Pune Jilha, Brihanmumbai and Nashik Jilha Ganit Adhyapak Mandal

GANIT PRABHUTWA EXAMINATION (Level-1)

Date : 8.12.13 **Std. V** **Total Marks : 100**
Time : 3 Hours

N.B. : Proper procedure and explanation is necessary.

1. a) Using each of the digits 6, 3, 8, 2, 9 only once write down the smallest and the largest five digit number. **10**

b) Convert into recurring decimal fraction : $\frac{40}{7}$

c) How many notes on Rs. 50 denomination make the amount of rupees one lakh forty five thousand?

d) What is the time if the hour hand is between III and IV and the minute hand is on IX? Where will the minute hand lie after 15 minute - write in Roman numerals.

e) Find the least number divisible by all one digit prime numbers.

2. a) A journey consisted of 17.6 km of which 3 quarters distance was covered. How much distance was left yet to be covered? **15**

b) The length of a side of a square is 9 cm and that of the other is 50% of the first. Find the difference between the areas of those squares.

c) 4 gross and 8 dozen paper sheets are produced everyday in a handmade paper mill. How many paper sheets will be produced in a week in the mill?

d) Construct triangle XYZ : l (yz) = 5.2 cm, $\angle y = 105^0$, $\angle z = 40^0$.

e) Boys were fallen in, in 16 rows for mass drill, each row being of equal number of boys. The middle boy in each row was 15^{th}. How many boys were participating in the drill?

3. a) The interest and amount of a principal after 7 years is Rs. 3150 and Rs. 8150 respctively. Find the principal and the rate of interest. **15**

b) Simplify : $10\frac{3}{5} - 7\frac{1}{2} + 1\frac{3}{10}$

c) Find cost of 1500 ml of petrol if the rate of petrol is Rs. 75 per liter.

d) 78 * 3 * 2 contains the same digit in the place of *. The difference between the place values of the digit is 5940. Find the digit in the place of *.

e) Simplify : $2\frac{2}{9} \div \left(5\frac{1}{3} \times 2\frac{7}{10}\right)$

4. a) i) Factorise 4802 **20**

ii) What is the difference between the three digit least composite number and the three digit least prime number?

b) 2432A × 2A = 60812A. The digit in the place of A is the same. Find value of A.

c) Draw a circle of radius 3.5 cm. Draw any 2 of its diameters. Draw segments joining the end points of the diameters. Measure angles of the quadrilateral. State the type of the quadrilateral.

d) An agent charged 2% commission for the owner and 3% for the customer on a deal of a plot for Rs. 15 lakh.

i) How much total commission did he get?

ii) What price the customer had to pay?

iii) What price of the plot did owner get?

e) 27 liter petrol was filled in an empty tank of a motor car, which occupied $3/4^{th}$ of its capacity. How much more petrol to the maximum can now be filled in it?

5. a) A man purchased 2.5 kg of cardamom at a rate of Rs. 800 per kg and prepared tiny pouches, each containing 20 gm cardamom. At what price should he sell each of them so that he earns a profit of Rs. 2 on every pouch? **20**

b) The sides of a carpet are 2m and 3m. The sides of a rectangular hall are 27m and 20m. How many carpets are required to cover the floor of the hall?

c) There are 5 divisions of Std. V in a school. Each of the divisions has some boys and some girls. $6/7^{th}$ of the boys and $4/5^{th}$ of the girls enrolled themselves for an educational excursion. The number of boys and girls who did not enroll was 24 and 21 respectively. How many students in all are in Std. V of the school?

d) Ganpatrao owned 6 acre 29 guntha 45 sq. yard of land. He purched additional 2 acre 18 guntha 96 sq. yard of land from Sopanrao. How much land now does he own?

[121 sq. yard = 1 guntha, 40 gunthe = 1 acre]

6. Solve **any four** of the following : **20**

a) i) $8 + 12 \div 4 \square (8 + 12) \div 4$. Write the correct sign out of '=' by < or >; so that the statement is true.

ii) Insert brackets at proper places in $\frac{8}{15} \div \frac{3}{4} \div \frac{9}{8} = \frac{4}{5}$ so that the statement in true.

b) GCD of two numbers is 21 and LCM is 588. Find all possible pairs of such numbers.

c) The length of a train is 540m. It crosses 1260m long bridge in 2 minutes. Find speed of the train in km/hr.

d) Ajay and Vijay each had some rupees. Ajay gave 50% of what he had to Vijay. Vijay then gave $\frac{1}{2}$ of his total money to Ajay. Again Ajay gave 50% of his money to Vijay. In the end Ajay had Rs. 106 and Vijay had Rs. 248. How much money did each of them have to begin with?

e) Rohit visited a zoo, which was 5 km away, on his bicycle. The speed of his bicycle was 15 km/hr while going and 12 km/hr while coming back. What was the average speed in the to and fro journey?