## Middle School Scholarship Examination (MSS) $\underline{2015}$

## (Paper - II)

## Subject - Mathematics \& EVS Part - 1

Medium - English

1. Topic wise weightage
2. Changes in Syllabus
3. Question Paper Pattern
4. Answer Key

## Middle School Scholarship Examination (MSS)

Topic wise weightage
Medium - English Sub : Mathematics \& EVS Part-1 Total Marks : 100
Section : I Subject : Mathematics (Marks - 70)

| Sr . No. | Area | Units/Sub - Units | Max Que. | Min Que. |
| :---: | :---: | :---: | :---: | :---: |
| 1. | Knowing Numbers | 1. International number signs. | 1 | 1 |
|  |  | 2. Five digits numbers reading, writing. | 1 | 1 |
|  |  | 3. Place value. | 1 | 1 |
|  |  | 4. Expanded form. | 1 | 1 |
|  |  | 5. Forming greatest and smallest | 1 | 1 |
|  |  | numbers. |  |  |
|  |  | 6. Ascending, descending order. | 1 | 1 |
|  |  | 7. Questions on numbers 1 to 100. | 1 | 1 |
|  |  | 8. Even and odd numbers, prime and composite numbers. Square numbers. | 1 | 1 |
| 2. | Operations on numbers | 1. Addition up to 5 digits, carry over and without carryover, word problems. | $1)$ |  |
|  |  | 2. Subtraction up to 5 digit number (borrowing and without borrowing), | $1\}$ | 3 |
|  |  | 3. word problems on addition and | 1 |  |
|  |  | subtraction. (Mixed Operations) | 1 |  |
|  |  | 4. Multiplication (3digit x 2digit) | $1)$ |  |
|  |  | Word problems. | $1\}$ |  |
|  |  | 5. Division <br> (3digit $\div 2$ digit, Divisors up to 30) | 1 \} | 3 |
|  |  | 6. word problems on multiplication | 1 |  |
|  |  | and division (Mixed operations) |  |  |
|  |  | 7. Expression. | 1 | 1 |
|  |  | 8. Divisibility tests up to 10. | 1 | 1 |
|  |  | 9. Factors and multiples of a number. | 1 | 1 |
| 3. | Fractions | 1. Reading and writing of fractions. | 1 | 1 |
|  |  | 2. Comparision of fractions. | 1 | 1 |
|  |  | 3. Addition \& subtractions of | 1 | 1 |
|  |  | fractions with equal denominators. |  |  |
|  |  | 4. Conversion into a mixed fraction. | 1 | 1 |


| 4. | Measurements | 1. Length, Mass (weight), volume \& capacity. <br> 2. Measurement of time. reading of clock 12 hours. (conversions hours : minutes, Addition - subtraction) <br> 3. Calendar <br> 4. Notes and coins, Rupees paise Conversion. <br> Basic concepts of selling and Purchasing of articles. | 2 1 1 2 | 2 1 1 2 |
| :---: | :---: | :---: | :---: | :---: |
| 5. | Geometry | 1. Angles, triangle, square, rectangle: vertices \& sides. <br> 2. Nets (Preparing 3D shapes) <br> 3. Circle - radius, diameter, centre, chord. <br> 4. Perimeter <br> 5. Area | 2 1 1 1 1 | 2 1 1 1 1 |
| 6. | Data handling | Able to conclude from picture graph. | 1 | 1 |
| 7. | Patterns | Patterns in numbers and shapes | 1 | 1 |
|  |  | Total Questions |  | 35 |


| Sr. <br> No. | Area | Units/Sub - Units | Max <br> Que. | Min Que. |
| :---: | :---: | :---: | :---: | :---: |
| 1. | Me and my Introduction | 1. Changes happening in the surrounding and their effect on us. <br> 2. The effect of my family, friends, neighbours and relatives on my Personality Development <br> 3. Changes in family and neighbours <br> 4. Mutual relation of plants and animals in the surroundings with us and among them. | $1$ <br> 1 <br> 1 1 | 2 |
| 2. | Introduction of body and our health | 1. General introduction of Internal Organs : Place and structure <br> 2. Physical Growth and Development <br> 3. Empathy for sick, aged and people with special needs and my responsibility <br> 4. Sickness and Health Service | $\begin{aligned} & 1 \\ & 1 \\ & 1 \\ & 1 \\ & 1 \end{aligned}$ | 2 |
| 3. | Some of our Needs | 1. Food : Different kinds of food, Efforts behind food production, Journey of food from farm to plate from germination to production of grains. Different constituents of food. Different tastes. <br> 2. Water: Present and contemporary methods of water storage. Environment in the surroundings of water bodies Distribution System. <br> District and state level rivers. Properties of water solubility. <br> 3. House : Diversity in shelter. Skills of building shelter. <br> 4. Clothing: Process of cloth production care of clothes, cleanliness. Reuse of clothes, variety of clothes due to Geographical and cultural reasons. <br> 5. Education : My School, Everybody's school, My delightful school. | 2 <br> 2 <br> 1 <br> 1 <br> 1 | 6 |

\begin{tabular}{|c|c|c|c|c|}
\hline 4. \& My Surrounding and our Environment \& \begin{tabular}{l}
1. My District and My state. \\
2. Inter relationship : life cycle of animals, birds, insects. Effect of natural elements on our life style. \\
3. Changes that are experienced easily - day \& night, festivals \& celebration according to different seasons. Incidents taking place in living things \& surrounding; according to seasons. Sudden changes occurring in the atmosphere. \\
4. Maps \\
5. Transport and communication. \\
6. Management of social life.
\end{tabular} \& 1
1
1
1

1
1
1 \& 5 <br>
\hline \& \& Total Questions \& \& 15 <br>
\hline
\end{tabular}

## Middle School Scholarship Examination (MSS) Revised Syllabus

Middle School Scholarship Examination: Changes in syllabus are given bellow.
(As per Primary Education curriculum - 2012)

| Sr. <br> No. | Omitted topics | Added/New Topics |
| :---: | :--- | :--- |
| 1. | Reading \& writing -6 digits | 5 digits |
| 2. | Face value | - |
| 3. | Multiplication -4 digits $\times 3$ <br> digits | 3 digits $\times 2$ digits |
| 4. | Division -4 digits $\div 2$ digits | 3 digits $\div 2$ digits (divisor up to <br> $30)$ |
| 5. | Measurement of time -24 <br> hours | 12 hours |
| 6. | Cuboid and cube - edges and <br> surfaces. | Nets (3D shapes) |
| 7. | Circumference | - |
| 8. | Symmetry | - |
| 9. | - | Area |
| 10. | - | Comparison of equal and <br> unequal numerators and <br> denominators. |
| 11. | Fractions with equal <br> denominators - comparison |  |

(6)

# Middle School Scholarship Examination <br> Model Question Paper <br> Paper : II Mathematics and EVS Part - 1 Total Marks: 100 Medium : English 

Section: I

## Mathematics

(Marks : 70)
Q. 1 How is the number thirty six thousand and seventy nine written in Devanagari numerals?
(1) ३६०८९
(2) ३६६७७९
(3) 36079
(4) 36089
2. How is number 70014 written in words?
(1) Seven hundred and fourteen
(2) Seventy thousand and fourteen
(3) Seven thousand and fourteen
(4) Seven hundred thousand and fourteen.
3. Which number is obtained by using ' $5 \mathrm{Th}, 6 \mathrm{H}, 2 \mathrm{TTh}, 3 \mathrm{U}, 9 \mathrm{~T}$ '.
(1) 56239
(2) 65239
(3) 25693
(4) 25639
4. Which of the following alternative show the place value of seven as seven hundred?
(1) 35739
(2) 5374
(3) 7890
(4) 77077
5. From the digits $2,3,0,4$ which greatest odd number is formed using each digit only ones?
(1) 4320
(2) 2043
(3) 4023
(4) 4203
6. By arranging the following numbers in order which number would be in the middle?
5335, 3545, 5037, 3455, 4205.
(1) 4205
(2) 5037
(3) 3545
(4) 3455
7. How many 2 digit number do not have digit two in them?
(1) 90
(2) 18
(3) 72
(4) 80
8. How many even numbers are there from 45 to 65 ?
(1) 10
(2) 11
(3) 9
(4) 12
9. There are 14084 males and 13109 females in a village. What is the total population of this village?
(1) 27293
(2) 27093
(3) 27183
(4) 27193
10. $5903-\square=4 \mathrm{Th} 9 \mathrm{H} 9 \mathrm{~T}$ 1U ; then $\square=$ ?
(1) 1292
(2) 912
(3) 10894
(4) 902
11. There were 345 cranes sitting on the tree. 87 cranes flew away. 105 crows and 24 sparrows came to the same tree. Find the total number of birds sitting on this tree?
(1) 561
(2) 387
(3) 129
(4) 339
12. Mrs. Patil distributed a dictionary costing 385 to each child in a class of 46 students. What is the total amount spent by her?
(1) 431
(2) 24640
(3) 17710
(4) 17610
13. Varun distributed 425 notebooks equally among 12 students and 5 notebooks were left with him. Which of the following alternatives show the number of notebooks each student got?
(1) 35
(2) 36
(3) 125
(4) 34
14. Initially 80 rows of 45 boys each were made. But Ashish sir asked the boys to form rows of 25 boys. So how many new rows were formed?
(1) 125
(2) 144
(3) 138
(4) 3600
15. $21-12 \div 3=$ $\square$
(1) 3
(2) 25
(3) 17
(4) 27
16. '524 ${ }^{3}$ ' is a number completely divisible by 9 . Which digit would replace $\boldsymbol{\checkmark}$ ?
(1) 1
(2) 9
(3) 0
(4) 7
17. Which of the following alternatives shows a number, by which 24 is not completely divisible?
(1) 6
(2) 4
(3) 12
(4) 9
18. $\frac{2}{7} \square \frac{1}{3}+\frac{1}{3}$, which sign would come in the box?
(1) <
(2) $>$
(3) $=$
(4) $\geq$
19. How is fraction $7 \frac{1}{2}$ read?
A) Seven integers one upon two
B) Seven integers and one half
C) Seven and a half.
(1) only 'A' and ' $B$ ' are correct
(2) only ' $B$ ' and ' $C$ ' are correct.
(3) only 'A' and ' $C$ ' are correct
(4) All three ' $A$ ', ' $B$ ' and ' $C$ ' are correct
20. $\frac{1}{9}+\frac{1}{9}+\frac{1}{9}+\frac{1}{9}+\frac{1}{9}+\frac{1}{9}=\frac{1}{9} \times \square$; then $\square=$ ?
(1) 6
(2) $\frac{6}{54}$
(3) 1
(4) $\frac{6}{9}$
21. How is quarter to nine written in fraction?
A) $8 \frac{3}{4}$
B) $\frac{35}{4}$
C) $9 \frac{3}{4}$
(1) only ' $A$ ' and ' $B$ ' is correct
(2) only ' $B$ ' and ' $C$ ' are correct
(3) only ' $A$ ' and ' $C$ ' is correct
(4) 'A', 'B' and 'C' All are correct.
22. Raju bought $1 / 4 \mathrm{~kg}$ pedhas, $3 / 4 \mathrm{~kg}$ bakarwadi, $1 / 4 \mathrm{~kg}$ burfi and $1 / 2 \mathrm{~kg}$ wafers from a shop. What is the total weight of the food stuff purchased?
(1) Three and a quarter kilograms.
(2) Two kilograms
(3) Two and a quarter kilograms
(4) one and three quarter kilogram.
23. How many times a measure of 250 ml will be used to fill a can of four and three quarter litre of milk?
(1) 11
(2) 12
(3) 19
(4) 20
24. Sakhubai went to a farm at eight thirty in the morning worked there till quarter past five in the evening. She took a lunch break of half an hour. So for how much time did she work?
(1) 8hrs 45mins.
(2) quarter past eight.
(3) Half past nine.
(4) 9 hrs 15 min .
25. In the summer vacation Isha attended hobby class from $2^{\text {nd }}$ may to $7^{\text {th }}$ June. How many days did she attend the hobby class?
(1) 35
(2) 37
(3) 36
(4) 38
26. In the rupees 1750 some notes of 50 denomination and some of 100 denomination are there. Which alternative shows possible number of 50 rupees notes?
(1) 20
(2) 35
(3) 28
(4) 23
27. Which of the following statement/statements is/are true?
A) Square is a right angled quadrilateral.
B) Rectangle is a square.
(1) only ' $A$ ' is true
(2) only ' B ' is true
(3) Both ' $A$ ' and ' $B$ ' are true
(4) Both ' $A$ ' and ' $B$ ' are false.
28. Find the total number of quadrilaterals in the given figure.

(1) zero
(2) six
(3) four
(4) two
29. In the given figure when a box is formed by folding it as shown in figure. Which number is seen on the surface opposite to the surface with number 3 ?
(1) 2
(2) 6
(3) 5
(4) 1

|  |  | 1 |  |
| :--- | :--- | :--- | :--- |
| 2 | 3 | 4 | 5 |
|  | 6 |  |  |
|  |  |  |  |

30. How many more chords can be drawn by joining the points in given figure?
Cos
(1) 3
(2) 4
(3) 5
(4) 6
31. 



What will be the perimeter of the adjoining figure in centimeters?
(1) 48
(2) 40
(3) 32
(4) 36
32. A room of 6 meter length and 4 meter breadth is to be tiled with the tile measuring 1 sq. meter. If the labour cost of fitting each tile is Rs. 200 each. What will be the total expenses in rupees?
(1) 2400
(2) 4800
(3) 2000
(4) 3200
33. Which pattern is not present in the given multiplication table?
(1) The digit in units place is decreasing by one.
(2) The digit in hundreds place is increasing by one.
(3) The digit in tens place is the Sum of digits in hundreds place and tens place.
(4) The digit in tens place is the difference between the digit in hundreds place and units place.

$$
\begin{aligned}
& 99 \times 3=297 \\
& 99 \times 4=396 \\
& 99 \times 5=495 \\
& : \quad: \quad: \\
& : \quad: \quad: \\
& 99 \times 9=891
\end{aligned}
$$

34. The seller bought a box of 2 dozen mangoes for Rs. 480 and sold each mango for Rs.30. How many more rupees did he get?
(1) 360
(2) 240
(3) 720
(4) 200
35. A chart showing types of trees in a village is given below Observe the chart and answer the given question.


Find the number of fruit trees.
(1) 400
(2) 180
(3) 9
(4) 140

## Section - II <br> Environment Studies Part - 1

(Marks: 30)
36. Which of the following in an arboreal animal?
(1) dog
(2) monkey
(3) goat
(4) wolf
37. The plants which are non aquatic can not survive in marshy area because.....
(1) Excess water helps them to grow properly.
(2) The plant do not rot in excess water.
(3) Plants grow rapidly with excess water.
(4) Excess water leads to rotting of plants.
38. Which of the following organ is situated in the thoracic cavity?
(1) heart
(2) brain
(3) stomach
(4) small intestine.
39. Which of the following statement is incorrect?
(1) When cooking food, add only as much water as is necessary
(2) Use sprouted pulses, while the sprout still small.
(3) Use grain flour after sifting.
(4) Eat fruits like figs with their skin.
40. Due to which of the following reasons the number of the family members increase or decrease?
$\begin{array}{lll}\text { (A) Marriage } & \text { (B) death, birth } & \text { (C) migration }\end{array}$
(1) only ' $A$ ' and ' $B$ '
(2) only ' $B$ ' and ' $C$ '
(3) only ' $A$ ' and ' $C$ '
(4) all three 'A', 'B', ‘C'
41. Which of the following object floats on water?
(1) Eraser
(2) nail (iron)
(3) plastic scale
(4) pebbles
42. Identify the relation between the given terms and select the correct alternative.
cotton: cloth : : jute: ?
(1) sack
(2) wool
(3) plastic bag
(4) rubber stamp
43. What is the source of cotton cloth?
(1) plant
(2) animals
(3) silkworm
(4) mineral oil
44. Select the odd term from the following options.
(1) Varhadi
(2) Telugu
(3) Ahirani
(4) Konkani
45. Which of the following statement shows the features of satpuda mountain in Maharashtra?
(1) The satpuda mountain is in the western part of Maharashtra.
(2) The highest peak in the satpuda mountain is 'Astambha'.
(3) The satpuda mountains is also called the 'western Ghats'.
(4) The highest peak in the satpuda mountain is 'kalsubai'.
46. Which district does not have coastal region in the following alternatives?
(1) Thane
(2) Sindhudurg
(3) Kolhapur
(4) Raigad.
47. What causes day and night on the earth?
(1) rotation of the earth.
(2) rotation of the moon.
(3) rotation of the sun.
(4) revolution of the moon.
48. In case any of your family member or a person in your neighbourhood is sick, which of the following would you avoid to do?
(1) give medicine to the patient on time.
(2) give nutritious food to the patient.
(3) visit the patient every now and then and anytime.
(4) when the patient feels better, the medication will be stopped only after consulting the doctor.
49. Which persons trades old clothes for new utensils from the given alternatives?
(1) kalhaiwala
(2) Boharin
(3) kasar
(4) Lohar.
50. Which means of entertainment does not fit in the group of 'means of entertainment that transmit programmes' from the given options?
(1) Radio
(2) TV
(3) Puppet show
(4) Movie show

Middle School Scholarship Examination (MSS)

## Answer Key

Paper No. : II
Subject : Mathematics and EVS Part - 1

| Q. No. | Answer Option No. | Q. No. | Answer Option No. |
| :---: | :---: | :---: | :---: |
| 1. | 2 | 26. | 4 |
| 2. | 2 | 27. | 1 |
| 3. | 3 | 28. | 2 |
| 4. | 1 | 29. | 3 |
| 5. | 4 | 30. | 3 |
| 6. | 1 | 31. | 4 |
| 7. | 3 | 32. | 2 |
| 8. | 1 | 33. | 4 |
| 9. | 4 | 34. | 2 |
| 10. | 2 | 35. | 2 |
| 11. | 2 | 36. | 2 |
| 12. | 3 | 37. | 4 |
| 13. | 1 | 38. | 1 |
| 14. | 2 | 39. | 3 |
| 15. | 3 | 40. | 4 |
| 16. | 4 | 41. | 3 |
| 17. | 4 | 42. | 1 |
| 18. | 1 | 43. | 1 |
| 19. | 4 | 44. | 2 |
| 20. | 1 | 45. | 2 |
| 21. | 1 | 46. | 3 |
| 22. | 4 | 47. | 1 |
| 23. | 3 | 48. | 3 |
| 24. | 2 | 49. | 2 |
| 25. | 2 | 50. | 3 |

