### 101. The memory blocks are mapped on to the cache with the help of \_\_\_\_\_

- a) Hash functions
- b) Vectors
- c) Mapping functions
- d) None of the mentioned

### 102. During a write operation if the required block is not present in the cache then \_\_\_\_\_ occurs.

- a) Write latency
- b) Write hit
- c) Write delay
- d) Write miss

### **103.** In \_\_\_\_\_ protocol the information is directly written into main memory.

- a) Write through
- b) Write back
- c) Write first
- d) None of the mentioned

#### 104. The only drawback of using the early start protocol is

- a) Time delay
- b) Complexity of circuit
- c) Latency
- d) High miss rate

### **105.** The method of mapping the consecutive memory blocks to consecutive cache blocks is called \_\_\_\_\_

- a) Set associative
- b) Associative
- c) Direct
- d) Indirect

### 106. While using the direct mapping technique, in a 16-bit system the higher order 5 bits is used for \_\_\_\_\_

- a) Tag b) Block c) Word
- d) Id

# **107. In direct mapping the presence of the block inmemory is checked with the help of block field.**a) Trueb) False

108. In associative mapping, in a 16-bit system the tag field has \_\_\_\_\_ bits.

a) 12
b) 8
c) 9
d) 10

### **109. The associative mapping is costlier than direct mapping.**

a) True b) False

### 110. The technique of searching for a block by going through all the tags is \_\_\_\_\_

a) Linear search

b) Binary search

c) Associative search

d) None of the mentioned

### 111. The set associative map technique is a combination of the direct and associative technique.

a) True b) False

112. In set-associative technique, the blocks are grouped into \_\_\_\_\_\_ sets.

a) 4
b) 8
c) 12
d) 6

### 113. A control bit called \_\_\_\_ has to be provided to each block in set-associative.

a) Idol bitb) Valid bitc) Reference bitd) All of the mentioned

### 114. The bit used to indicate whether the block was recently used or not is \_\_\_\_\_

- a) Idol bit
- b) Control bit
- c) Reference bit
- d) Dirty bit

#### 115. Data which is not up-to date is called as \_\_\_\_\_

- a) Spoilt data
- b) Stale data
- c) Dirty data
- d) None of the mentioned

### 116. The main memory is structured into modules each with its own address register called \_\_\_\_\_

- a) ABR
- b) TLB
- c) PC
- d) IR

### 117. When consecutive memory locations are accessed only one module is accessed at a time.

a) True b) False

### **118.** In memory interleaving, the lower order bits of the address are used to

a) Get the data

b) Get the address of the module

c) Get the address of the data within the module

d) None of the mentioned

### 119. The number successful accesses to memory stated as a fraction is called as \_\_\_\_\_

- a) Hit rate
- b) Miss rate
- c) Success rate
- d) Access rate

### 120. The number failed attempts to access memory, stated in the form of fraction is called as \_\_\_\_\_

- a) Hit rate
- b) Miss rate
- c) Failure rate
- d) Delay rate

121. In associative mapping during LRU, the counter of the new block is set to '0' and all the others are incremented by one, when \_\_\_\_\_ occurs.
a) Delay
b) Miss
c) Hit
d) Delayed hit

### 122. If hit rates are well below 0.9, then they're called as speedy computers.

a) True b) False

123. The extra time needed to bring the data into memory in case of a miss is called as \_\_\_\_\_

- a) Delay
- b) Propagation time
- c) Miss penalty
- d) None of the mentioned

### 124. \_\_\_\_\_ are the different type/s of generating control signals.

- a) Micro-programmed
- b) Hardwired
- c) Micro-instruction
- d) Both Micro-programmed and Hardwired

#### 125. The type of control signal are generated based on,

- a) contents of the step counter
- b) Contents of IR
- c) Contents of condition flags
- d) All of the mentioned

#### 126. What does the end instruction do?

- a) It ends the generation of a signal
- b) It ends the complete generation process
- c) It starts a new instruction fetch cycle and resets the counter
- d) It is used to shift the control to the processor

127. The name hardwired came because the sequence of operations carried out are determined by the wiring.a) Trueb) False

#### **128.** The benefit of using this approach is

a) It is cost effective

- b) It is highly efficient
- c) It is very reliable
- d) It increases the speed of operation

#### 129. The disadvantage/s of the hardwired approach is

a) It is less flexible

b) It cannot be used for complex instructions

c) It is costly

d) less flexible & cannot be used for complex instructions

### 130. In micro-programmed approach, the signals are generated by \_\_\_\_\_

- a) Machine instructions
- b) System programs
- c) Utility tools
- d) None of the mentioned

### 131. A word whose individual bits represent a control signal is \_\_\_\_\_

- a) Command word
- b) Control word
- c) Co-ordination word
- d) Generation word

### 132. A sequence of control words corresponding to a control sequence is called \_\_\_\_\_

- a) Micro routine
- b) Micro function
- c) Micro procedure
- d) None of the mentioned

### 133. Individual control words of the micro routine are called as \_\_\_\_\_

- a) Micro task
- b) Micro operation
- c) Micro instruction
- d) Micro command

### 134. The special memory used to store the micro routines of a computer is \_\_\_\_\_

a) Control tableb) Control storec) Control martd) Control shop

135. To read the control words sequentially \_\_\_\_\_ is used.

- a) PC
- b) IR
- c) UPC
- d) None of the mentioned

### 136. Every time a new instruction is loaded into IR the output of \_\_\_\_\_\_ is loaded into UPC.

- a) Starting address generator
- b) Loader
- c) Linker
- d) Clock

### 137. The signals are grouped such that mutually exclusive signals are put together.

a) True b) False

## 138. Highly encoded schemes that use compact codes to specify a small number of functions in each micro instruction is \_\_\_\_\_

- a) Horizontal organisation
- b) Vertical organisation
- c) Diagonal organisation
- d) None of the mentioned

### **139. The directly mapped cache no replacement algorithm is required.**

- a) True
- b) False

### 140. The algorithm which replaces the block which has not been referenced for a while is called \_\_\_\_\_

- a) LRU
- b) ORF
- c) Direct
- d) Both LRU and ORF

### 141. The counter that keeps track of how many times a block is most likely used is \_\_\_\_\_

- a) Count
- b) Reference counter
- c) Use counter
- d) Probable counter

### 142. \_\_\_\_ have been developed specifically for pipelined systems.

- a) Utility software
- b) Speed up utilities
- c) Optimizing compilers
- d) None of the mentioned

### 143. Each stage in pipelining should be completed within \_\_\_\_\_ cycle.

a) 1
b) 2
c) 3
d) 4

#### 145. The periods of time when the unit is idle is called as

- a) Stalls
- b) Bubbles
- c) Hazards
- d) Both Stalls and Bubbles

### 146. The contention for the usage of a hardware device is called as \_\_\_\_\_

- a) Structural hazard
- b) Stalk
- c) Deadlock
- d) None of the mentioned

### 147. The situation where in the data of operands are not available is called \_\_\_\_\_

- a) Data hazard
- b) Stock
- c) Deadlock
- d) Structural hazard

### 148. The computer architecture aimed at reducing the time of execution of instructions is \_\_\_\_\_

- a) CISC b) RISC
- c) ISA d) ANNA

### 149. The RISC processor has a more complicated design than CISC.

a) True b) False

### **150.** The iconic feature of the RISC machine among the following are

- a) Reduced number of addressing modes
- b) Increased memory size
- c) Having a branch delay slot
- d) All of the mentioned