

Mock Test 2

Use this after revising mistakes from Mock Test 1.

Section A: Aptitude

Q1

30% of 750:

- A. 205
- B. 215
- C. 225
- D. 235

Q2

An article sold at ₹960 gives 20% profit. Cost price:

- A. ₹760
- B. ₹780
- C. ₹800
- D. ₹820

Q3

Average of 7 numbers is 14. Sum:

- A. 88
- B. 96
- C. 98
- D. 108

Q4

A:B = 5:6. If B = 42, A =

- A. 30
- B. 35
- C. 36
- D. 40

Q5

A and B complete work in 20 and 30 days. Together:

- A. 10 days
- B. 12 days
- C. 15 days
- D. 18 days

Q6

Train 150 m long crosses pole in 15 sec. Speed:

- A. 10 m/s
- B. 15 m/s
- C. 20 m/s
- D. 25 m/s

Q7

Find next: 4, 9, 19, 39, 79, ?

- A. 139
- B. 149
- C. 159
- D. 169

Q8

Find next: Z, X, U, Q, L, ?

- A. G
- B. F
- C. E
- D. D

Q9

If BOOK = CPPL, then READ = ?

- A. SFBE
- B. SFBF
- C. QDZE
- D. TFFE

Q10

A walks 6 km east, 8 km north. Distance from start:

- A. 10 km
- B. 12 km
- C. 14 km
- D. 16 km

Q11

Choose correct: The team ____ ready.

- A. are
- B. is
- C. were
- D. have

Q12

He prefers tea ____ coffee.

- A. than
- B. over
- C. to
- D. from

Q13

Antonym of **scarce** :

- A. rare
- B. limited
- C. abundant
- D. insufficient

Q14

Synonym of **brief** :

- A. long
- B. short
- C. heavy
- D. deep

Q15

Simple interest on ₹6000 at 8% for 2 years:

- A. ₹860
- B. ₹900
- C. ₹960
- D. ₹1000

Q16

LCM of 8 and 12:

- A. 16
- B. 20
- C. 24
- D. 36

Q17

HCF of 24 and 36:

- A. 6
- B. 8
- C. 12
- D. 18

Q18

Probability of getting a number greater than 4 on die:

- A. $\frac{1}{6}$
- B. $\frac{1}{3}$
- C. $\frac{1}{2}$
- D. $\frac{2}{3}$

Q19

If price increases from 80 to 100, percentage increase:

- A. 20%
- B. 25%
- C. 30%
- D. 40%

Q20

One inlet fills tank in 5 hr, another in 10 hr. Together:

- A. $\frac{10}{3}$ hr
- B. $\frac{15}{2}$ hr
- C. 5 hr
- D. 15 hr

Q21

Odd one out:

- A. 2
- B. 3
- C. 5
- D. 9

Q22

All cats are animals. No animal is stone. Conclusion: No cat is stone.

- A. True
- B. False
- C. Cannot be determined
- D. None

Q23

Choose article: She bought ____ umbrella.

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

Q24

Correct sentence:

- A. Each of the students have a book.
- B. Each of the students has a book.
- C. Each students has books.
- D. Each student have a book.

Q25

Compound amount on ₹1000 at 10% for 2 years:

- A. ₹1100
- B. ₹1200
- C. ₹1210
- D. ₹1220

Q26

20% discount on ₹450:

- A. ₹80
- B. ₹90
- C. ₹100
- D. ₹110

Q27

Selling price after 20% discount on ₹450:

- A. ₹320
- B. ₹340
- C. ₹350
- D. ₹360

Q28

Find next: 1, 4, 9, 16, 25, ?

- A. 30
- B. 35
- C. 36
- D. 49

Q29

Brother's daughter is:

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

Q30

Data sufficiency: Is x even? I: x is divisible by 4. II: x is divisible by 2.

- A. I alone sufficient
- B. II alone sufficient
- C. Either alone sufficient
- D. Both insufficient

Section B: Technical

Q1

Array index access is:

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

Q2

Linked list search is:

- A. $O(1)$
- B. $O(\log n)$

- C. $O(n)$
- D. $O(n \log n)$

Q3

Heap is commonly used for:

- A. priority queue
- B. stack only
- C. DNS only
- D. syntax check

Q4

Binary Search Tree property:

- A. left larger, right smaller
- B. left smaller, right larger
- C. no order
- D. circular nodes only

Q5

Process differs from thread because process:

- A. shares all memory always
- B. has separate address space
- C. cannot execute
- D. is always smaller

Q6

SJF stands for:

- A. Shortest Job First
- B. Small Java File
- C. System Job Finish
- D. Sorted Job Flow

Q7

Semaphore is used for:

- A. synchronization
- B. sorting
- C. routing
- D. compiling

Q8

Virtual memory uses:

- A. disk as extension of RAM
- B. printer as RAM
- C. monitor memory only
- D. no storage

Q9

UDP is:

- A. reliable connection-oriented
- B. connectionless
- C. always encrypted
- D. application layer only

Q10

SSH port:

- A. 21
- B. 22
- C. 23
- D. 25

Q11

Switch works at:

- A. Physical layer only
- B. Data Link layer
- C. Transport layer
- D. Application layer

Q12

MAC address belongs to:

- A. Data Link layer
- B. Network layer only
- C. Session layer
- D. Presentation layer

Q13

RTOS is used when:

- A. response deadlines matter
- B. no timing matters
- C. only documents are edited
- D. only graphics needed

Q14

Polling means:

- A. device interrupts CPU
- B. CPU repeatedly checks device
- C. CPU sleeps forever
- D. memory is paged

Q15

SPI uses:

- A. MOSI, MISO, SCLK, SS
- B. SDA, SCL only
- C. HTTP, DNS
- D. HTML, CSS

Q16

DAA Big-O represents:

- A. exact runtime in seconds
- B. growth rate upper bound
- C. compiler name
- D. memory address

Q17

Insertion sort best case:

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

Q18

0/1 knapsack is commonly solved using:

- A. dynamic programming
- B. DNS
- C. paging
- D. UART

Q19

Kruskal uses:

- A. sorted edges
- B. time quantum
- C. page table
- D. test case

Q20

Unit testing tests:

- A. complete system only
- B. individual function/module
- C. user acceptance only
- D. production server only

Q21

Validation asks:

- A. Are we building the right product?
- B. Are cables connected?
- C. Is DNS port 53?
- D. Is array sorted?

Q22

JMeter is used for:

- A. performance/load testing
- B. unit testing only
- C. microcontroller flashing only
- D. DNS routing

Q23

Jira is commonly used for:

- A. bug/project tracking
- B. binary search
- C. data link switching
- D. ADC conversion

Q24

CI means:

- A. Continuous Integration
- B. Code Inversion
- C. Central Interrupt
- D. Computer Input

Q25

White-box testing requires knowledge of:

- A. internal code
- B. only user manual
- C. only network cable
- D. no system info

Q26

Black-box testing focuses on:

- A. internal branches only
- B. input-output behavior
- C. page replacement only
- D. CPU registers

Q27

Soft real-time system:

- A. missing deadline degrades quality
- B. missing deadline always fatal
- C. has no timing
- D. only uses soft keyboard

Q28

Topological sort applies to:

- A. DAG
- B. cyclic undirected graph only
- C. array only
- D. linked list only

Q29

Which sort is stable among these?

- A. Merge sort
- B. Selection sort
- C. Heap sort
- D. Quick sort always

Q30

Postman is used for:

- A. API testing
- B. memory management
- C. graph traversal
- D. scheduling

Section C: Pseudocode

Q1

```
SET x = 2
SET y = 1
FOR i = 1 TO 4
    SET y = y * x
END FOR
DISPLAY y
```

Q2

```
SET n = 789
SET count = 0
WHILE n > 0
    SET count = count + 1
    SET n = n / 10
END WHILE
DISPLAY count
```

Q3

```
SET A = [10, 20, 30, 40]
SET sum = A[0] + A[3]
DISPLAY sum
```

Q4

```
FOR i = 3 DOWNT0 1
    DISPLAY i
END FOR
```

Q5

```
SET x = 0
FOR i = 1 TO 6
    IF i % 2 = 0 THEN
        SET x = x + 2
    ELSE
        SET x = x + 1
    END IF
END FOR
DISPLAY x
```

Coding

Coding Q1

Given a number `n` , print `YES` if it is prime, otherwise print `NO` .

Coding Q2

Given two strings, print `YES` if they are anagrams, otherwise print `NO` .

Answer Key

Aptitude

	Q	Ans
	1	C
	2	C
	3	C
	4	B
	5	B
	6	A
	7	C
	8	B
	9	A
	10	A
	11	B
	12	C

	Q	Ans
	13	C
	14	B
	15	C
	16	C
	17	C
	18	B
	19	B
	20	A
	21	D
	22	A
	23	B
	24	B
	25	C
	26	B
	27	D
	28	C
	29	A
	30	C

Technical

	Q	Ans
	1	A
	2	C
	3	A
	4	B
	5	B
	6	A
	7	A
	8	A

Q	Ans
9	B
10	B
11	B
12	A
13	A
14	B
15	A
16	B
17	B
18	A
19	A
20	B
21	A
22	A
23	A
24	A
25	A
26	B
27	A
28	A
29	A
30	A

Pseudocode

Q	Ans
1	16
2	3
3	50
4	3 2 1

Q	Ans
5	9