

**Brihanmumbai Ganit Adhyapak Mandal
&
Pune Jilha Ganit Adhyapak Mandal**

GANIT PRABHUTWA EXAMINATION (Level-1)

Time : 3 Hours

Date : 16.12.12

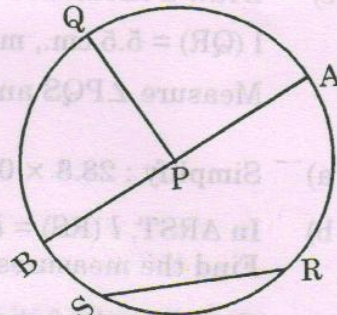
Std. V

Total Marks : 100

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

1. Solve the following sub-questions. 10

- a) Write in numerals :
Forty nine crore forty seven
- b) Find prime factors using the given factors :
 $74088 = 147 \times 63 \times 8$
- c) Convert into decimal form : $\frac{3}{40}$
- d) Out of 42000 glass jars, 2% jars were broken in transportation. How many jars were broken?
- e) Observe the adjoining figure and name the following segments
 - i) A chord of the circle
 - ii) Two radii of the circle
 - iii) The diameter of the circle



2. a) 15 times a number is $\frac{4}{3}$ rd of 360. Find the number. 3
- b) Simplify and write the answer in kg. 3
9090 gm – 5 hecto gm. – 1500 decigm.
- c) A merchant purchased some clocks for Rs. 21,000 and sold all of them for Rs. 25,000. If the cost price of each clock was Rs. 420, find 4
 - i) the number of clocks he purchased
 - ii) the selling price of each clock
 - iii) total profit
 - iv) profit percentage

3. a) In a unit test Rekha got 30 marks out of 40 in mathematics and 18 marks out of 25 in English. In which subject and by how many percent she did better? 3
- b) Simplify the expression : $[17 + 3 (2 + 3) + 13 - (2 + 4 \times 3)]$ 3
- c) Krishna can cover a distance of 13.8 km. in an hour, on a bicycle. He started from his home and reached a village in 42 minutes. How far was the village? 4
4. a) A train departs for Kolkata at 14.30 and reaches Kolkata on next day at 20.10. How much time does the train take for the journey? 3
- b) Find the period in which the amount will be double of the principal at 8 p.c.p.a., if the principal is Rs. 3000. 3
- c) L.C.M. of two numbers is 140 and their G.C.D. is 14. Find the numbers. 4
5. a) 10 notebooks are made from 1 ream of paper. How many papersheets will be required to make such 25 notebooks? 3
- b) Simplify and write the answer in Roman numerals : $DXXVIII \div IV$ 3
- c) Draw a rhombus PQRS : 4
 $l(QR) = 5.5 \text{ cm.}, m\angle Q = 70^\circ$ Draw its diagonal QS.
 Measure $\angle PQS$ and $\angle RQS$
6. a) Simplify : $28.8 \times 0.75 \div 3.6$ 3
- b) In ΔRST , $l(RS) = l(RT)$ and $m\angle S = 48^\circ$ 3
 Find the measures of $\angle R$ and $\angle T$
- c) Complete the following magic square of addition 4
- | | | |
|----|----|----|
| 12 | 19 | |
| | 15 | |
| | | 18 |
7. a) The side of a square is 15cm. The perimeter of a regular hexagon is equal to that of the square. Find the length of the side of the hexagon. 3
- b) $\frac{12}{9}$ is a given fraction. 3
- i) Which smallest number should be subtracted from its numerator so that the resulting fraction becomes a proper fraction?
- ii) Which smallest number should be added to its denominator so that the resulting fraction becomes a proper fraction?

- c) A train running at a speed of 90 km/hr. covers the distance in 25 poles per minute. Find the distance between two consecutive poles. 4
8. a) A bolt consists of 30m cloth.. It is to be cut into pieces, each of 225 cm. length. How many maximum pieces can be cut out of it? How much cloth will be left? 3
- b) The number $5 * * 9$ consists of the same digit in places of stars. The difference between the place values of those digits is 360. Find the digits. 3
- c) ABCD is a square ground of side 240m. A man started to walk from A and completed a round of the ground. But while walking on sides AB, BC, CD and DA his walking speed was 72 m/min, 60 m/min, 50 m/min and 40 m/min. respectively. How much time did he require to complete the round? 4
9. Solve any four sub-questions 20
- a) Find the smallest four digit number which is exactly divisible by 49 and 56.
- b) In which group the fractions are in descending order?
- Group i) $0.64, \frac{3}{5}, 0.62$
- Group ii) $\frac{16}{25}, 0.62, 0.6$
- Group iii) $\frac{31}{50}, 0.6, 0.64$
- c) The length of a photoframe is 45cm. and its breadth is 35cm. A photograph of Ramanujan, the great mathematician, is fixed centrally in the frame, leaving 2.5 cm. border from all the sides. Find the area of the plane space around the photograph.
- d) Total property of Babasaheb was Rs. 280000/-. He donated $\frac{1}{7}$ th part of it to a school. $\frac{1}{3}$ of the remaining was given to each of his two sons by him and he kept the remaining amount for himself. Find the amount left with him.
- e) A laptop was purchased for Rs. 12780 and a sum of Rs. 1220 was spent on its repairs. It was then sold for Rs. 14700. Find profit thus gained and also find profit percentage.