

**ALL INDIA SAINIK SCHOOL ENTRANCE EXAMINATION : 2014**  
**PAPER I – MATHEMATICS AND LANGUAGE ABILITY**  
**CLASS -VI**

**INSTRUCTIONS**

1. This question paper contains two parts and you have to answer all the questions in both the parts.
2. Part 'A' – Mathematics has three sections containing 30 questions. Q. Nos 1 to 10 carry 2 marks each, Q. Nos 11 to 20 carry 3 marks each and Q. Nos. 21 to 30 carry 5 marks each.
3. Part 'B' – Language Ability Test contains 10 questions. Q. No. 1 and 2 carry 15 marks each and Q. Nos 5 and 8 carry 5 marks each. The remaining questions carry 10 marks each. In this part you can write your answer in any one of the chosen language only.
4. Write your answer with blue or black ink / ball pen. **Do not use pencil.**
5. All Rough Work is to be done at space provided.
6. There are total 27 pages in the question paper.

**PART 'A' : MATHEMATICS**

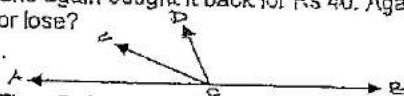
**SECTION - I**

**(Each question carries Two marks)**

1. What is the LCM of two numbers if their HCF is 2 and the product is 112?
2. Write the Hindu-Arabic numerals for MDCL.
3. John had  $2\frac{1}{2}$  cake. His friends ate  $1\frac{2}{3}$  of the cake. How much of the cake is left?
4. The dimensions of a rectangular field are 36 m and 24 m. Find the cost of fencing of the field if cost of wire is Rs 4.50 per meter.
5. Find the average of first 9 prime numbers.
6. Simplify:  

$$\frac{\frac{2}{3} \div \frac{3}{4} \text{ of } \frac{1}{5}}{\frac{1}{5} \text{ of } \frac{1}{5} \div \frac{1}{5}}$$
7. A train covers 20 m in a second. Convert the speed of train in Km/h.
8. Form the greatest and smallest 4 digit numbers with digits 9, 3, 7 and 1.
9. Mayank bought a ball for Rs 20. He sold it for Rs 30 and again bought it back for Rs 40. Again he sold it Rs 50. Did he gain or lose? By how much did he gain or lose?

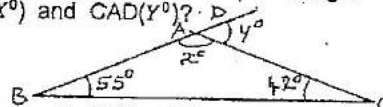
In the above figure if  $\angle AOC = x$ ,  $\angle COD = 2x$ ,  $\angle BOD = 3x$ . Then find each angle in degree.



**SECTION - II**

**(Each question carries Three marks)**

11. Solve:  $\frac{2}{7}$  of  $2 + \{2\{11 + 4 - 2\}\} - 2$
12. What percent is 200 gram of 4.5 kg?
13. If the simple interest on Rs. 12800 for a period of 2 years is Rs. 3840, then find the rate of interest per annum.
14. If the circumference of a circular park is 88 m, then find the area of the park.
15. Arrange the following in ascending order:  $\frac{3}{7}$ ,  $\frac{4}{5}$ ,  $\frac{7}{9}$ ,  $\frac{1}{2}$  and  $\frac{3}{5}$ .
16. Mohan, a student of Class – V secured 315 marks out of 450. Find marks in percentage.
17. In the given figure, what is the value of angles BAC ( $x^\circ$ ) and CAD ( $y^\circ$ )?

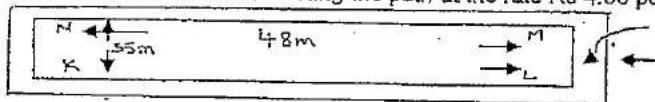
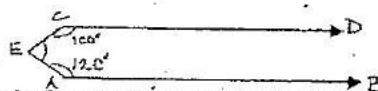


18. Sachin saved Rs 400 each in the first and second months, Rs 800 and Rs 600 in the third and fourth months respectively. Find average monthly saving over the four months.
19. If average (mean) of the following marks obtained by students of Class – V is 35.  
26   45   37   43   49   20   X   22   and   30.  
Find unknown mark i.e.x.
20. Find :  $1 - 2 + 3 - 4 + 5 - 6 + \dots + 19 - 20$ .

**SECTION - III**

**(Each question carries five marks)**

21. A rectangle and a square have the same perimeter 100 m. Find the side of the square if the rectangle has a breadth 2 m less than that of the square. Find breadth length and area of the rectangle.
22. Rakesh completes one round of a running track in 8 minutes and Saroj completes it in 6 minutes. How long will it take for both to arrive again at their starting point together, if they start running at the same time and maintain their speed?
23. Akshita's dad needed a loan of Rs. 20,000 to buy a new car. Mr. Das, the Bank Manager agreed to give him the loan at 3% per annum. If the loan was to be paid back after 5 years, what total amount must he return to the bank?
24. Find the value of 'x' for following figure if  $AB \parallel CD$ .
25. A supermarket sells 19 oranges for Rs 114, 6 Apples for Rs 48, 22 Pomegranates for Rs 154 and 17 Mangoes for Rs 153. Which one of the fruits is the cheapest?
26. A rectangular grassy lawn measuring 48 m by 35 m is to be surrounded externally by a path, which is 2.5 m wide. Find the cost of levelling the path at the rate Rs 4.50 per Sq.m.



27. One number exceeds another number by 36. If sum of both number is 48. Find the numbers.  
 28. Find the smallest number, having four different prime factors.  
 29. What sum of money will produce Rs. 143 interest in  $3\frac{1}{4}$  years at  $2\frac{1}{2}\%$  simple interest?  
 30. A brick measures 20 cm by 10 cm  $\times$  7  $\frac{1}{2}$  cm. How many bricks will be required for a wall 25 m long, 2 m high and  $\frac{5}{4}$  m thick?

### PART 'B' : LANGUAGE ABILITY

(Max. Marks: 100)

1. Write 15 sentences on any one of the following topics:  
 My Favourite Sports person  
 or  
 Festivals of India  
 (15 M)
2. Read the following passage carefully and answer the questions that follow:- (3 x 5 = 15)  
 Ants are the most interesting of all insects because they are so like human being in many ways. They live in families, build their own houses, and have a king and a 'queen'. Each ant has its own work to do and it does its work well. The very young ants who have just come out of their cocoons are generally the nurses. When they are older and their skins are harder, they are ready to leave the nest and do other kinds of work. Some of the ants hunt for food. Most other kinds of insects go about looking for food, but it is always for themselves alone. But the ants think of the nest. They bring in food for the queen and other workers as well as for themselves.
- (a) How are ants similar to human beings?  
 (b) What jobs are done by the very young ants?  
 (c) When do these very young ants leave the nest?  
 (d) Which word in the passage conveys the meaning - "a cover that keeps someone safe and warm".  
 (e) How are ants different from most other kinds of insects?
3. Make a sentence of your own for each underlined word given in the following passage. Do not copy any sentence from the given paragraph.  
 Laughter is indicative of joy. A man who laughs radiates happiness and wins friends. Laughter can be the best tonic. A man who cannot laugh fails to attract friends, loses his health and deprives himself of any pleasure of life.
- (a) ..... (b) ..... (c) ..... (d) ..... (e) .....
4. Rearrange the jumbled words to form meaningful sentences: (2 x 5 = 10)  
 (a) newspapers / very important / day to day life / in our / have become  
 (b) others / at / you / not / laugh / should  
 (c) smiles / full of / tears / is / life / and  
 (d) a / standing / the / fox / was / clever / tree / under  
 (e) the / west / in / the / sets / sun
5. Give one word for the following:- (1 x 5 = 5)  
 (a) A doctor who does operations .....  
 (b) A bunch of flowers .....  
 (c) A person who works with machines .....  
 (d) Happening once a year .....  
 (e) A house or shelter for a dog .....
6. Choose the correct word / phrase from the brackets and fill in the blanks: (2 x 5 = 10)  
 (a) He ..... a new bicycle last week. (bought, have bought, had bought)  
 (b) It ..... since early morning. (rained, is raining, has been raining)  
 (c) He ..... TV most evening. (it watch, watches, is watching)  
 (d) I ..... a lot of work today. (do, have done, had done)  
 (e) He ..... fast when the accident happened. (is driving, was driving, drove)
7. Use each of the word in separate sentences of your own to show the difference in the meaning of the words of the pairs given below: (2 x 5 = 10)  
 (a) Dairy ..... Diary .....  
 (b) There ..... Their .....  
 (c) Tail ..... Tale .....  
 (d) Peace ..... Piece .....  
 (e) Weight ..... Wait .....
8. Write opposite words for the following: (1 x 5 = 5)  
 (a) Win .....  
 (b) Refuse .....  
 (c) Cruel .....  
 (d) Ascending .....  
 (e) Give .....
9. Change each of the following as directed: (2 x 5 = 10)  
 (a) It is going to rain. (Change into Interrogative)  
 (b) Mr Mukherji knows Chinese. (Change into negative)  
 (c) He knows me well. (Change verb to past tense)  
 (d) You are very smart. (Change into Exclamatory)  
 (e) The cat killed the mouse. (Change into Passive Voice) (ore) (zinc)
10. Your elder brother has sent you a birthday gift. Write a letter of Thanks to him. (10 M)