxiliary Memory
- B. CPU Memory
- C. Register Memory
- D. Control Memory only

Answer: A. Auxiliary Memory

86. Secondary memory की capacity generally होती है:

Secondary memory generally has:

- A. Very small capacity
- B. Large capacity
- C. Zero capacity
- D. Same as register

Answer: B. Large capacity

87. HDD किस type की storage technology use करता है?

HDD uses which storage technology?

- A. Magnetic
- B. Optical only
- C. Flip-flop
- D. Capacitor only

Answer: A. Magnetic

88. SSD में moving mechanical parts:

SSD has moving mechanical parts:

- A. Yes
- B. No
- C. Only in old models
- D. Always two

Answer: B. No

89. SSD का major advantage HDD पर क्या है?

What is a major advantage of SSD over HDD?

- A. Slower speed
- B. Faster access
- C. More noise
- D. More moving parts

Answer: B. Faster access

90. HDD में circular paths को क्या कहते हैं?

Circular paths on an HDD platter are called:

- A. Frames
- B. Tracks
- C. Pages
- D. Blocks of RAM

Answer: B. Tracks

91. Track को छोटे parts में divide करने पर उन्हें क्या कहते हैं?

A track is divided into smaller parts called:

- A. Sectors
- B. Frames
- C. Pages
- D. Registers

Answer: A. Sectors

**92. CD/DVD किस storage category में आते हैं?
CD/DVD belong to which storage category?**

- A. Optical Storage
- B. Magnetic Storage
- C. Primary Memory
- D. Register Storage

Answer: A. Optical Storage

93. Pen Drive किस type की memory का example है?

Pen Drive is an example of:

- A. Flash Memory
- B. SRAM
- C. DRAM
- D. Magnetic Tape

Answer: A. Flash Memory

94. Magnetic Tape का मुख्य उपयोग किसमें होता है?

Magnetic tape is mainly used for:

- A. Cache
- B. Backup and archival
- C. CPU register
- D. ALU

Answer: B. Backup and archival

E. Cache Memory

95. Cache Memory की capacity RAM की तुलना में generally:

Compared with RAM, cache capacity is generally:

- A. Larger
- B. Smaller
- C. Same
- D. Unlimited

Answer: B. Smaller

96. Cache Memory का cost per bit RAM की तुलना में:

Cache memory cost per bit compared with RAM is:

- A. Lower
- B. Higher
- C. Same
- D. Zero

Answer: B. Higher

97. Cache memory frequently used

information क्यों store करती है?

Why does cache store frequently used information?

- A. To reduce average memory access time
- B. To slow the CPU
- C. To increase disk size
- D. To replace ROM

Answer: A. To reduce average memory access time

98. L1 Cache सामान्यतः:

L1 Cache is generally:

- A. Largest and slowest cache
- B. Smallest and fastest cache
- C. Secondary memory
- D. Optical storage

Answer: B. Smallest and fastest cache

99. L3 Cache, L1 की तुलना में सामान्यतः:

Compared with L1 cache, L3 cache is generally:

- A. Smaller and faster
- B. Larger and slower
- C. Same size
- D. A secondary disk

Answer: B. Larger and slower

100. Cache Hit होने पर CPU को data कहाँ से मिलता है?

During a cache hit, CPU gets data from:

- A. Cache
- B. HDD only
- C. Tape
- D. DVD

Answer: A. Cache

101. Cache Miss होने पर next likely source कौन-सा है?

After a cache miss, the next likely source is:

- A. Main Memory
- B. Printer
- C. Keyboard
- D. Monitor

Answer: A. Main Memory

102. Cache Memory किस principle पर efficient work करती है?

Cache memory works efficiently mainly because of:

- A. Locality of Reference
- B. Sequential printing
- C. Optical reflection
- D. Magnetic induction only

Answer: A. Locality of Reference

103. Temporal Locality का अर्थ है:

Temporal locality means:

- A. Recently used data is likely to be used again
- B. Nearby locations are likely to be accessed
- C. Data never repeats
- D. Only sequential storage is used

Answer: A. Recently used data is likely to be used again

104. Spatial Locality का अर्थ है:

Spatial locality means:

- A. Recently accessed nearby locations may be accessed soon
- B. Same item is never reused
- C. Only ROM is accessed
- D. Cache cannot be used

Answer: A. Recently accessed nearby locations may be accessed soon

F. Virtual Memory

105. Virtual Memory physical RAM का:

Virtual memory acts as:

- A. Complete replacement always
- B. Logical extension using secondary storage
- C. Cache register
- D. ROM chip

Answer: B. Logical extension using secondary storage

106. Virtual Memory किसके द्वारा manage की जाती है?

Virtual memory is mainly managed by:

- A. Operating System with MMU support
- B. Keyboard
- C. Printer
- D. Monitor

Answer: A. Operating System with MMU support

107. Paging में virtual memory divide होती है:

In paging, virtual memory is divided into:

- A. Pages
- B. Sectors only
- C. Registers
- D. Tracks only

Answer: A. Pages

108. Physical RAM paging में divide होती है:

In paging, physical RAM is divided into:

- A. Frames
- B. Tracks
- C. Files
- D. Programs

Answer: A. Frames

109. सामान्यतः Page size और Frame size:

Usually, page size and frame size are:

- A. Equal
- B. Completely unrelated
- C. Page is always twice frame
- D. Frame is always zero

Answer: A. Equal

110. Page Fault के दौरान required page कहाँ से load हो सकती है?

During a page fault, the required page may be loaded from:

- A. Secondary Storage
- B. Keyboard
- C. Register
- D. Printer buffer only

Answer: A. Secondary Storage

111. Excessive page faults से कौन-सी problem हो सकती है?

Excessive page faults may cause:

- A. Thrashing
- B. Faster execution
- C. ROM programming
- D. Cache enlargement

Answer: A. Thrashing

112. Thrashing का result क्या होता है?

What is the result of thrashing?

- A. System performance decreases significantly
- B. CPU becomes permanently faster
- C. RAM becomes non-volatile
- D. Disk capacity doubles

Answer: A. System performance decreases significantly

113. Virtual address में generally कौन-से parts होते हैं?

A virtual address generally contains:

- A. Page Number and Offset
- B. Track and Sector only
- C. Register and Cache
- D. File and Folder

Answer: A. Page Number and Offset

114. Page Table का main purpose क्या है?

What is the main purpose of a page table?

- A. Map virtual pages to physical frames
- B. Store audio
- C. Format hard disk
- D. Print data

Answer: A. Map virtual pages to physical frames

G. DASD

115. DASD में data access किस प्रकार होता है?

In DASD, data access is:

- A. Direct/Random
- B. Only sequential
- C. Manual
- D. Impossible

Answer: A. Direct/Random

116. Direct Access का अर्थ है:

Direct access means:

- A. Required block can be accessed without reading all previous blocks
- B. All data must be read sequentially
- C. Only first record can be read
- D. Only CPU registers can be used

Answer: A. Required block can be accessed without reading all previous blocks

117. Sequential Access का common example कौन-सा है?

Which is a common example of sequential access?

- A. Magnetic Tape
- B. RAM
- C. Register
- D. Cache

Answer: A. Magnetic Tape

118. HDD में read/write head का काम क्या है? What is the function of the read/write head in HDD?

- A. Read/write data on magnetic platter
- B. Increase RAM
- C. Control monitor
- D. Store data in capacitor

Answer: A. Read/write data on magnetic platter

119. SSD में data mainly कहाँ store होता है?

In SSD, data is mainly stored in:

- A. NAND Flash Memory
- B. Magnetic platter
- C. Optical layer only
- D. CPU register

Answer: A. NAND Flash Memory

120. HDD, SSD की तुलना में generally: Compared with SSD, HDD is generally:

- A. Faster
- B. Slower
- C. Has no moving parts
- D. Completely silent

Answer: B. Slower

H. Destructive and Non-destructive Readout

121. Destructive Readout में original information:

In destructive readout, original information:

- A. May be destroyed or altered during reading
- B. Always remains unchanged
- C. Becomes encrypted
- D. Moves to ROM

Answer: A. May be destroyed or altered during reading

122. Destructive Readout के बाद data restore करने की process को क्या कहा जा सकता है? After destructive readout, data may need to be:

- A. Rewritten/Restored
- B. Printed
- C. Compiled
- D. Uploaded

Answer: A. Rewritten/Restored

123. Non-destructive Readout का advantage क्या है?

What is an advantage of non-destructive readout?

- A. Data remains unchanged after reading
- B. Data is destroyed after each read
- C. Memory becomes slower
- D. Requires rewriting after every read

Answer: A. Data remains unchanged after reading

124. Modern semiconductor memory read operation सामान्यतः होती है:

Modern semiconductor memory read operation is generally:

- A. Non-destructive
- B. Always destructive
- C. Mechanical
- D. Sequential only

Answer: A. Non-destructive

I. Program and Data Memory

125. Program Memory में क्या store होता है?

What is stored in program memory?

- A. Instructions
- B. Only user photos
- C. Mouse movement
- D. Printer ink level

Answer: A. Instructions

126. Data Memory में क्या store होता है?

What is stored in data memory?

- A. Variables and intermediate results
- B. Only machine instructions

- C. Only firmware
- D. Only boot loader

Answer: A. Variables and intermediate results

127. Program Memory के लिए commonly कौन-सी memory use हो सकती है?

Which memory may commonly be used as program memory?

- A. ROM/Flash
- B. Magnetic Tape only
- C. Cache only
- D. Register only

Answer: A. ROM/Flash

128. Data Memory के लिए commonly कौन-सी memory use होती है?

Which memory is commonly used as data memory?

- A. RAM
- B. PROM only
- C. EPROM only
- D. CD-ROM only

Answer: A. RAM

129. Program execution के दौरान variables: During program execution, variables are generally stored in:

- A. Data Memory
- B. Program Memory only
- C. Magnetic Tape
- D. DVD only

Answer: A. Data Memory

130. Harvard Architecture में:

In Harvard Architecture:

- A. Program and data memory are separate
- B. Program and data always share one memory
- C. No memory is used
- D. Only cache is used

Answer: A. Program and data memory are separate

131. Von Neumann Architecture में:

In Von Neumann Architecture:

- A. Program and data share the same memory space
- B. Program and data must be physically separate
- C. No CPU is used
- D. Only ROM is used

Answer: A. Program and data share the same memory space

J. MMU

132. MMU किसके बीच bridge की तरह काम करती है?

MMU acts as a bridge between:

- A. CPU virtual addresses and physical memory
- B. Printer and scanner
- C. Monitor and keyboard
- D. Mouse and speaker

Answer: A. CPU virtual addresses and physical memory

133. MMU address translation में किस structure का उपयोग करती है?

MMU uses which structure for address translation?

- A. Page Table
- B. File table only
- C. Track table only
- D. Keyboard map

Answer: A. Page Table

134. TLB किसका छोटा high-speed cache है?

TLB is a small high-speed cache of:

- A. Address translations
- B. User files
- C. Videos
- D. Printer commands

Answer: A. Address translations

135. TLB Miss होने पर क्या होता है?

What happens on a TLB miss?

- A. Page table is consulted
- B. CPU is permanently stopped
- C. RAM is deleted
- D. HDD is formatted

Answer: A. Page table is consulted

136. MMU कौन-सी permissions check कर सकती है?

Which permissions can MMU help check?

- A. Read, Write, Execute
- B. Print, Scan, Copy
- C. Play, Pause, Stop
- D. Upload, Download only

Answer: A. Read, Write, Execute

137. Process Isolation का मतलब क्या है?

What does process isolation mean?

- A. One process is prevented from improperly accessing another process's memory
- B. All processes use one unprotected area
- C. Only one process can ever run
- D. CPU has no memory

Answer: A. One process is prevented from improperly accessing another process's memory

138. Page Fault कौन handle करता है?

Who primarily handles a page fault?

- A. Operating System
- B. Keyboard
- C. Monitor
- D. Printer

Answer: A. Operating System

139. MMU का कौन-सा feature system security improve करता है?

Which MMU feature improves system security?

- A. Memory Protection
- B. Screen brightness
- C. Audio buffering
- D. Disk formatting

Answer: A. Memory Protection

140. MMU के बारे में कौन-सा statement सही है?

Which statement about MMU is correct?

- A. It translates virtual addresses into physical addresses
- B. It is a secondary storage device
- C. It is a type of optical disc
- D. It stores only music files

Answer: A. It translates virtual addresses into physical addresses
