DPSG DEHRADUN

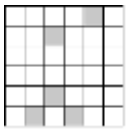
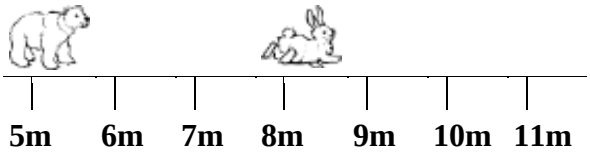
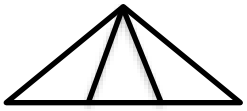
ARYABHATA MATHEMATICIAN OF THE YEAR

NUMERICAL ABILITY TEST 2017

NAME:-_____ **Reg. No:-** _____ **GRADE - V**

SCHOOL NAME: _____**CONTACT NO.** _____

NO. OF QUESTIONS: 50 **TOTAL MARKS**: 60 **TIME**: 60 MINUTES

SECTION-A	a	b	c	d
1) How many more squares need to be shaded to cover **50**% of the total area?  a) 18 b) 13 c) 5 d) 9	○	○	○	○
2) Ram remembers that his mother's birthday is after **12th** but before **18th** of December. His sister Shilpa remembers that her mother's birthday is before **20th** and after **16th** of December. On which date of December is their mother's birthday? a) 17 b)16 c) 18 d)cannot be determined	○	○	○	○
3) A bear is chasing a rabbit.  **5m 6m 7m 8m 9m 10m 11m** The bear starts from **5** m and jumps **2** m every time. The rabbit starts from **8** m and jumps **1** m every time. If they both start at the same time, after how many jumps will the bear catch the rabbit? a) After 5 jumps b) After 3 jumps c) After 2 jumps d) After 4 jumps	○	○	○	○
4) Among five friends, Sara is taller than Radha, but not as tall as Gita. Rajesh is taller than Shilpa but shorter than Radha. Who is the tallest in the group? a) Radha b) Gita c) Shilpa d)Sara	○	○	○	○
5) What number comes next in the series **4**, **196**, **16**, **144**, **36**, **100**, **64** a) 36 b) 100 c) 80 d) 64	○	○	○	○
6) **CLIX** stands for a) 160 b) 159 c) 158 d) 161	○	○	○	○
7) Which number is prime? a) 12 b) 6 c) 7 d) 9	○	○	○	○
8) How many minutes are in one week? a) 10000 min b) 10080 min c) 10800 min d) 1440 min	○	○	○	○
9) How many triangles are there in this figure?  a) 3 b) 6 c) 5 d) 7	○	○	○	○
10) Which number is composite? a) 21 b)2 c) 13 d) 11	○	○	○	○

SECTION-B

1) A large box contains **18** small boxes and each small box contains **25** chocolate bars. How many chocolate bars are in the large box? a) 450 b) 400 c) 350 d) 520	○	○	○	○
2) It takes John **25** minutes to walk to the car park and **45** to drive to work. At what time should he get out of the house in order to get to work at **9**:**00** a.m.? a) 7: 30 a.m. b) 7:50 a.m. c) 7:00 a.m. d) 8:00 a.m.	○	○	○	○
3) John can eat a quarter of a pizza in one minute. How long does it take John to eat one pizza and a half? a) 5 min b) 4 min c) 6 min d) 7 min	○	○	○	○
4) Find the predecessor of the smallest **4**-digit number. a) 1000 b) 999 c) 998 d) 899	○	○	○	○
5) Linda bought **3** notebooks at ₹**1**.**20** each; a box of pencils at ₹**1**.**50** and a box of pens at ₹ **1**.**70**. How much did Linda spend? a)₹6 b)₹6.50 c) ₹6.80 d) ₹6.75	○	○	○	○
6) The average of **9**, **11**, **13**, **15**, **17** a) 14 b) 16 c) 13.5 d) 13	○	○	○	○
7) A painter charges ₹ **225** for material and ₹ **35** per hour for labour. The total cost of painting an office is ₹ **330**. How many hours did it take the painter to paint the office? a) 2 hours b) 3 hours c) 4 hours d) 5 hours	○	○	○	○
8) Express $\frac{\square}{\square\square}$ as a percentage a) 24 % b) 32% c) 17% d) none of these	○	○	○	○
9) What comes in the blank? **87**, **82**, **77**, **72**, ……., **62** a) 57 b) 67 c) 47 d) 66	○	○	○	○
10) Marilee was baking a cake, but made a mistake with the recipe. She used $\mathbf{3}\frac{\square}{\square}$ cups of flour when the recipe called for $\mathbf{1}\frac{\square}{\square}$ cups. How many cups too many did she use? a) $1\frac{5}{6}$ b) $1\frac{1}{6}$ c) $2\frac{1}{3}$ d) $4\frac{3}{5}$	○	○	○	○
11) John can eat a sixth of a pizza in two minutes. It takes **3** minutes for Billy to eat one quarter of the same pizza. If John and Billy start eating one pizza each, who will finish first? a)Same time b) John c) Billy d) None of these	○	○	○	○

12) Order from greatest to least. **0.2; 0.26; 0.12** a) 0.12;0.26;0.2 b)0.2;0.12;0.26 c)0.26;0.2;0.12	○	○	○	
13) Compare and Choose >, <, or = for **0.49** ..... **0.490** a) > b) < c) =	○	○	○	
14) Order from least to greatest: **94.601; 91.610; 94.106** a) 91.610; 94.601; 94.106 b) 94.106; 91.610; 94.601 c)91.610; 94.106; 94.601	○	○	○	
15) What shape has four sides and only one pair of parallel lines? a) Trapezoid b) Parallelogram c) Rhombus d) Hexagon	○	○	○	○
16) What is **823.871** rounded to the nearest tenth? a) 824 b) 823.9 c) 823.87 d) 800.8	○	○	○	○
17) Which of the following numbers would make the equation shown below correct? **5** x (**13** - __) ÷ **2** = **15** a) 1 b) 5 c) 7 d) 9	○	○	○	○
18) Which digit is the thousands digit in the number 23,090,562? a) 6 b) 9 c) 0 d) 5	○	○	○	○
19) Which fraction is equivalent to $\frac{\square}{\square}$? a) $\frac{10}{30}$ b) $\frac{5}{2}$ c) $\frac{5}{20}$ d) $\frac{12}{30}$	○	○	○	○
20) Which of the following fractions is higher than $\frac{\square}{\square}$, but less than $\frac{\square}{\square}$? a) $\frac{3}{5}$ b) $\frac{2}{3}$ c) $\frac{1}{3}$ d) $\frac{1}{6}$	○	○	○	○
SECTION-C				
1) Take away **229.023** from **306.8** a) 67.777 b)77.777 c) 77.007 d) None of these	○	○	○	○
2) Find the H.C.F. of **69**, **115** a) 43 b)23 c)33 d) 22	○	○	○	○
3) **8** × **9** ÷ **9** + **10** ÷ **5** × **6** a) 30 b) 20 c) 40 d) None of these	○	○	○	○
4) Find the missing time in the pattern. **08:00, 08:25,** ....., **09:15** a) 08:40 b) 08:50 c)08:55 d) 08:45	○	○	○	○
5) Divide. $2.2\overline{)2.42}$ ose the quotient. a) 0.011 b) 0.11 c) 1.1 d) 11	○	○	○	○
6) **77** shoes + **73** shoes=? pairs a) 75 b) 85 c) 55 d) None of these	○	○	○	○

7) At the beginning of the day, the temperature was **2**°F. During the day, the temperature rose **7**° and then dropped **9**°. What was the

10) Number of days in January, February and March in a leap year are

a) 81 b) 91 c) 90 d) 89

8) **1395.6** + **1769.801** + **2075.08**=?

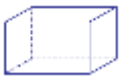
a) 3210.361 b)5240.481 c) 4433.11 d) 4523.14

SECTION-D

1) If a girl is sitting in a row, **6th** from the front and **6th** from the back, how many girls are sitting in that row?

a) 10 b)12 c) 11 d) 13

2) Which figure has one base and one vertex?

a)  b)  c)  ne of these

3) Which of the following can be the angles of a triangle?

a) $62^{\circ}, 56^{\circ}, 63^{\circ}$ b) $105^{\circ}, 42^{\circ}, 33^{\circ}$ c) $75^{\circ}, 68^{\circ}, 40^{\circ}$ d)None of these

4) The total age of Amar, Akbar and Anthony is **80** years. What was the total of their ages **3** years ago?

a) 71 years b) 72 years c) 74 years d) 77 years

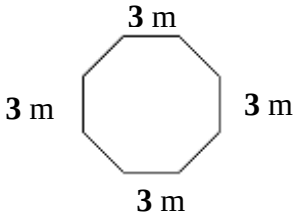
5) If the area of square X and rectangle Y is equal, find the side of square X.

a) 8 cm b) 9 cm c) 10 cm d) 7 cm

6) In triangle ABC, $\angle A = \square\square^{\circ}$, $\angle B = \square\square^{\circ}$, $\angle C = ?$

a) 45° b) 55° c) 35° d) None of these

7) Find the perimeter of this figure



a) 16 m b) 20 m c) 22 m d) 24 m

8) Take away one-tenths three times from **1** and you are left with ?

a) 0.3 b)0.7 c) 0.1 d) None of these

9) Identify the pattern and fill in the blank

5 20 80 ..... **1280**

a) 100 b) 320 c) 220 d) 1020

10) Dora left the lodge and climbed **13** feet up to her car in the parking lot. The parking lot is at an elevation of **28** feet. At what elevation in feet was the lodge?

a) 15 ft b) 31 ft c) 41 ft d) 5 ft