ROLL NO.....

ARYABHATTA INTER-SCHOOL MATHS COMPETITION 2006

SUMMER FIELDS SCHOOL (JUNIOR)
CLASS V

Time allowed : 2 hrs. M.M. : 100

GENERAL INSTRUCTIONS:

1. *Participant should not write his/her name on the questionnaire.*
2. *Write your Roll no. on all pages of the paper.*
3. *All questions are compulsory.*
4. *Read questions carefully, think twice before you write the answer. Another copy of the questionnaire will not be provided.*
5. *Marks are indicated at the end of each question.*
6. *Write the answer within the prescribed limited space.*
7. *Do your rough work on a sheet pinned up with the questionnaire.*
8. *Use of eraser and overwriting is not allowed.*

PART – I : ARITHMETIC

Q.1 To $33\frac{1}{3}\%$ of $\frac{1}{3}$ of the predecessor of smallest ten digit number add successor of the smallest number formed by the digits of first five composite numbers, the number you get is _____ (3)

Q.2 Split 95 as a product of two primes _____ (2)

ROLL NO.....

Q.3 Double the whole part and halve the decimal part of 5.05 and you get _____ (2)

Q.4 Arrange in ascending order 1.11, 1.001, 1.01, 1.00,1.011.

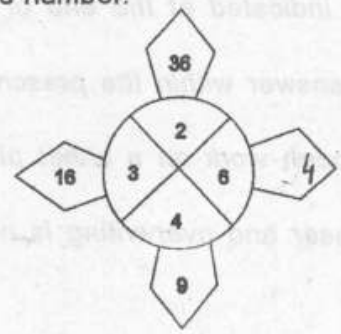
_____, _____, _____, _____, _____ (2)

Q.5 The product of the sum and the difference of 1 and $\frac{1}{2}$ is _____ (2)

Q.6 Mini can Knit a scarf 30cm by 28cm from 10.15 am to 1.15 pm. In 1 hr. she can knit 28 cm^2. (2)

Q.7 0.5 is $12\frac{1}{2}\%$ of _____ . (2)

Q.8 Fill in the blank with suitable number.



(2)

Q.9 In the number 4685.029 the value of digit 4 is _____times the value of digit 2. (2)

Q.10 1 litre of full fat milk contains .150 ml of fat. If Niyati's family's weekly consumption of milk is 10 litres, the quantity of fat in it is _____. (2)

Q.11 Complete the series.

$1\frac{1}{4}$, 3.75, $7\frac{1}{2}$, 11.25, _____ .

(2)

ROLL NO.....

Q.12 Two multiplied by one less than the difference of 19 and 6 is _____. (2)

Q.13 A sewing machine stitches 4000 stitches per decametre. The number of stitches it would stitch per decimetre is _____. (2)

Q.14 The average of 4, 7, 9,14 and _____ is 9. (2)

Q.15 A basket containing 144 oranges was bought to a school for distribution. $24\frac{2}{3}\%$ were found rotten. The number of oranges left in the basket if half of the oranges were distributed is _____. (3)

Q.16 Circle the Roman numerals which do not make any sense.

XCII, XLVIX, XIX, XXIL, XDI, XXXIII, CXXIV, DXVII (3)

Q.17 Average age of five children is 8 yrs 4 months. If the average age of four children is 7 yrs. 10 months, the age of fifth child is _____ (3)

Q.18 A box and its contents weigh 19.6 kg. The empty box weighs 1.85 kg. The weight of the contents in six such boxes is _____ (3)

Q.19 Vinny bought 5 ice creams at Rs.22.50 each, 4 sweets at 0.85 each if the total amount spent was $\frac{2^{th}}{5}$ of her money, then the amount of money she had in the beginning was _____ (3)

Q.20 Car parking attendant at a showroom charges Rs.3 for first hour and Rs.2.50 for every extra hour or part there of . The amount Dev must pay for parking his car for 2 hr. 50 min is _____. (3)

ROLL NO.....

Q.21 Fill in the missing digits so as to make the number divisible by

2, 3, 4, 6, 8, 9, 11

3 7 7 9 [4] [2] 4 (3)

Q.22 A shopkeeper packed 9 boxes of shirts. 4 boxes contained 58 shirts each, 2 boxes together contained 100 shirts and each of the remaining boxes contained 6 more shirts than each of the first 4 boxes. The number of total shirts packed was _____. (3)

Q.23 Look at the given time table and answer the following questions.

Station		Train 1	Train 2	Train 3
Spidey's Heaven	a	10.25	9.10	12.40
	d.	10.35	9.17	12.59
Pokemon Town	a	13.05	10.30	14.15
	d	13.32	10.48	14.18
Ninja Hyde out	a	16.21	14.54	17.15
	d	16.28	15.05	17.20
Bey blade Town	a	18.10	17.24	18.50
	d.	18.25	17.30	18.55

(1) Which is the fastest train between spidey's Heaven and Beyblade Town? Train 3

(2) Which train takes the shortest time between pokemon town and Ninja Hyde out? Train 2

(3) If a person has to reach Ninja Hyde out by 3'o clock. Which train should he take from spidey's Heaven? Train 3

(4) From Ninja Hyde out to Beyblade town which is the faster train between train 1 and Train 2 ? Train d)

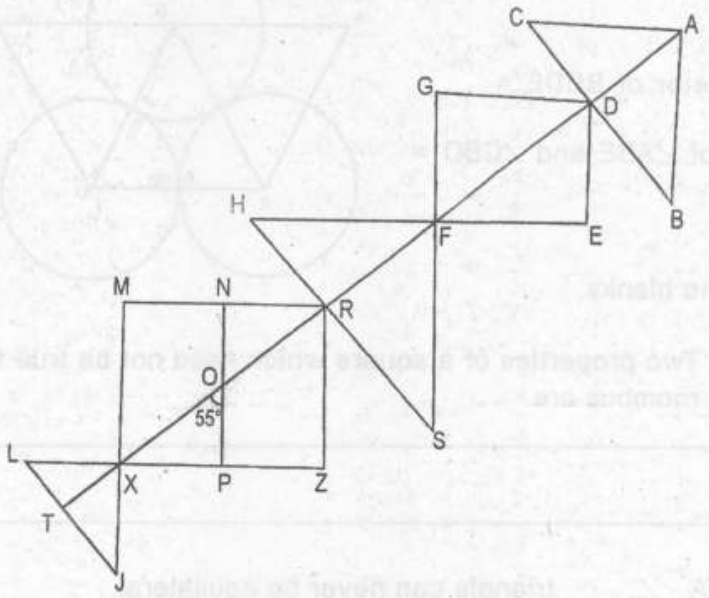
(4)

Q.24 The number nearest to 10000 which is exactly divisible by each of these 2,3, 4, 5, 6 and 7 is _____ (3)

ROLL NO.....

PART 2 : GEOMETRY.

Q.1 Look at the given figure and answer the following questions.



Name

(1) Adjacent angle of ∠GDE _____ (1)

(2) Supplement of ∠RFG _____ (1)

(3) Complement of ∠ORZ_____ (1)

(4) Linear pair of ∠ORZ_____ (1)

(5) Vertically opposite angle to ∠ADB _____ (1)

(6) HS 'll _____ (1)

(7) ON ⊥ _____ (1)

(8) No. of right angles _____ (1)

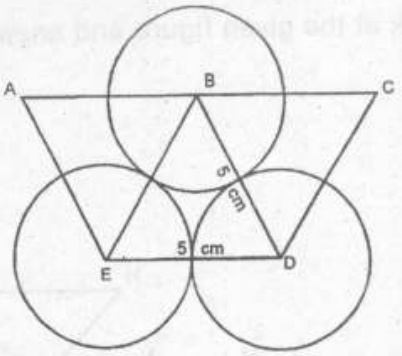
(9) Number of acute angles _____ (1)

(10) Measure of ∠TXJ_____ (2)

(11) Measure of ∠ORZ_____ (2)

ROLL NO.....

Q.2 Look at the figure and answer the following questions.



Perimeter of BCDE =

Sum of ∠ABE and ∠CBD = (3)

Q.3 Fill in the blanks.

(i) Two properties of a square which need not be true for a rhombus are.

a. _____ (1)

b. _____ (1)

(ii) A _____ triangle can never be equilateral. (1)

(iii) In a _____ only two sides are parallel to each other. (1)

(iv) Sum of any two non-opposite angles of a parallelogram is _____. (1)

(v) In a triangle each of the three angles can not be less than _____ (1)

(vi) The area of a square piece of paper is 144 sq. cm. If it is cut into 16 equal triangles then the area of each triangle is _____ (1)

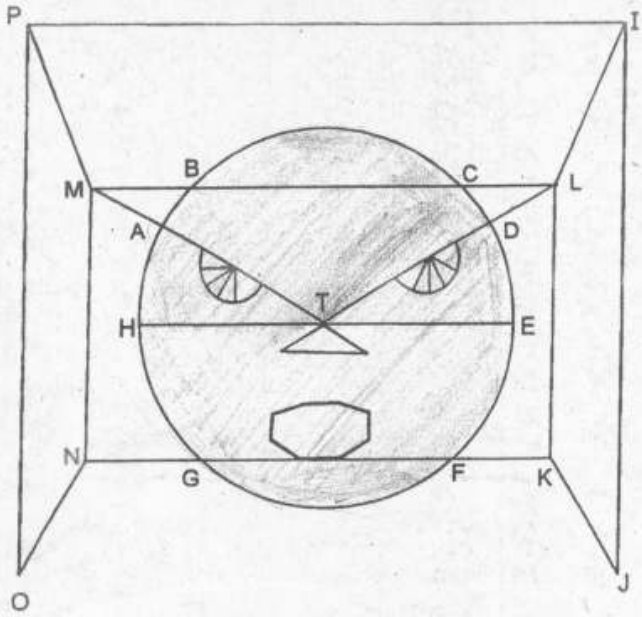
(vii) The measure of reflex angle formed by the hands of a clock at 3.35 pm is _____. (2)

(viii) Longest line segment that can be drawn in a circle is called its _____ . (1)

(ix) The measure of angles of a seven sided figure are 130°, 105°, 155°, 144°, 162°, 121°. The measure of the seventh angle is _____ (2)

ROLL NO.....

Q.4 Look at the given figure and answer the following questions.



(i) Number of radii _____ (1)

(ii) Number of chords _____ (1)

(iii) Name an arc _____ (1)

(iv) Name the longest chord _____ (1)

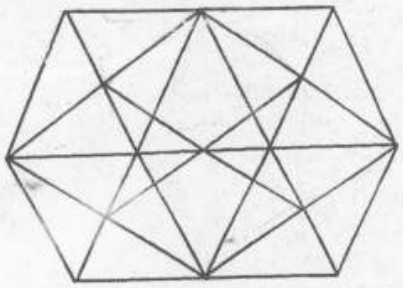
(v) Sum of the angles in the mouth of the figure _____ (1)

(vi) Sum of the angles in the eyes and nose _____ (1)

(vii) Name an octagon _____ (2)

(viii) Shade a major segment _____ (2)

Q.5 Look at the given figure and count the number of rhombus.



Number of rhombuses is 13 (2)