

NARUMALAR DEEPAM ACADEMY  
PG TRB – COMPUTER INSTRUCTOR

Question Bank

**1. Python is an example of which type of programming language?**

- a) Compiled language b) Interpreted language c) Assembly language d) Machine language

**Answer: b) Interpreted language**

**2. Which of the following is NOT a valid Python data type?**

- a) int b) float c) char d) string

**Answer: c) char**

**3. Match the Python data types with their examples:**

Column A	Column B
1. int	A. [1, 2, 3]
2. float	B. True
3. Boolean	C. 42
4. list	D. 3.14

- a) 1-C, 2-D, 3-B, 4-A b) 1-A, 2-B, 3-C, 4-D c) 1-C, 2-A, 3-B, 4-D d) 1-D, 2-C, 3-B, 4-A

**Answer: a) 1-C, 2-D, 3-B, 4-A**

**4. Statement A: Python variables do not need explicit type declaration. Statement B: Python is dynamically typed. Choose the correct option:**

- a) Both A and B are true b) A is true, B is false c) A is false, B is true d) Both A and B are false

**Answer: a) Both A and B are true**

**5. What is the output of: print(type(3.0))**

- a) <class 'int'> b) <class 'float'> c) <class 'double'> d) <class 'decimal'>

**6. Which of the following is NOT a basic HTML tag?**

- a) <html> b) <head> c) <body> d) <script>

**Answer: d) <script>**

**7. Match the HTML formatting tags with their purposes:**

Column A	Column B
1. <b>	A. Italic text
2. <i>	B. Bold text
3. <u>	C. Strikethrough text
4. <s>	D. Underlined text

a) 1-B, 2-A, 3-D, 4-C b) 1-A, 2-B, 3-C, 4-D c) 1-B, 2-C, 3-D, 4-A d) 1-D, 2-A, 3-B, 4-C

**Answer: a) 1-B, 2-A, 3-D, 4-C**

**8. Statement A: The <font> tag is deprecated in HTML5. Statement B: CSS should be used instead of <font> tag for styling. Choose the correct option:**

a) Both A and B are true b) A is true, B is false c) A is false, B is true d) Both A and B are false

**Answer: a) Both A and B are true**

**9. Which attribute is used to specify color in HTML?**

a) bgcolor b) color c) style d) All of the above

**Answer: d) All of the above**

**10. What is the correct way to specify a hexadecimal color value?**

a) color="red" b) color="#FF0000" c) color="rgb(255,0,0)" d) Both b and c

**Answer: d) Both b and c**

**11. Time complexity of an algorithm measures:**

a) Running time as function of input size  
b) Number of memory accesses  
c) Code lines  
d) Input type only

**Answer: a) Running time as function of input size**

**12. Space complexity denotes:**

a) Total memory used by algorithm  
b) Recursion depth  
c) Number of CPU cycles  
d) Output size

**Answer: a) Total memory used by algorithm**

**13. The asymptotic NOTATION  $O(f(n))$  expresses:**

- a) Upper bound
- b) Lower bound
- c) Average bound
- d) Both bounds

**Answer: a) Upper bound**

**14. The notation  $\Theta(f(n))$  expresses:**

- a) Tight bound
- b) Lower bound
- c) Upper bound
- d) No bound

**Answer: a) Tight bound**

**15.  $\Omega(f(n))$  is used for:**

- a) Lower bound
- b) Upper bound
- c) Tight bound
- d) None

**Answer: a) Lower bound**

**16. A deadlock occurs when:**

- a) Two or more processes are unable to proceed as each is waiting for a resource held by another
- b) Processes execute sequentially
- c) Resources are unlimited
- d) Only one process runs at a time

**Answer: a) Two or more processes are unable to proceed as each is waiting for a resource held by another**

**17. Which is NOT a necessary condition for deadlock?**

- a) Mutual exclusion
- b) Hold and wait
- c) Preemption
- d) Circular wait

**Answer: c) Preemption**

**18. The “mutual exclusion” condition for deadlock means:**

- a) Processes can share resources freely
- b) Only one process can use a resource at any time
- c) No process holds any resources
- d) Resources are always idle

**Answer: b) Only one process can use a resource at any time**

**19. “Hold-and-wait” condition exists when:**

- a) Each process holds at least one resource and waits for another

- b) No process waits
- c) All processes finish instantly
- d) Resources are allocated randomly

**Answer: a) Each process holds at least one resource and waits for another**

**20. “No preemption” means:**

- a) Resources may be taken from a process involuntarily
- b) Only voluntary release of resources
- c) Processes are forced to terminate
- d) No resource usage

**Answer: b) Only voluntary release of resources**

**21. The “circular wait” condition for deadlock involves:**

- a) All processes waiting in a circle for resources
- b) Resources allocated by round-robin
- c) No shared resources
- d) Processes scheduled sequentially

**Answer: a) All processes waiting in a circle for resources**

**22. Which is NOT a component of a data communication system?**

- a) Sender
- b) Receiver
- c) Storage Device
- d) Transmission Medium

**Answer: c**

**23. The device which sends the message is called:**

- a) Receiver
- b) Sender
- c) Transmitter
- d) Router

**Answer: b**

**24. The message in data communication is:**

- a) The transmitted data
- b) The Protocol used
- c) The transmission medium
- d) None

**Answer: a**

**25. A transmission medium can be:**

- a) Guided (wired)
- b) Unguided (wireless)
- c) Both a and b
- d) None of above

**Answer: c**