

Mock Test 1

Use this as a timed simulation.

Timing

- Aptitude: 30 questions / 30 minutes
 - Technical: 30 questions / 30 minutes
 - Pseudocode: 20 questions / 20 minutes
 - Coding: 2 questions / 30 minutes
-

Section A: Aptitude

Questions

Q1

25% of 480 is:

- A. 90
- B. 100
- C. 110
- D. 120

Q2

If a number is decreased by 20% and becomes 160, original number is:

- A. 180
- B. 190
- C. 200
- D. 220

Q3

A man buys an article for ₹500 and sells it for ₹575. Profit percentage?

- A. 10%
- B. 12%
- C. 15%
- D. 20%

Q4

Average of 6 numbers is 18. Their sum is:

- A. 96
- B. 100
- C. 108
- D. 116

Q5

Two numbers are in ratio 2:5 and sum is 84. Larger number?

- A. 48
- B. 50
- C. 55
- D. 60

Q6

A can do work in 10 days and B in 15 days. Together:

- A. 5 days
- B. 6 days
- C. 7 days
- D. 8 days

Q7

60 km/h in m/s:

- A. 15
- B. 16.67
- C. 18
- D. 20

Q8

Simple interest on ₹4000 at 5% for 3 years:

- A. ₹400
- B. ₹500
- C. ₹600
- D. ₹700

Q9

Find next: 2, 5, 10, 17, 26, ?

- A. 35
- B. 36
- C. 37
- D. 38

Q10

Find next: A, C, F, J, O, ?

- A. T
- B. U
- C. V
- D. W

Q11

If CAT = DBU, then DOG = ?

- A. EPH
- B. EOG
- C. CNE
- D. FPI

Q12

A walks 4 km north, 3 km east. Shortest distance from start?

- A. 4 km
- B. 5 km
- C. 6 km
- D. 7 km

Q13

All pens are books. Some books are papers. Conclusion: Some pens are papers.

- A. Definitely true
- B. Definitely false
- C. Cannot be determined
- D. None

Q14

Choose correct: He has been working here ____ Monday.

- A. for
- B. since
- C. from
- D. by

Q15

Choose synonym of **rapid** .

- A. slow
- B. fast
- C. weak
- D. calm

Q16

Choose antonym of **ancient** .

- A. old
- B. modern
- C. historic
- D. primitive

Q17

Correct sentence:

- A. Neither of the boys are ready.
- B. Neither of the boys is ready.
- C. Neither boys is ready.
- D. Neither boy are ready.

Q18

He is interested ____ learning Python.

- A. on
- B. at
- C. in
- D. for

Q19

LCM of 12 and 18:

- A. 24
- B. 30
- C. 36
- D. 48

Q20

Probability of getting head when one coin is tossed:

- A. $\frac{1}{4}$
- B. $\frac{1}{3}$
- C. $\frac{1}{2}$
- D. 1

Q21

A pipe fills tank in 8 hours and another empties in 16 hours. Together:

- A. 8 hours
- B. 12 hours
- C. 16 hours
- D. 24 hours

Q22

Find odd one out:

- A. 8
- B. 27
- C. 64
- D. 100

Q23

If $+$ means $\times$ and $\times$ means $+$, then $2 + 3 \times 4$ equals:

- A. 10
- B. 11
- C. 14
- D. 20

Q24

Change to passive: "She writes a letter."

- A. A letter is written by her.
- B. A letter was written by her.
- C. A letter has written by her.
- D. A letter writes by her.

Q25

What is 15% of 260?

- A. 29
- B. 35
- C. 39
- D. 42

Q26

If marked price is ₹800 and discount is 10%, selling price is:

- A. ₹700
- B. ₹710
- C. ₹720
- D. ₹750

Q27

Find next: 1, 1, 2, 3, 5, 8, ?

- A. 11
- B. 12
- C. 13
- D. 15

Q28

Mother's brother is:

- A. uncle
- B. aunt
- C. cousin
- D. nephew

Q29

Choose correct article: He is ____ honest man.

- A. a
- B. an
- C. the
- D. no article

Q30

Average of 10, 20, 30, 40:

- A. 20
 - B. 25
 - C. 30
 - D. 35
-

Section B: Technical

Q1

Stack follows:

- A. FIFO
- B. LIFO
- C. Random order
- D. Priority only

Q2

Queue follows:

- A. FIFO
- B. LIFO
- C. Tree order
- D. Hash order

Q3

Binary search complexity:

- A. $O(1)$
- B. $O(\log n)$
- C. $O(n)$
- D. $O(n^2)$

Q4

DFS generally uses:

- A. queue
- B. stack/recursion
- C. heap
- D. array only

Q5

Average hash search:

- A. $O(1)$
- B. $O(\log n)$
- C. $O(n)$
- D. $O(n^2)$

Q6

Round Robin uses:

- A. priority only
- B. time quantum
- C. shortest job first
- D. memory pages

Q7

Deadlock condition:

- A. syntax error
- B. circular wait
- C. compilation
- D. linking

Q8

Paging causes:

- A. external fragmentation mainly
- B. no internal fragmentation
- C. possible internal fragmentation
- D. no page fault

Q9

TCP is:

- A. connectionless
- B. unreliable
- C. reliable and connection-oriented
- D. physical layer protocol

Q10

HTTP port:

- A. 22
- B. 53
- C. 80
- D. 443

Q11

HTTPS port:

- A. 25
- B. 53
- C. 80
- D. 443

Q12

Router works mainly at:

- A. Physical
- B. Data Link
- C. Network
- D. Application

Q13

ADC converts:

- A. digital to analog
- B. analog to digital
- C. text to binary only
- D. current to voltage only

Q14

Microcontroller contains:

- A. only CPU
- B. CPU, memory, I/O
- C. only RAM
- D. only ALU

Q15

Waterfall model is:

- A. iterative
- B. sequential
- C. random
- D. no testing

Q16

Smoke testing is:

- A. full regression
- B. basic build verification
- C. performance test only
- D. code review

Q17

Severity is:

- A. urgency
- B. business order
- C. impact of bug
- D. release date

Q18

Selenium is used for:

- A. web automation
- B. memory paging
- C. network routing
- D. sorting

Q19

Merge sort complexity:

- A. $O(n)$
- B. $O(n \log n)$
- C. $O(n^2)$
- D. $O(\log n)$

Q20

BFS shortest path works for:

- A. weighted graph with negative edges
- B. unweighted graph
- C. only trees
- D. only arrays

Q21

Critical section is:

- A. code accessing shared resource
- B. deleted file
- C. compiler phase
- D. DNS server

Q22

Thrashing is caused by:

- A. too many page faults
- B. no keyboard
- C. faster CPU
- D. syntax error

Q23

DNS maps:

- A. IP to MAC
- B. domain to IP
- C. MAC to port
- D. HTTP to TCP

Q24

ARP maps:

- A. IP to MAC
- B. domain to IP
- C. protocol to port
- D. file to disk

Q25

I2C uses:

- A. SDA and SCL
- B. MOSI only
- C. HDMI
- D. HTTP

Q26

Watchdog timer:

- A. stores code
- B. resets hung system
- C. sorts array
- D. compiles program

Q27

Regression testing:

- A. checks old features after change
- B. tests only hardware
- C. tests only documentation
- D. is same as coding

Q28

Agile uses:

- A. iterative delivery
- B. no feedback
- C. fixed final-only release
- D. no customer interaction

Q29

Priority scheduling can cause:

- A. starvation
- B. page size
- C. faster DNS
- D. no CPU use

Q30

Quick sort worst case:

- A. $O(n)$
- B. $O(\log n)$
- C. $O(n \log n)$
- D. $O(n^2)$

Section C: Pseudocode

Use [[03_Pseudocode/Pseudocode_20_Minute_Mock]] for Section C.

Section D: Coding

Coding Q1

Given an array of integers, print the second largest distinct element. If no second largest exists, print `-1`.

Coding Q2

Given a string, print `YES` if it is a palindrome, otherwise print `NO`.

Answer Key

Aptitude

Q	Ans
1	D
2	C
3	C
4	C
5	D
6	B
7	B
8	C
9	C
10	B
11	A
12	B
13	C
14	B
15	B
16	B
17	B
18	C
19	C
20	C
21	C
22	D
23	A
24	A
25	C

	Q	Ans
	26	C
	27	C
	28	A
	29	B
	30	B

Technical

	Q	Ans
	1	B
	2	A
	3	B
	4	B
	5	A
	6	B
	7	B
	8	C
	9	C
	10	C
	11	D
	12	C
	13	B
	14	B
	15	B
	16	B
	17	C
	18	A
	19	B
	20	B

Q	Ans
21	A
22	A
23	B
24	A
25	A
26	B
27	A
28	A
29	A
30	D