Integers

Test

Time – 1 hour **Maximum Marks - 20**

Important Instructions

- This test contains 20 questions.
- Each questions has FOUR options (1), (2), (3) and (4). ONLY ONE of these four options are correct.
- For each question, marks will be awarded in one of the following categories.
  Full Marks : +1 : If only correct answer is given.
  Zero Marks : 0 : If no answer is given.
  Negative Marks : There is no negative marking.

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1. The additive inverse of 30 – (–20) is _____ .

(1) –50 (2) 50 (3) –30 (4) –20

2. Simplify: 12 – {–7 – (–5)} = _____.

(1) 0 (2) 24 (3) 14 (4) 10

3. Find the value of – 12 –[(–15) + (–2) – 3]

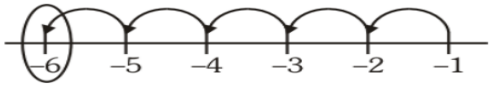
(1) –10 (2) –8 (3) 8 (4) 10

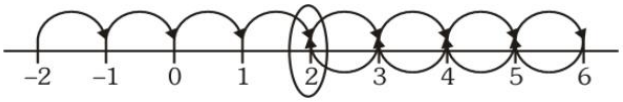
4. The sum of two integers is –15. If one of them is 7, then the other is _____ .

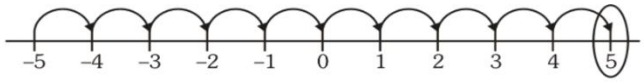
(1) –8 (2) 22 (3) 8 (4) –22

5. Which of the following number line represents 5 + (–11)?

(1) 

(2) 

(3) 

(4) 

6. One integer is greater than the other by 6. If one Integer is –20, then the other number is

(1) –14 (2) –6 (3) 14 (4) 6

7. Find the sum of –25, 10, –20 and –50.

(1) –75 (2) –105 (3) –85 (4) –95

8. Which of the following is showing maximum rise in temperature?

(1) –5°C to 0°C (2) –7°C to 2°C (3) –15°C to –13°C (4) –5°C to –1°C

9. Representation of "A withdrawal of Rs 650" in integers is _____.

(1) +650 (2) –650 (3) not possible (4) none of these

10. Fill in the blanks: (–3) + (–6) _____ (–3) – (–6).

(1) > (2) < (3) = (4) none of these

11. How many integers are there between –9 and 2?

(1) 7 (2) 11 (3) 12 (4) 10

12. Which set of integers is written in ascending order?

(1) 112, 200, 315, –48 (2) –64, –86, –101, –260

(3) –361, –316, –163, –136 (4) 45, 80, –100, –125

13. The temperature on a certain morning is –11°C at 5 a. m. If the temperature drops 3 degree at 6 a.m. and rises 5 degree at 8 a.m. and again drops 3 degree at 9 a.m. What is the temperature at 9 a.m.?

(1) –22°C (2) –15°C (3) –9°C (4) –12°C

14. Subtract –4305 from | (–2508) + (–3502) |

(1) –10315 (2) –1705 (3) 10315 (4) 1705

15. A diver is at a depth of 10 m below sea level and a parachute is at a height of 30 m above sea level. What is the total distance between the diver and the parachute?

(1) 10m (2) 10m (3) 30m (4) 40m

16. Find the sum of additive inverse of (–18) and predecessor of (–24).

(1) 7 (2) –7 (3) 24 (4) 25

(Q. 17 to 20) Match the Column–I with Column – II and choose the correct option.

Column-I		**Column-ll**	
(A)	Additive inverse of 5	(p)	5
(B)	| 10 – 4 | ÷ – 3	(q)	15
(C)	Predecessor of |–6|	(r)	–2
(D)	The number which is next to 14 in the right is	(s)	–5

17. Option A matches with

(1) p (2) q (3) r (4) s

18. Option B matches with

(1) p (2) q (3) r (4) s

19. Option C matches with

(1) p (2) q (3) r (4) s

20. Option D matches with

(1) p (2) q (3) r (4) s

Test Solutions

Answer Key

Question	1	2	3	4	5	6	7	8	9	10
Answer	**1**	**3**	**3**	**4**	**1**	**1**	**3**	**2**	**2**	**2**
Question	11	12	13	14	15	16	17	18	19	20
Answer	**4**	**3**	**4**	**3**	**4**	**2**	**4**	**3**	**1**	**2**

1. Option (1)

30 – (– 20)

30 + 20 = 50

Additive inverse of 50 + (– 50) = 0

50 – 50 = 0

Additive inverse of 50 is – 50.

2. Option (3)

12 – {–7 – (–5)} [Using BODMAS]

= 12 – {– 7 + 5}

= 12 – {– 2}

= 12 + 2

= 14

3. Option (3)

= – 12 – [(–15) + (– 2) + (– 3)] [Using BODMAS]

= – 12 – (– 20)

= – 12 + 20

= 8

4. Option (4)

It is given that

Sum of integers =–15

One integer = 7

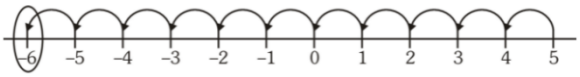
Other integer =–15 – 7

Taking negative sign as common

= –(15 + 7)

= –22

5. Option (1)



= 5 + (–11) = –6

6. **Option (1)**

Given one integer is – 20.

Then the other integer will be = –20 + 6 = –14

7. **Option (3)**

Sum = –25 + 10 + (–20) + (–50) = –95 +10 = –85

8. **Option (2)**

Rise in option 1 = 0°C – (–5°C) = 5°C

Rise in option 2 = 2°C – (–7°C) = 9°C

Rise in option 3 = –13°C – (–15°C) = 2°C

Rise in option 4 = –1°C – (–5°C) = 4°C

Therefore, maximum rise in temperature is in option (2).

9. **Option (2)**

Withdrawal of Rs.650 means amount 650 is subtracted from our account. i.e Rs. –650

10. **Option (2)**

(–3) + (–6) _____ (–3) – (–6)

–3 – 6_____ –3 + 6

–9 < 3

11. **Option (4)**

– 8, –7, –6, –5, –4, –3, –2, –1, 0, 1

10 integers are there between –9 and 2.

12. **Option (3)**

–361, –316, –163, –136 (Ascending order)

13. **Option (4)**

Temperature at 5 a.m. = –11°C

Temperature decreased at 6 a.m. = 3°C = –3

Temperature raised at 8 a.m. = 5°C = + 5

Temperature decreased at 9 a.m. = 3°C = –3

Final temperature at 9 a.m. = (–11) + (–3) + (+5) + (–3)

= –11 – 3 + 5 – 3

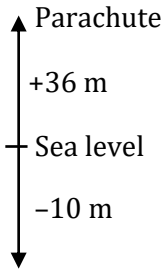
= –17 + 5

= –12°C.

14. **Option (3)**

|(–2508) + (–3502) | – (–4305) = | – 6010 | + 4305 = 6010 + 4305 = 10315

15. Option (4)



Depth of diver below sea level = – 10 m

Height of parachute above sea level = +30 m

Distance between the two = 30 – (– 10) = 30 + 10 = 40 m

16. Option (2)

The additive inverse of (– 18) is 18 and the predecessor of (– 24) is (– 24– 1) = (– 25).

Required Sum = 18 + (– 25) = (– 7)

17. Option (4)

Additive inverse of 5 is –5.

18. Option (3)

| 10 – 4 | ÷ (– 3)

= 6 ÷ (–3) = –2

19. Option (1)

|–6| = 6

Predecessor of |–6| = 6 – 1 = 5

20. Option (2)

The number which is next to 14 in the right is 15. So, option D matches with q.