DIRECTION TEST

Self – Evaluation Test

1. Nisha starts walking straight towards East. She walks a and then turns her right and walks again. After moving some distance she again turns right and moves on. Find the direction if her next turn is towards her

    (a) North   (b) East

    (c) South   (d) West

    (e) None of these

2. Kabir goes to market which is towards East from his house. If he has to go 1st left and then right from the market, in which direction will he move?

    (a) 1st South and then East

    (b) 1st South and then West

    (c) 1st North and then East

    (d) 1st West and then South

    (e) None of these

3. Kapila drives a car towards North from a certain point A, after some distance she takes left turn, walks a certain distance and again turns left. Find her direction if she turns right next and moves on.

    (a) East   (b) West

    (c) North   (d) South

    (e) None of these

4. A man is facing North-West. He turns 90° in the clockwise direction and then 135° In the anti-clockwise direction. Which direction is he facing now?

    (a) East   (b) West

    (c) North   (d) South

    (e) None of these

5. You go north, turn right than right again then go are you now?

    (a) North

    (b) south

    (c) East

    (d) West

    (e) None of these

6. Katrina moved a distance of 75 metres towards the work. She then turned to the left and walking about 25 metres, turned left again and walked 80 metres. Finally, she turned to the right at an angle of 45^0. In which direction was she moving finally?

(a) North-East   (b) North-West

(c) South   (d) South-West

(e) None of these

7. Pareshus standing North to Kavita and Kavita is standing East to Rajni. In which direction when Paresh comes to meet Rajni, what will be the direction of his shortest route?

(a) North-West

(b) South-West

(c) North-East

(d) South-East

(e) None of these

8. Meena walks 14 metres towards west, then turns to her right and walks 14 metres and then turns to her left and walks 10 metres. Again turning to her left she walks 14 metres. What is the shortest distance between her starting point and the present position?

(a) 10   (b) 24

(c) 28   (d) 38

(e) None of these

9. I am facing South I turn right and walk 20m. Then I turn right again and walk 10 m.

Then I turn to left and walk 10 m and then turning right walk 20m en I turn right again and walk 60m. In which direction and I from the starting point?

(a) North   (b) North-West

(c) East   (d) North-East

(e) None of these

10. A child is looking for his father. He went 90 metres in the East before turning to his right He went 20 metres before turning to his right again to look for his father at his uncle s place 30 metres from this point. His father was not there. From here he went 100 metres to the North before meeting his father in a street. How far did the son meet his father from the starting point?

(a) 80 m

(b) 100 m

(c) 140 m

(d) 280 m

(e) None of these

11. In the given figure, B is 300 km eastward of A and C is 400 km North of A. D is in the middle of C B. The C and D is:
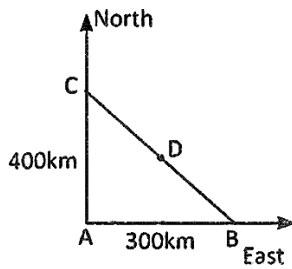
(a) 250 km   (b) 300 km

(c) $250\sqrt{2}$ km   (d) 350 km

(e) None of these

12. Ravi wants to go to the university. He starts from his home which is in the East and comes to a crossing. The road to the left ends in a theatre, straight ahead is the hospital in which direction is the university?

(a) North   (b) South

(c) East   (d) West

(e) None of these

Directions (Questions 13 to 15): Study the information given below carefully and answer the questions that follow:

A, B, C, D, E, F, G, H and I are nine houses. C is 2 km east to B. A is 1 km north to B and H is 2 km south to A. G is 1 km west of H while D is 3 km east of G and F is 2 km north to G. I is situated just in middle of B and C while E is just in middle of H and D.

13. Distance between E and G is:

(a) 1 km   (b) 1.5 km

(c) 2 km   (d) 5 km

(e) None of these

14. Distance between E and I is:

(a) 1 km   (b) 2 km

(c) 3 km   (d) 4 km

(e) N o n e of these

15. Distance between A and F is:

(a) 1 km   (b) 1.41km

(c) 2 km   (d) 3 km

(e) None of these

16. A watch reads 4.30. If the minute hand points East, in what direction will the hour hand point?

(a) North   (b) North-West

(c) South-East   (d) North-East

(e) None of these

17. Anuj started walking positioning his back towards the sun. After sometime, he turned left, then turned right and then towards the left again, in which direction is he going now?

(a) North or South

(b) East or West

(c) North or West

(d) South or West

(e) None of these

18. A clock is so placed that at 12 noon its minute hand points towards north-east, in which direction does its hour hand point at 130 pm?

(a) North   (b) South

(c) East   (d) West

(e) None of these

Direction (Questions 19 to 20): The following questions are based on the diagram given below showing four persons stationed at the four corners of a square piece of plot as shown below.
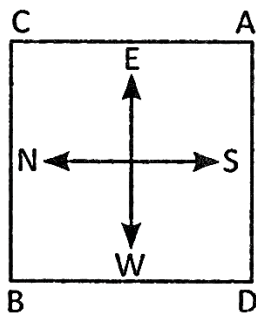
19. A starts crossing the field diagonally. After walking half the distance, he turns right, walks some distance and turns left. Which direction is a facing now?

(a) North-East

(b) North-West

(c) North

(d) South-East

(e) None of these

20. From the original position given in the above figure, A and B move one arm length clockwise and then crossover to the corner diagonally opposite; C and D move one arm length anti-clockwise and cross over the corner diagonally opposite. The original configuration ADBC has now changed to:

(a) CBDA

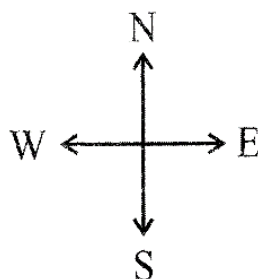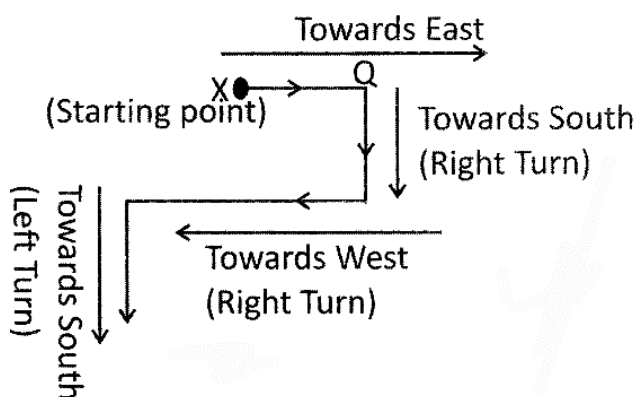(b) BDAC

(c) DACB

(d) ACBD

(e) None of these

Answer – Key

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

Explanation

1. **Explanation**

   Option (C) is correct.

   Let us see:

   Clearly, Nisha is walking towards South.

   Rest of the options is incorrect because of the correctness of option (C).

2. **Explanation**

   Option (C) is correct.
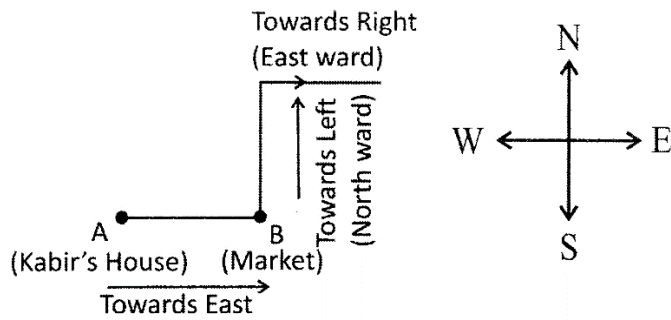
   Let us see:

Clearly, to reach home Kabir will move 1st towards North and then towards East. Rest of the options is incorrect because of the correctness of option (C).

3.   **Explanation**

Option (B) is correct.
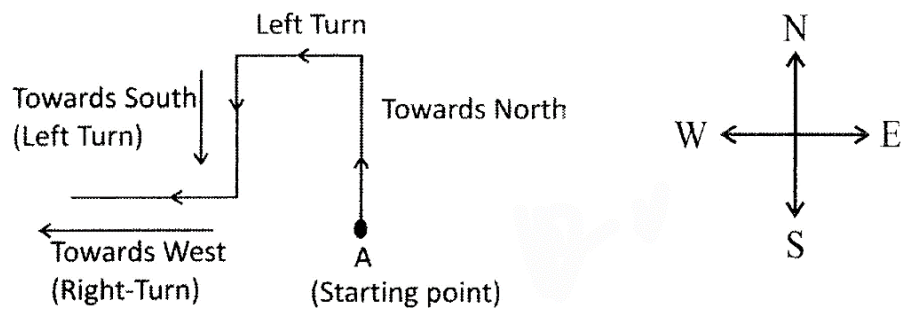
Let us see:

Clearly, Kapila is going towards West.

Rest of the options is incorrect because of the correctness of option (B).

4.   **Explanation**

Option (B) is correct.

Let us see:
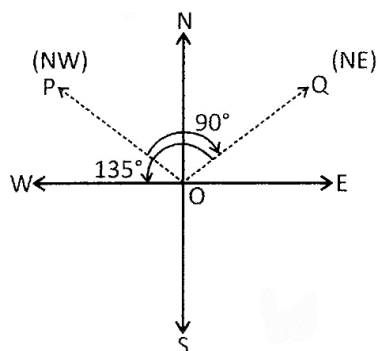
Clearly, the man initially faces in the direction OP. On moving 90° clockwise, he faces in the direction OQ. On further moving 135° anti-clockwise he faces in the direction OR.

Which is west.

5. **Explanation**

Option (C) is correct.

According to given indication are as shown in figure
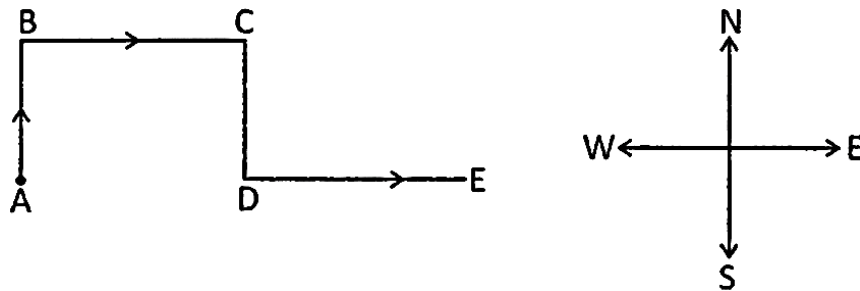
[A to B, B to C, C to D and D to E]

Thus, the final movement is the direction indicated by DE. Which is East.

6. **Explanation**

Option (D) is correct

Let us see:
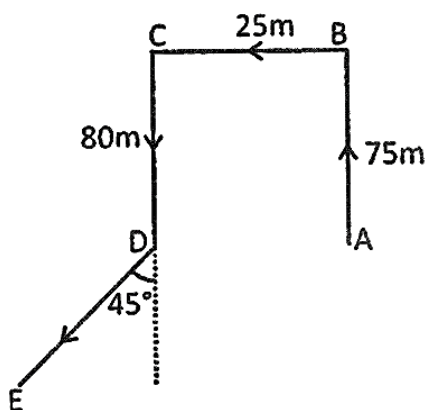
Katrina started from A, moved 75m upto B, turned left and walked 25m upto C. she then turned left again and moved 80m upto D. turning to the right at on angle of, she was finally moving in the direction De: Which is South-West.

7.   **Explanation**

Option (B) is correct.
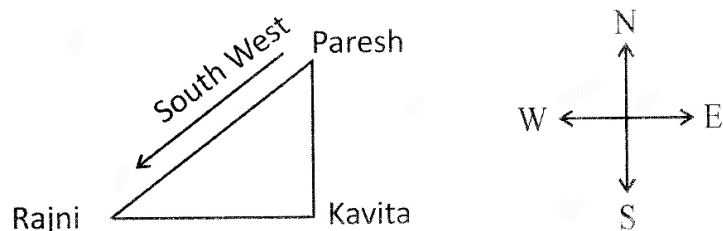
Let us see:

8.   **Explanation**

Option (B) is correct.

Let us see:

The movements of the person are given mentioned as in figure.
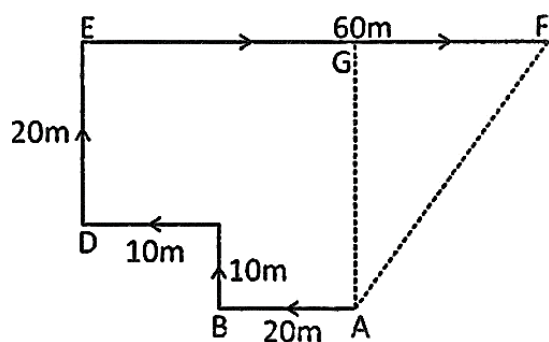
[A to B, B to C, C to D and D to E]

Clearly, the final position is F. Which is to North-East of the starting point A.

$\rightarrow AE = (AB + BE)$

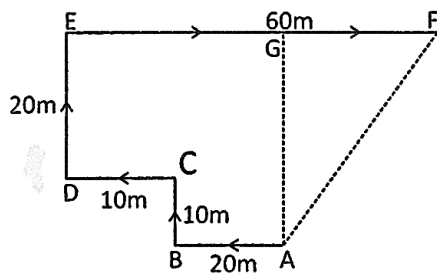$\rightarrow AE = (AB + CD)$

$\rightarrow AE = (14 + 10)\,m$

$\rightarrow AE = 24m.$

9.   **Explanation**

Option (D) is correct.

Let us see:

The movement of the child from A to E are as shown in figure.

10. Explanation

Option (D) is correct.

The movement of the child from A to E are as shown in figure.
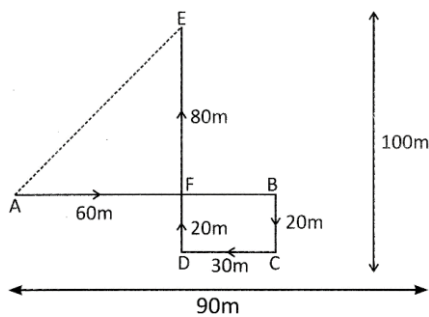
Finally the child meets his father at E. Now, $AF = (90 - 30)\,m = 60\,m$.

$EF = (DE - DF) = (DE - BC) = (100 - 20) = 80\,m$.

$\therefore$ Required distance $= AE = \sqrt{(AE)^2 + (EF)^2} = \sqrt{(60)^2 + (80)^2} = \sqrt{3600 + 6400} = \sqrt{10,000} = 100\,m$.

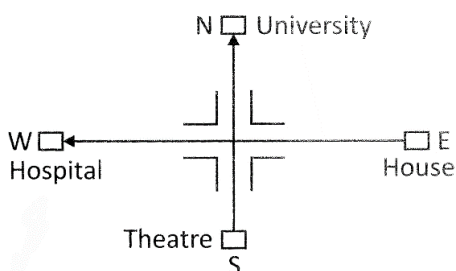## 11. Explanation

Option (A) is correct.

Clearly, $PC = \sqrt{AB^2 + AC^2} = \sqrt{(300)^2 + (400)^2}$

$= \sqrt{90000 + 160000} = 500\,km$.

12. Explanation

Option (A) is correct.

Starting from his house in the East, Ravi moves westwards. Then, the theatre, which is to the left, will be in the South. The hospital, which is straight ahead, will be to the West. So, the University will be to the North.

The location of the houses is as shown in the adjoining figure.
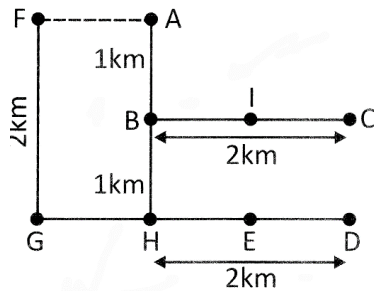
13. **Explanation**

Option (C) is correct.

Since E lies in middle of H and D, so HE – ED. But HD = 2 km. So, HE = ED = 1 km.

∴ Required distance = GE = GH+HE

= (1+1) km =2 km.

14. **Explanation**

Option (A) is correct.

I lies in middle of B and C So, BI = IC.

But BC = 2 km. So, BI = IC = 1 km.

So, I lies directly above E.

∴ Required distance = EI = HB = 1 km.

15. **Explanation**

Option (A) is correct.

Since GF = AH = 2 km, so F and A lie in the same line.

∴ Required distance = AF = GH = 1 km.
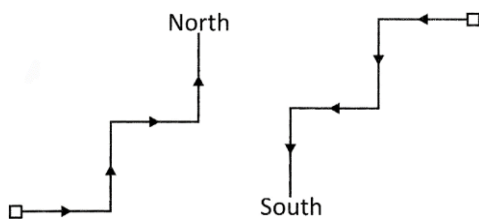
16. **Explanation**

Option (D) is correct.
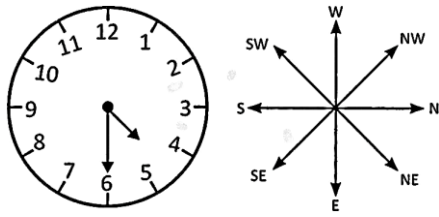
Clearly, to show 4.30, the position of the minute and hour hands of the clock will be as shown. So, again as shown, if the minute hand pints east, the hour hand will point in the North-East.
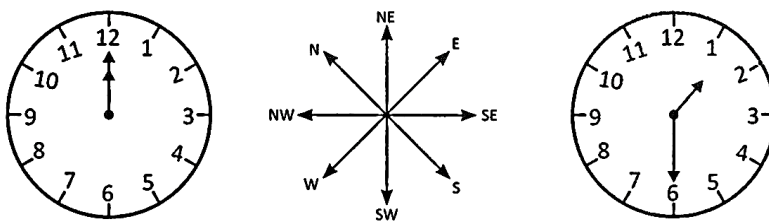
17.   Explanation

Option (A) is correct.

Clearly, there are two possible movements of Anuj as shown in the figure above.

Thus, Anuj is finally moving towards either North or South.
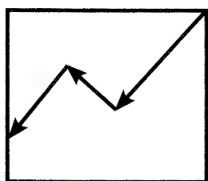
18.   Explanation

Option (C) is correct.

Clearly, the positions of the minute and hour hands at 12 noon and 1.30 p.m. are as shown in the diagram. So, as shown, the hour hand at 1.30 p.m. points towards the East.
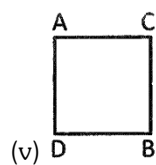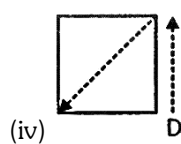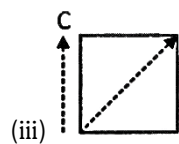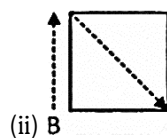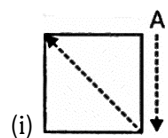
19.   Explanation

Option (B) is correct.

Clearly, the route of W is shown. Comparing it with the given diagram, the direction of A will be North-West.

20. **Explanation**

Option (A) is correct.

Clearly, (i), (ii), (iii), and (iv) show the movements of A, B, C and D respectively while the new arrangement so obtained is shown in (v). So, the configuration changes to CBDA.