ALL INDIA SAINIK SCHOOL ENTRANCE EXAMINATION : 2016
PAPER I – MATHEMATICS AND LANGUAGE ABILITY
CLASS –VI

Time: 2 hrs   **Max Marks: 200**

Note:-

(1)   This question paper contains two parts and you have to answer all questions in both 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.1 and 2 carry 15 marks each and Q. Nos 5 to 8 carry 5 marks each. The 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/ ink only. <u>Do not use pencil</u>.

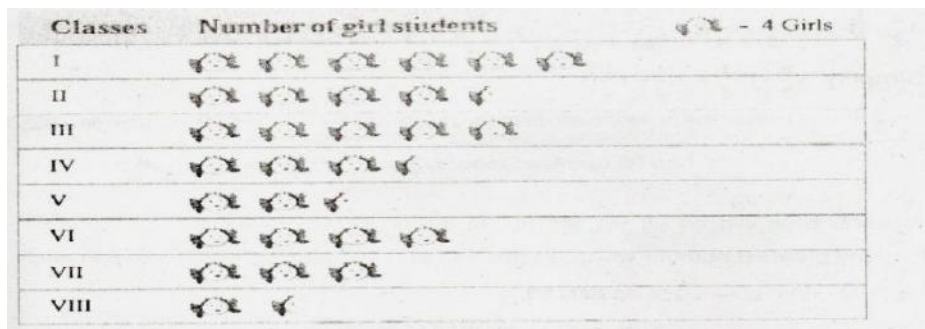(5)   All Rough Works is to be done at space provided.

PART-A MATHEMATICS
SECTION – I
(Each question carries two marks)

Q1.   Form the smallest and greatest 6-digit numerals by repeating any 2 digits from 7,9,5,4.

Q2.   Find the square root of 7921.

Q3.   If a man can do a work in 32 days, in how many days will 24 men complete the same work?

Q4.   Find the simple interest, if P = 400, R = 3.65% per annum and time = 150 days.

Q5.   Round 48,540 and 23,467 to the nearest 1000 and find the difference.

Q6.   Express 804.291 kg as decagrams.

Q7.   Find the smallest number which when divided by 12 and 20 leaves no remainder.

Q8.   Sonali and Priya are classmates. Sonali completed her homework in 5/6 of an hour and Priya in ¾ of an hour. Who was faster?

Q9.   Simplify $6\frac{3}{10} - 2\frac{3}{4} - 1\frac{2}{5}$

Q10. Two angles of a quadrilateral are each 90^0 and remaining two angles are such that one is 3 times the other. Find these two angles.

SECTION –II
(Each question carries three marks)

Q11. Find the ratio of 90 cm to 1.5 m.

Q12. Arrange the following in descending order: $\frac{3}{7}, \frac{3}{11}, \frac{3}{5}, \frac{3}{2}$ and $\frac{3}{17}$

Q13. The number of girl students in each class of a co-educational middle school is depicted by the pictograph:

Classes	Number of girl students	⚘ - 4 Girls
I	⚘ ⚘ ⚘ ⚘ ⚘ ⚘	
II	⚘ ⚘ ⚘ ⚘ ⚘	
III	⚘ ⚘ ⚘ ⚘ ⚘	
IV	⚘ ⚘ ⚘ ⚘	
V	⚘ ⚘ ⚘	
VI	⚘ ⚘ ⚘ ⚘	
VII	⚘ ⚘ ⚘	
VIII	⚘ ⚘	

Observe this pictograph and answer the following questions:
- (a) Which class has the maximum number of girl students?
- (b) Is the number of girls in Class V less than the number of girls in ClassIII?
- (c) How many girls are there in Class VII?

Q14. Akhilesh runs a coffee shop and sells 51 cups of coffee in 6 hours. If this is three-fourths of the total number of cups he sells in the whole day, find out the number of cups he sells in a day.

Q15. Simplify $4\frac{6}{8} - \{3\frac{1}{3} + (2\frac{1}{2} - 1\frac{1}{4})\}$

Q16. Find the greatest number which divides 149 and 101 leaving remainder 5 in each case.

Q17. Mrs Singhal deposited Rs 10,000/- in a Post Office Saving Bank at an interest of 3% per annum. How much amount will she receive at the end of 4th month.

Q18. Suppose your watch gains 4 seconds every 8 hours. How many seconds will it gain in a week.

Q19. A fruit seller had 2, 00,000 apples. He packed them in boxes. Each box contains 176 apples. How many boxes were used and how many apples were left over?

Q20. Find the average of all prime numbers between 60 and 80.

SECTION –III
(Each question carries five marks)

Q21. Bob wants to cover the floor of a room 3 m wide and 4 m long by squared tiles. If each square tile of side 0.5 m, then find the number of tiles required to cover the floor of the room.

Q22. Name the types of following triangles:
- (a) Triangle with lengths of sides 7 cm, 8 cm, and 9 cm. …………………..
- (b) Δ ABC with AB = 8.7 cm, AC = 7 cm and BC = 6 cm…………………
- (c) Δ PQR such that PQ = QR = PR = 5 cm. ……
- (d) Δ DEF with m∠D = 90^0 …………………
- (e) Δ XYZ with m∠Y = 90^0 and XY = YZ. …………………………..

Q23. Find the smallest 4 digit number such that when it is divided by 12, 18, 21 and 28, it leaves remainder 3 in each case.

Q24. How much time will a 171 m long train to cross 229 m long bridge, if it is running at a speed of 45 km/h?

Q25. Divide rupees 4000 among A, B, C so that their shares may be in the ratio of 5: 7: 8.

Q26. Find the number of cubical boxes of cubical side 3 cm which can be accommodated in a carton of dimension   15 cm x 9 cm x 12 cm?

Q27. Fiil in the blanks:-
      (a) There are only ……symbols in Roman numerals.
      (b) The predecessor of the smallest 8 digit number is……..
      (b) $\frac{4}{7}$ X…………..= 84
      (d) Length of a Rectangle $= \dfrac{?}{Breadth}$
      (c) ...………… is the smallest prime number?

Q28. A crockery dealer ordered for 50 pieces of China tea sets for Rs 18,000/-. When the goods arrived, he found that two tea sets were damaged. At what price per set should he sell the remaining tea sets to earn a total profit of Rs 1200/-?

Q29. Vina's father baked a rectangular cake. In the evening 5/6 of the cake was left. Vina ate half of it. What fraction of the cake did Vina eat?

Q30.   (a) The product of two numbers is 2925. If LCM is 195, find HCF?
            (b)   Sohan bought rice at Rs 4800. 75 per quintal. Due to a fall in prices he could sell it at Rs 4600. 75 per quintal only. Find his total loss if he has bought 13.5 quintals rice.

PART – B : LANGUAGE ABILITY

Max Marks : 100

Q1. Write 15 sentences on any one of the following topics: **(15)**
      Importance of cleanliness or   A Journey by Bus

Q2. Read the following passage carefully and answer the questions that follow: **(15)**
    The Sahara Desert covers large parts of Africa. The desert is covered with sand dunes or sand seas. The desert also has several deeply dissected mountains and mountain ranges along with many volcanic mountains. Most of the rivers and streams that are found in Sahara are seasonal or intermittent, except the Nile river, which crosses the desert from its origins in central Africa to empty into Mediterranean.
    The central part of the Sahara is very dry, with little vegetation. The northern and southern reaches of the desert , along with the highlands, have areas of sparse grasslands and desert shrub, with trees and taller shrubs at places where moisture collects.
    (a) What is the meaning of word "seasonal"?
    (b) "The desert is covered by sand dunes or sand seas". What is the meaning of sand sea in the paragraph?
    (c) "The central part of Sahara is very dry, with little vegetarian". What does it mean?
    (d) Give the meaning of "sparse".
    (e) What is the meaning of vegetation in paragraph?

Q3. Make your own sentences using the underlined words in the following paragraph.   (5X2=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 **regular** practice of that game. Learning basic skills of the game is very **essential**.
    (a) …….. (b) ……… (c) …….. (d) ……… (e) ………..

Q4. Form meaningful sentences by rearranging the words in proper order:-
                                                                                (5X2=10)

    (a) crying/ she had/ as/ lost her/ Manju was/ pencil
    (b) at that hospital/ Anil said that/ was a doctor/ his father was
    (c) environmental/ of everybody/ protection/ is responsibility/ the
    (d) the/ knocking / who/ at/ door/ is
    (e) early to bed/ good habit/ and early to rise/ is a

Q5. Give one word for the following :-   (5X1=5)
    (a) A person who carries our luggage …………
    (b) A person who spends money extravagantly ………………..
    (c) Young one of a horse ……
    (d) Happening once a two years ………
     (e) One who makes wooden furniture ………

Q6. Choose the correct word given in the brackets and fill in the blanks:-
                                                                                (5X2=10)
    (a) Cleanliness is next to _____(God, Goddess, Godliness)
    (b) My father tells me to _____ daily. (Play, played, playing)
    (c) Yesterday, a cyclone _____ a small town near the beach. (hit/ has hit)
    (d) I like _____ blue candle the best. (a, an, the)
    (e) There is _____ eucalyptus tree beside the house. (a, an, the)

Q7. Use the given word in separate sentences of your own to show the difference in the meaning of the words of the pair given below:-   (5x2=10)
    (a) Early, Yearly ……   (b) Greatness, Grateful ……
    (c) Pray, Prey ……..   (d) Break, Brake ……   (e) Lose, Loose ……

Q8. Give the antonym (opposite) of the following words :   (5X1=5)
    (a) Risky _____   (b) Doubtful _____
    (c) Negligent _____   (d) Deep _____   (e) Differ _____

Q9. Change each of the following as directed :-   (5X2=10)
    (a) The news is too good to be true. (Remove "too")
    (b) She is your mother.   (Change into interrogative)
    (c) Fire destroyed the town.   (Change the Voice)
    (d) He said , 'I am very thirsty'   (Change into indirect speech)
    (e) Raju is not as bad as Gaurav.   (Rewrite using comparative form of "good")

Q10. Imagine your name is Akash and you live at House No.23, Dr Kalam Road, Jayanagar, Bangalore. Your sister, Deepika who lives at Shanti Nivas, Linking Road, Mumbai, has sent you a Rakhi on Rakshabandhan. Write a letter of thanks to her.
                                                                                (10)
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