# ALL INDIA SAINIK SCHOOL ENTRANCE EXAMINATION 2012 PAPER - I MATHEMATICS AND LANGUAGE ABILITY CLASS VI 

## Time: 2 hrs

Max. Marks: 200

## Instructions:

1. This question paper contains two parts and you have to answer all questions in both the parts.
2. Part ' A ' - Mathematical knowledge test 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 9 questions. Q. No. 1 and 2 carry 15 marks each and remaining questions carry 10 marks each. In this part you can write your answers in any one of the chosen language only.
4. Write your answer in Blue/Black in only. Do not use pencil.
5. All Rough Works is to be done at space provided

## PART 'A' MATHEMATICS

## SECTION : I MAX MARKS : 100 EACH QUESTION CARRIES TWO MARKS

1. Find the largest and smallest (least) numbers which can be formed by 5,0,7,4.
2. The number 4318 should be divided by which number so that the quotient is 17?
3. The side of a square room is 12 m . Find the cost of carpeting the room at the rate of Rs. 5 per sq metre.
4. Find the value: $1 \frac{1}{2}+2 \frac{2}{3}-\frac{1}{6}$
5. The cost of a dozen pens is Rs. 90. Find the cost of 20 such pens.
6. The marks obtained by a student in five examinations are $90,92,93,95$ and
7. Find his average marks.
8. What is $15 \%$ of Rs. 500 ?
9. Change $40 \mathrm{~m} / \mathrm{sec}$ into $\mathrm{km} /$ hour
10. In the given figure, $A O B$ is a straight line. If $\angle A O C+\angle B O D=85^{\circ}$, then find the measure of $\angle \mathrm{COD}$

11. The side of a square is 25 m . What is the Perimeter of the square.
12. Simplify: $1 \div\left\{\frac{1}{2}+\frac{1}{3}+\frac{1}{6} \div\left(\frac{3}{4}-\frac{1}{3}\right)\right\}$
13. If 15 men can do a piece of work in 20 days, in how many days can 25 men finish the same work.?
14. The radius of a circle is 7 cm . Find its Diameter, Area and Circumference.
15. Find the simple interest on Rs. $5,600 / 0$ at the rate of $5 \%$ per annum for a period of three years?
16. The LCM of two numbers is 630 and their HCF is 9 . If one number is 90 , then find out the other number.
17. In a school, $75 \%$ if the students are boys. If the number of girls is 420 , find the number of boys in that school.
18. The angles of a triangles are in the ratio $1: 2: 3$. Find the angles. Also write the type of the triangle.
19. Find the average of first ten counting numbers.
20. Find the square root of $5 \frac{19}{25}$
21. The radius of a wheel is 35 cm . How much distance will it travel in 100 revolutions?

## SECTION : III (EACH QUESTION CARRIES FIVE MARKS)

21. A town population is $2,65,000$, in which $40 \%$ are males, $30 \%$ females and rest are children. Find out the number of males, females and children in the town.
22. The average age of a class of 40 students is 18 years. When a teacher joins them, their average age becomes 19 years. Find the teachers age.
23. The angles of a triangle are in the ratio of $2: 3: 5$. Find the angles of the triangle.
24. A man sold two radios at Rs. 924/- each. On one he gains $20 \%$ on another he loses $20 \%$. How much does he gain or lose in the whole transaction?
25. Find the area of the figure given below:

26. How many bricks, each measuring $25 \mathrm{~cm} \times 12.5 \mathrm{~cm} \times 7.5 \mathrm{~cm}$ will be needed to construct a wall 15 m long, 1.8 m high and 37.5 cm thick ?
27. Calculate the time in which Rs. $1,250 /$ - would become Rs. $1,375 /-$ at $4 \%$ rate of interest per annum ?
28. A number is divided into two parts such that their sum is 246. One part is twice the other. Find the two parts?
29. How many wooded cubical blocks of edge 20 cm can be cut from a log of wood of size $8 \mathrm{~m} \times 5 \mathrm{~m} \times 80 \mathrm{~cm}$, assuming there is no wastage.
30. The perimeter of a square and circumference of a circle are each equal to 44 cm . Find their areas. Which area is grater and by how much ?
31. Write $\mathbf{1 5}$ sentences on any one of the following topics.
(a) My parents
OR
(b) My favourite Game.
32. Read the following passage carefully and answer the questions-

We should eat green vegetables and fresh fruits to remain healthy. The use of carrot, peas, cabbage and spinach protect us from diseases whereas apple, papaya, orange, pomegranate and mango give us energy. Vegetarian food is considered healthier than the non-vegetarian food. We should also avoid fried food stuff. Samosas, Burger, Pizza and Pakodas weaken our digestive system. Chocolates and toffees are the biggest enemies of our teeth. In order to remain healthy, we should inculcate good eating habits.
(a) Give a suitable title for the above passage.
(b) What should we eat in order to remain healthy ?
(c) What are the benefits of eating fruits?
(d) Name the food items which weaken our digestive system.
(e) What are the two main enemies of our dental health?
3. Make a sentence of your own for each underlined word given in the following passate. Do not copy any sentence from the given paragraph. (10)
Do you support a football or hockey team? Perhaps you follow the success of your national cricket team. You know every game has its own importance and follows its own discipline. To become a good player of any game you need to have a regular practice of that game. Learning basic skills of the game is very essential.
4. Form meaningful sentences of the following by rearranging the words/phrases in proper order.
(a) both / likes / Mahesh / and dancing / singing.
(b) a lot / cries / baby brother / our
(c) to watch / go out / we / on Saturdays / cinema
(d) of milk / gives / cow / neighbour's / our / a lot
(e) the washing / does / father / on Sundays my
5. Give one word for the following :
(a) One who paints
(b) One who treats patients $\qquad$
(c) One who sings $\qquad$
(d) Place where Muslims pray ....
(e) Group of twelve $\qquad$
6. 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 : -
(10)
(a) Pool, Pull......
(b) Pen, Pain.....
(b) Birth, Berth .....
(d) their, there..
(e) Bare, Bear ...
7. Write a letter to your uncle informing him why you want to join Sainik School for your further studies.
8. Change each of the following as directed :
(a) Health is wealth
(Change into interrogative)
(b) This is a lovely view.
(Change into Exclamatory)
(c) He likes swimming.
(Change into Negative)
(d) Aero planes fly in the air.
(Change verb to past tense)
(e) I see a dark cloud.
(Change into passive voice)
9. Write the opposite words for the following:
(a) Cheap
(b) Safe
(c) Tight
(d) Deep
(e) Smooth

