ARYABHATTA INTER-SCHOOL MATHS COMPETITION 2007

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   Make the largest and the smallest number using the digits of the first five multiples of eight. Write the difference of the numbers in:

a)   Indian system _____

_____

b)   International system _____

_____

(3)

Q.2 Use the correct symbol < or >.

A number which is between $\dfrac{1}{2}$ and $\dfrac{3}{5}$, its reciprocal is _____ than 1.

(2)

Q.3 Number of halves in 14.5 is = _____

(2)

Q.4 Dev exchanges 5 indian stamps for 3 foreign stamps. If he wants to get 15 foreign stamps the number of Indian stamps he should exchange is_____.

(2)

Q.5 The product of two co primes is 132. Their L.C.M is _____.

(2)

Q.6 Take away $\dfrac{1}{100}$ ten times from 1 and you are left with _____.

(2)

Q.7 Place arithmetical symbols in between these numbers to make the total 1 gross.

6   6   6   6   6   6   = 1 gross

(2)

Q.8 17kg 8hg 9dag 7g 4dg 3cg 6mg ÷ 36 = _____kg

(2)

Q.9 Difference in kilometer between 0.02km and 85m is _____.

(2)

Q.10 Ten hundredth less than 5.2 = _____

(2)

Q.11 A carpenter worked from 9.30am to 6.30 pm. He was paid Rs.34.50 per hour. He spent Rs.25.40 on his lunch. Money left with him is-_____.

(2)

Q.12 At a Christmas sale 20% discount is given on each dress. The amount paid for six dresses costing Rs.300 each will be _____.

(2)

Q.13 Time taken to cover a distance of $18\dfrac{2}{5}$ m at a speed of $18\dfrac{2}{5}$ cm/sec is _____.

(2)

2

Q.14 If 3rd of April falls 3 days after Saturday, then the day that falls 3 days before 27th February would be _____.

(2)

Q.15 The least number that should be subtracted from 423 to make it a multiple of 12, 14, 15 is _____

(3)

Q.16 A fisherman caught 27Kg of prawn and 21Kg of fish. He sold all his catch for Rs. 881.55.If he sold 1Kg of fish for Rs. 15.75, the money charged for 1Kg of prawn is _____.

(3)

Q.17 Look at the given time table and answer the following questions.

Station		Train 1	Train 2	Train 3
Burgerking	a	15.47	18.19	11.54
Junction	b	16.02	18.35	12.15
PizzaTown	a	19.45	19.55	15.27
	b	20.07	20.20	15.45
Chocolaty	a	00.25	23.55	19.35
Place	b	00.42	00.30	20.10
Cola city	a	01.30	01.25	21.07

(1)   Which is the fastest train between Burgerking Junction and Cola city?

_____

(2)   Which is the fastest train between Chocolaty Place and Pizza Town?

_____

(3)   Which train stops for the shortest time at Pizza Town?

_____

(4)   Which is the fastest train between Burgerking Junction and Chocolaty Place?

(4)

_____

Q.18 Rohan has 60 sweets. Manik has half as many sweets as Rohan. Dhruv has twice as many sweets as Rohan. The number of sweets Dhruv must give to each of them so that all three will have the same number of sweets is _____.

(3)

Q.19 Use digits 0 to 9 without repeating any digit to make fractions equal to

$$\frac{1}{3} \ , \ \frac{1}{6} \ , \ \frac{1}{8} \ , \ \frac{1}{12}$$

_____ , _____ , _____ , _____

(3)

Q.20 Mrs. Roy bought $\frac{3}{4}$ kg of chocolate. She used $\frac{1}{6}$ of it to make a cake and $\frac{3}{5}$ of the remainder to make some cookies. She shared the remaining chocolate equally among her two children. Quantity of chocolate each child got = _____ gm

(3)

Q.21 Simplify

$\overline{\text{XII}}\text{CDXCI} \ + \ \text{LXIV} \ \div \ \text{VIII} \ - \ \text{DCCXLII} \ = \ $ _____

(3)

Q.22 The average weight of 15 students is 55kg. The average weight of first eight students is 53kg and the average weight of last eight students is 57kg. The weight of the seventh child is ____ kg.

(3)

Q.23 100Kg of sweets are distributed. If each child gets 0.5% of the total sweets then the number of children are _____.

(3)

Q.24 Fill in the blanks so as to make the number divisible by 4, 6, 8, 9, 11.

3 5 __ 9 6 __ 8

(3)

4

PART - II : GEOMETRY

Q.1 Look at the given figure and answer the following questions:
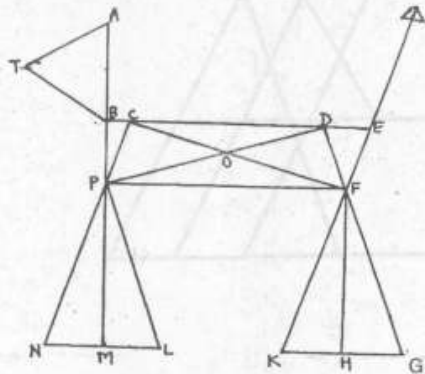
1) Adjacent angle of ∠ ABT is _____. (1)

2) Supplement of ∠ EFG is _____. (1)

3) Complement ∠ MPL is _____. (1)

4) Linear pair of ∠ CDF is _____. (1)

5) BP ⊥ _____. (1)

6) BE ‖ _____. (1)

7) ∠ BPC = _____ (vertical angle). (1)

8) Measure of angles around point O _____. (1)

9) Name a polygon whose sum of angles is 720° _____. (2)

Q.2 Rearrange these nine line segments to make four quadrilaterals. (2)

5

Q.3 Look at the figure and count the number of trapeziums
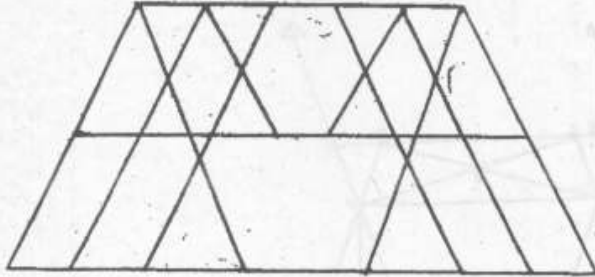
Number of trapeziums is _____ (3)

Q.4 Write True or False for the following:

1) An angle $\frac{2}{3}$ of its complement measures 36°. _____

2) Two acute angles can form a linear pair. _____

3) All chords of a circle are of the same length. _____

4) Infinite number of radii can be drawn in a circle. _____

5) If the sum of two angles of a triangle is 90°, it is a right angled triangle.___

6) Supplementary angles are never adjacent. _____

7) Two lines perpendicular to the same line are parallel to each other. _____

8) If two adjacent sides of a quadrilateral are equal, it is called a rhombus.___

9) If the sides of a square are doubled, its area would also double. _____

10) A right triangle maybe isosceles. _____ (10)

Q.5 Look at the given figure and answer the following questions.
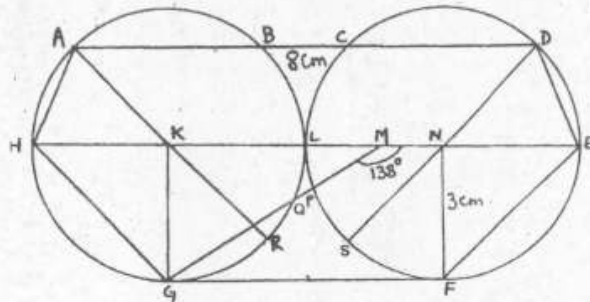
1) Number of radii. _____ (1)

2) Number of chords. _____ (1)

3) Name an arc. _____ (1)

4) Number of diameters. _____ (1)

5) Measure of ∠ KGM _____ (2)

6) Perimeter of ADNK_____ (2)

7) Shade a minor segment. (1)

Q.6 Fill in the blanks:

1) The total length of the edges of the cube is 36cm. Its total surface area is_____. (2)

2) The measures of seven angles of an octagon are 140°, 112°, 153°, 136°, 165°,122°, 139°. The measure of the eighth angle is _____. (2)

3) The circumference of a circle whose diameter is 3.5cm is _____. (2)