

**Class 9  
Sample Paper**

***Examination Fever***

An entrance exam is being conducted in which 10 questions are asked.

Six marks are awarded for every correct answer. Three marks are deducted for every wrong answer, 4 marks are deducted for 2 wrong answers.

Based on this information, answer the following questions:

**Q1.** What would you score if all your answers are correct?

- a. 40      b. 50      c. 60      d. 70

**Q2.** What would you score if you attempt all questions, but only 8 are correct?

- a. 36      b. 44      c. 52      d. 68

**Q3.** What would you score if you attempt 4 questions out of which one is incorrect?

- b. 21      b. 23      c. 27      d. 15

***(Educational)***



***Region Round Up of Pass Percentage (2018) Educational***

The following information is regarding the CBSE results for the year 2018 of 5 states. Answer the following question based on the given information.

<b>Region roundup (Pass percentage)</b>			
<b>State</b>	<b>Overall</b>	<b>Boys</b>	<b>Girls</b>
J&K	95.47	94.22	97.09
HP	89.84	86.97	93.34
Punjab	86.33	82.26	91.32
Haryana	85.40	81.56	90.77
Chandigarh	79.35	75.32	84.51
<b>Total percentage</b>	<b>85.66</b>	<b>81.85</b>	<b>90.66</b>

**Q4.** What is the percentage of girls failing in J&K?

- a) 3.33      b) 10.12      c) 2.91      d) 4.25

**Q5.** Which state has the best overall percentage?

- a) Chandigarh      b) J & K      c) HP      d) Punjab

Q6. Find the ratio of pass percentage of boys of Chandigarh to pass percentage of girls of Haryana.

a) 7935:9422

b) 8226:9077

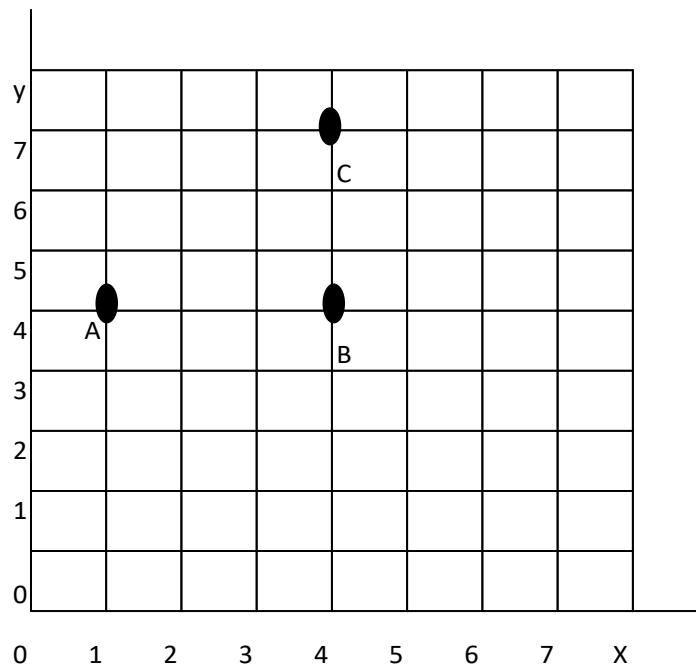
c) 7532:8451

d) 7532:9077

### Design of City Beautiful

### (Occupational)

In the City Beautiful Chandigarh, 3 buildings of the administration are located at the points A, B and C. A fourth building D has to be constructed.



Q7. Where should this building come up so as to maintain the symmetry of the city & the buildings A, B, C & D form a square.

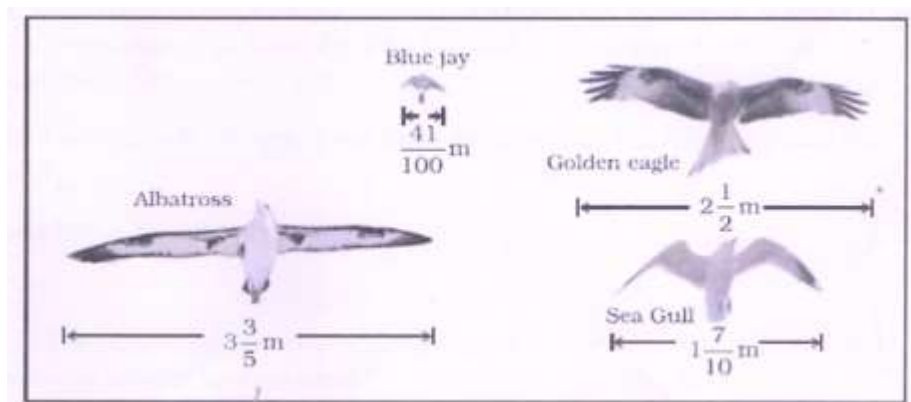
Q8. What is the area of the Square ABCD?

Q9. What is the length of the diagonal of the square ABCD?

### Comparison of Wingspan of Birds

### (Societal)

The diagram shows the wingspan of different species of birds. Use the diagram to answer the questions given below.



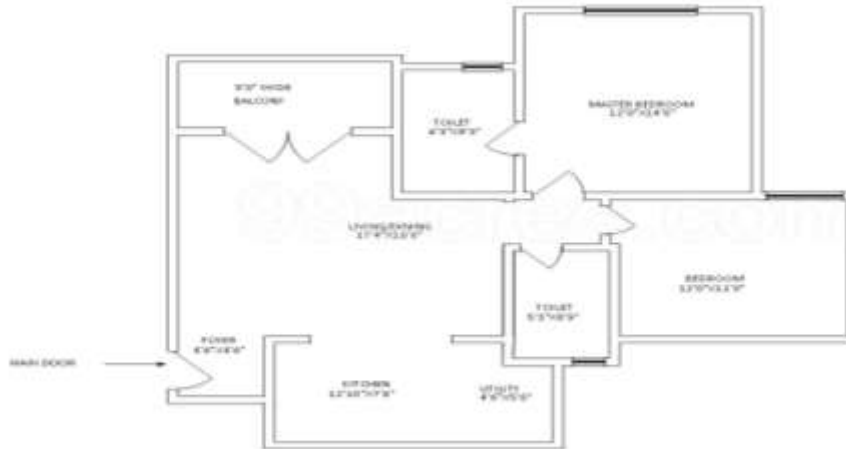
**Q10.** What is the difference between the wingspan of the albatross and the wingspan of the sea gull?

**Q11.** State the difference between the wingspan of the golden eagle and the wingspan of the blue jay?

## *Building plan*

*(Societal)*

Given below is the building plan of the prestigious St. John's Woods School, Bangalore.



**Q12.** How many right angles do you see on the inside of the given figure?

**Q13.** Is the number of pairs of vertical parallel lines less than or greater than 10?

## *MA Bakers*

*(Occupational)*

**Q14.** If a bakers' committee spends ₹10,000 for the initial startup costs and then earns ₹5000 per month in sales. Show the correct relationship between money earned (E) and months they spent working? How much will they earn in 6 months?



## *School Bus Ride*

*(Educational)*

**Q15.** In a class, 7 students walk to school,  $\frac{2}{5}$  ride the bus, and 32% are dropped to school by their parents. Which number is the largest? Explain.



## Answer Key

1. c      ( $6 \times 10 = 10$ )
2. b      ( $8 \times 6 - 4 = 44$ )
3. d      ( $3 \times 6 - 3 = 15$ )
4. c      (Direct observation)
5. b      (Direct observation)
6. d      (Direct observation)
7. D is at the point (1,7)      [ $A=(1,4)$        $B=(4,4)$        $C=(4,7)$ ]
8. 9 square units      ( $3^2 = 9$ )
9.  $3\sqrt{2}$  units      ( $\sqrt{3^2 + 3^2} = \sqrt{18} = 3\sqrt{2}$ )
10.  $1\frac{9}{10}$ m      ( $\frac{18}{5} - \frac{17}{10}$ )
11.  $2\frac{9}{100}$ m      ( $\frac{5}{2} - \frac{41}{100}$ )
12. 26 right angles      (Observing and counting)
13. Greater than 10      (observing and counting)
14.  $E = 5000M - 10000$  (as ₹10000 is initial investment & ₹5000 is monthly earning)  
     $E = ₹20000$       ( $5000 \times 6 - 10000$ )
15. Let x be the total no. of students

$$\begin{aligned} \text{Then, } 7 + \frac{2}{5}x + \frac{8}{25}x &= x \\ 7 &= \frac{25-10-8}{25}x \\ 7 &= \frac{7}{25}x \\ x &= 25 \end{aligned}$$

$$\frac{2}{5}x = \frac{2}{5} \times 25 = 10$$

Walk = 7, bus = 10, dropped = 8

∴ No. of students by bus is the greatest.