

Quantitative Aptitude

1. If the cost price of 15 items is equal to the selling price of 12 items, what is the profit percentage?

- a) 20%
- b) 25%
- c) 30%
- d) 40%

Answer: b) 25%

2. The difference between the compound interest and simple interest on ₹10,000 for 2 years at 10% per annum is:

- a) ₹100
- b) ₹110
- c) ₹120
- d) ₹150

Answer: b) ₹110

3. Two pipes A and B can fill a tank in 20 minutes and 30 minutes, respectively. If both are opened together, how much time will it take to fill the tank?

- a) 12 minutes
- b) 15 minutes
- c) 18 minutes
- d) 10 minutes

Answer: a) 12 minutes

4. What is the sum of the first 20 odd numbers?

- a) 200
- b) 210
- c) 400
- d) 420

Answer: b) 400

5. The area of a rectangle is 240 cm^2 , and its length is 20 cm. Find its perimeter.

- a) 48 cm
- b) 50 cm
- c) 60 cm
- d) 62 cm

Answer: c) 60 cm

Logical Reasoning

6. What comes next in the series: 1, 2, 6, 24, 120, ?

- a) 360
- b) 600
- c) 720

- d) 840

Answer: c) 720

7. Select the odd one out:

- a) Triangle

- b) Square

- c) Rectangle

- d) Circle

Answer: d) Circle

8. A person walks 6 km North, then 8 km East. How far is he from the starting point?

- a) 10 km

- b) 12 km

- c) 14 km

- d) 16 km

Answer: a) 10 km

9. If TOMATO is written as 8121315, how is POTATO written?

- a) 7161315

- b) 8162315

- c) 8172315

- d) 8182315

Answer: a) 7161315

10. Which number replaces the question mark? 2, 3, 5, 7, ?, 13

- a) 9
- b) 10
- c) 11
- d) 12

Answer: c) 11

Technical MCQs

Programming

11. Which of the following is not a programming language?

- a) Python
- b) HTML
- c) Java
- d) C++

Answer: b) HTML

12. Which keyword is used to define a function in Python?

- a) func

- b) def
- c) define
- d) function

Answer: b) def

13. What is the output of the following code?

```
```python
print(3 "Hello ")
```
```

- a) HelloHelloHello
- b) Hello Hello Hello
- c) Hello Hello Hello (with spaces)
- d) Error

Answer: c) Hello Hello Hello

14. Which of the following is an OOP concept?

- a) Encapsulation
- b) Recursion
- c) Looping
- d) Compilation

Answer: a) Encapsulation

15. What does SQL stand for?

- a) Standard Query Language
- b) Structured Query Language
- c) Simple Query Language
- d) None of the above

Answer: b) Structured Query Language

Database

16. What is the default port for MySQL?

- a) 3306
- b) 8080
- c) 1521
- d) 1433

Answer: a) 3306

17. Which of the following is a valid SQL statement?

- a) SELECT FROM table_name
- b) GET ALL table_name
- c) FETCH ALL table_name
- d) FIND ALL table_name

Answer: a) SELECT FROM table_name

18. Which command is used to delete all rows in a table?

- a) DELETE
- b) REMOVE
- c) DROP
- d) TRUNCATE

Answer: d) TRUNCATE

19. What is a primary key in a database?

- a) A column that uniquely identifies each row
- b) A column that stores the largest value
- c) A key to lock the database
- d) A backup file

Answer: a) A column that uniquely identifies each row

20. Which type of JOIN returns all rows from both tables, with NULLs where there is no match?

- a) INNER JOIN
- b) LEFT JOIN
- c) RIGHT JOIN
- d) FULL OUTER JOIN

Answer: d) FULL OUTER JOIN

Networking

21. What does IP stand for in networking?

- a) Internet Port
- b) Internet Protocol
- c) Internal Path
- d) Interconnected Protocol

Answer: b) Internet Protocol

22. Which layer of the OSI model is responsible for routing?

- a) Transport
- b) Data Link
- c) Network
- d) Application

Answer: c) Network

23. What is the full form of HTTP?

- a) HyperText Transmission Protocol
- b) HyperText Transfer Protocol
- c) HyperText Transform Protocol
- d) HyperText Translation Protocol

Answer: b) HyperText Transfer Protocol

24. Which of the following is not a valid IPv4 address?

- a) 192.168.1.1
- b) 255.255.255.255
- c) 10.0.0.1
- d) 256.100.50.25

Answer: d) 256.100.50.25

25. What is the default gateway?

- a) The router that connects your local network to the internet
- b) The DNS server address
- c) The IP address of your computer
- d) The subnet mask

Answer: a) The router that connects your local network to the internet

26. Which data structure uses LIFO (Last In, First Out)?

- a) Queue
- b) Stack
- c) Linked List
- d) Binary Tree

Answer: b) Stack

27. Which sorting algorithm is the fastest on average for large datasets?

- a) Bubble Sort
- b) Quick Sort
- c) Insertion Sort
- d) Selection Sort

Answer: b) Quick Sort

28. What is the time complexity of searching in a balanced binary search tree (BST)?

- a) $O(n)$
- b) $O(\log n)$
- c) $O(1)$
- d) $O(n^2)$

Answer: b) $O(\log n)$

29. Which of the following is a NoSQL database?

- a) MySQL
- b) Oracle
- c) MongoDB
- d) PostgreSQL

Answer: c) MongoDB

30. Which command is used to check the current branch in Git?

- a) git branch

- b) git status
- c) git show branch
- d) git checkout

Answer: a) git branch

31. Which keyword in C++ is used to handle exceptions?

- a) throw
- b) try
- c) catch
- d) All of the above

Answer: d) All of the above

32. What is the output of the following Python code?

```
` `` `python
x = [1, 2, 3]
print(x[-1])
` `` `
```

- a) 3
- b) 2
- c) 1
- d) Error

Answer: a) 3

33. What is the use of the `continue` statement in programming?

- a) Stop the loop execution
- b) Skip the current iteration and move to the next
- c) Exit the program
- d) None of the above

Answer: b) Skip the current iteration and move to the next

34. Which language is used for artificial intelligence and machine learning?

- a) Python
- b) COBOL
- c) Assembly
- d) C

Answer: a) Python

35. Which of the following is not a cloud service provider?

- a) AWS
- b) Azure
- c) Google Cloud
- d) PostgreSQL

Answer: d) PostgreSQL

Quantitative Aptitude (continued)

36. The sum of the first 30 natural numbers is:

- a) 465
- b) 480
- c) 500
- d) 515

Answer: a) 465

37. If a person travels 120 km at a speed of 40 km/h and returns at 30 km/h, what is the average speed for the entire journey?

- a) 34.28 km/h
- b) 35 km/h
- c) 37.5 km/h
- d) 36 km/h

Answer: a) 34.28 km/h

38. If a number is doubled, its square increases by 96. What is the number?

- a) 4
- b) 6
- c) 8
- d) 10

Answer: b) 6

39. What is the least number that is divisible by all numbers between 1 and 10?

- a) 120
- b) 180
- c) 2520
- d) 360

Answer: c) 2520

40. The ratio of the present ages of A and B is 3:5. In 10 years, their ages will be in the ratio 2:3. What is A's current age?

- a) 15 years
- b) 18 years
- c) 20 years
- d) 25 years

Answer: a) 15 years

Logical Reasoning (continued)

41. What comes next in the series: 2, 4, 8, 16, ?

- a) 24
- b) 30
- c) 32
- d) 36

Answer: c) 32

42. Find the odd one out: 64, 49, 36, 24

- a) 64
- b) 49
- c) 36
- d) 24

Answer: d) 24

43. Pointing to a photograph, a man says, "She is the only daughter of my father's only son." How is the woman related to the man?

- a) Sister
- b) Cousin
- c) Daughter
- d) Niece

Answer: a) Sister

44. If BLUE is written as 25121205, how is GREEN written?

- a) 7175145
- b) 7145145
- c) 8155145
- d) 7144155

Answer: b) 7145145

45. Which number replaces the question mark? 5, 10, 20, 40, ?

- a) 50
- b) 80
- c) 70
- d) 60

Answer: b) 80

Networking (continued)

46. Which protocol is used to transfer files over the Internet?

- a) HTTP
- b) FTP
- c) SMTP
- d) SNMP

Answer: b) FTP

47. What does DNS stand for?

- a) Domain Name System
- b) Data Network System
- c) Domain Network Server

- d) Data Name Server

Answer: a) Domain Name System

48. What is the default port for HTTPS?

- a) 80
- b) 8080
- c) 443
- d) 21

Answer: c) 443

49. Which of the following is not a valid network topology?

- a) Star
- b) Ring
- c) Linear
- d) Bus

Answer: c) Linear

50. What is the role of a router in networking?

- a) Connects different networks
- b) Provides internet to devices
- c) Transmits data packets between devices
- d) All of the above

Answer: d) All of the above
