- (C)  $9\frac{3}{8}$
- (D) 10
- 44. Sound travels at 330 metres a second. How many kilometres away is a thunder cloud when its sound follows the flash after 10 seconds?
  - (A) 3.3
- (B) 33
- (C) 0.33
- (D) 3.33
- 45. 5\*2 is a number which is divisible by 6, the digit \* is \_\_\_\_\_
  - (A) 3
- (B) 6
- (C) 7
- (D) 2
- 46. Consider the statment:
  - (i) 21 and 29 are prime number
  - (ii) 21 and 29 are co-prime
  - (iii) 23 and 21 are twin prime Which of the following statment is or are not true?
  - (A) I only
- (B) III only
- (C) I & II
- (D) II & III
- 47. Two trains are moving in the same direction at 65 km/hr and 45km/hr. The faster train crosses

a man in slower train in 18 seconds. The length of the faster train is

- (A) 120 m
- (B) 180m
- (C) 100 m
- (D) 145 m
- 48. The normal body temperature of an adult is about 98.6°F. What is the temperature in degree celcius
  - (A) 37°C
- (B) 36°C
- (C) 39°C
- (D) 38°C
- 49. Which of the following is not a part of the circle?
  - (A) Centre
- (B) Arc
- (C) Semi-circle
- (D) none of above
- 50. The total population of a district is 207635. There are 81675 men and 79231 women and the remaining are children. How many children are there in the district?
  - (A) 56729
- (B) 47729
- (C) 46729
- (D) 46529

\*\*\*\*\*

SPACE FOR ROUGH WORK

## 26<sup>th</sup>MV (MATHEMATICS)

Time Allowed 1 hour

Maximum Marks: 100

## Read the following instructions carefully before you begin to answer the questions.

- 1. This booklet contains 50 questions in all.
- 2. All guestions are compulsory and each guestion carries 2 marks.
- Before you start to answer the questions you must check up this booklet and
  ensure that it contains all the pages 7 (Seven) and see that no page is missing
  or repeated. If you find any defect in this Booklet, you must replace it
  immediately.
- 4. There will **NOT** be any negative marking for wrong answers.
- You are required to fill the information on the answer sheet which you will get in the examination hall by H.B. pencil or BALL point pen(Blue or Black).
- Answer Sheet and Question Paper will be supplied in examination hall. After
  the test is over, you should hand over the answer sheet to the invigilator before
  leaving the room.
- 7. You should write your **Name**, **Roll No.**, **School name** carefully on the space provided in the answer sheet. Otherwise you will be awarded **ZERO** mark.
- 8. If you wish to change your answer, **ERASE** completely the darkened circle by using an **ERASER** and then blacken the new circle. If not erased completely, smudges will be left on the erased circle and the question will be read as having two answers and will be ignored for giving any credit. (only for pencil users)
- Answer the questions as quickly and as carefully as you can. Some questions may be difficult and others easy. Do not spend too much time on any question.
- You are not allowed to leave the examination hall until you are advised to do so by the invigilator.

- In the expression 15-n, which value of n results in the greatest difference
  - (A) n=0
- (B) n=5
- (C) n=10
- (D) n=15
- Write the expanded form of 89.81.050. (A)800000+900000+0+50+0+1000+800000 (B)80000+900000+0+50+0+1000+8000000
  - (C)10000+900000+0+50+0+8000+8000000
  - (D)10000+90000+0+50+0+80000+800000
- Use the expression below to answer the question 53 x 24.

How can the distributive property be used to solve this expression.

- (A) (50+20) x (3+4)
- (B) (5x2) + (3x4)
- (C) (53+4) x (53+2)
- (D) (53x20) + (53+4)
- The length of Eagle Trail is  $6\frac{3}{5}$  miles.

The length of Bear Trail is  $2\frac{1}{10}$  miles. What is the difference in length Eagle Trail and Bear Trail?

- (A)  $3\frac{1}{10}$  miles (B)  $3\frac{9}{10}$  miles

- (C)  $4\frac{1}{10}$  miles (D)  $4\frac{4}{5}$  miles
- The expression in the table below show the amount of money, in rupees, that Natalie and Pritika each earned babysitting last week.

Earning from babysitting

**Babysitter** Amount earned  $8 + 4 \times 15$ Natalie

Pritika 4 x 15

Based on the expression in the table, which of the following statement is true.

- (A) Pritika earned `4 less than Natalie
- (B) Natalie earned `8 more than pritika
- (C) Natalie earned 12 times as much as pritika
- (D) Pritika earned 4 times as much as Natalie
- A group of 5 campus used a total of 12 gallons of water on a camping trip. Each camper used the same amount of water. How many gallons did each campus use?

B) 
$$\frac{abcd}{5}$$

- 5(a+b+c+d+e)
- (D) a+4
- 37. If increasing 20 by P percentage gives the same result as decresing 60 by P percentage, What is P percentage of 70?
  - (A) 50
  - (B) 140
  - (C) 14
  - (D) 35
- Which of the following is divisible by 12?
  - (A) 457558
- (B) 385365
- (C) 495036
- (D) 361768
- 39. 'Product of two co-prime number is 117. Their L.C.M. should be
  - (A) 1
- (B) 117
- (C) equal to their H.C.F
- (D) Cannot be calculated
- 40. Which of the following sets of fractions is in ascending order?

(A) 
$$\frac{5}{6}, \frac{6}{8}, \frac{7}{9}, \frac{6}{8}$$

(A) 
$$\frac{5}{6}, \frac{6}{8}, \frac{7}{9}, \frac{6}{8}$$
 (B)  $\frac{6}{6}, \frac{7}{9}, \frac{5}{6}, \frac{11}{13}$ 

- (C)  $\frac{11}{13}, \frac{5}{6}, \frac{7}{9}, \frac{6}{8}$  (D)  $\frac{11}{13}, \frac{7}{9}, \frac{6}{8}, \frac{5}{6}$
- 41. The difference of two numbers is 11 and  $\frac{1}{5}$ th of their sum is 9. The numbers are
  - (A) 31, 20
- (B) 30,19
- (C) 29,18
- (D) 28,17
- 42. A dishonest dealer profess to sell his goods at cost price but uses a weight of 750g for the kilogram. What is his gain percent?
  - (A) 75%
- (B) 50%
- (C)  $40\frac{1}{3}\%$  (D)  $33\frac{1}{3}\%$
- 43. A can do  $\frac{1}{3}$ th of the work in 5 days

and B can do  $\frac{2}{5}$  of the work in 10 days. In how many days both A and B together can do the work?

- (5) -

always acute.

Which of the following statements is/ are true?

- (A) I only
- (B) II only
- (C) I & II
- (D) III only
- 30.  $131^{\circ}F =$ 
  - (A) 55°C
- (B) 56°C
- (C) 57°C
- (D) 55.5°C
- 31. The volume of a cuboid whose length, breadth and height respectively are 30cm, 20cm and 15cm is 9000 cu.cm. How many cube of edge 1cm can be cut from the cuboid?
  - (A) 600
- (B) 300
- (C) 9000
- (D) 4500
- 32. In Ravi's clock shop, two clocks brought for repairs. One clock has the cuckoo coming out every sixteen minutes while the other one has the cuckoo coming out evry eighteen minutes. Both cuckoos come out at 12.00noon. When will they both come out together again?
  - (A) 2.06PM
- (B) 2.08PM

- (C) 2.24PM (D) 2.32PM
- 33. In the year 1996, the republic day was celebrated on friday. On which day was the Independence day celebrated in the year 2000?
  - (A) Tuesday
- (B) Monday
- (C) Friday
- (D) Saturday
- 34. Which of the following fractions is the smallest?
  - (A)  $\frac{13}{16}$
- (B)  $\frac{15}{19}$
- (C)  $\frac{17}{21}$
- (D)  $\frac{7}{8}$
- 35. How many  $\frac{1}{8}$  s are there in  $7\frac{1}{2}$ ?
  - (A) 60
- (B) 70
- (C) 80
- (D) can't be determined.
- If a, b, c, d, e are five consecutive odd numbers, their average is
  - (A) 5(a+4)

(A)  $\frac{1}{12}$ 

- (B)  $\frac{5}{12}$
- (C)  $2\frac{2}{5}$
- (D)  $2\frac{1}{2}$
- 7. If  $\frac{4}{5}of 2\frac{5}{2}$  of a sum of money is `4900, find the sum.
  - (A) `612.50
- (B) `2450
- (C) `4900
- (D) `1225
- What will come in place of question mark in the following question?
  76.36 + 2984.317 + 39465.11 = ?
  - (A) 42525.787
- (B) 42135.364
- (C) 68395.387
- (D) 91246.023
- 9. The two consecutive integers between which the fraction  $\frac{5}{7}$  lies
  - are
  - (A) 5 and 6 (B) 0 and 1
  - (C) 5 and 7
- (D) 6 and 7
- 10. The price of an article is cut by 20%. To restore it to the former value, the new price must be increase by?

- (2) -|| (A) 25%
- (B) 20%
- (C) 16%
- (D) 24%
- 11. A plane figure has 5 congruent sides (same size). The perimeter of this figure is equal to 600 metres. Find the length of one side of this figure.
  - (A) 120cm
- (B) 3000m
- (C) 120m
- (D) 150m
- 12. In terms of percentage profit, Which of the following is the greatest profit percent?
  - (A) CP=36, Profit=17
  - (B) CP=50, Profit=24
  - (C) CP=40, Profit=19
  - (D) CP=60, Profit=29
- 13. Which of the following statements is not True?
  - (A) A fractional number can be divided by zero
  - (B) Division of zero by non zero fractional number results to zero
  - (C) Division of a fractional number by any of its equivalent fractions result to one.

- (3) -(D) Division of a fractional number by one, results to the fractional number itself.
- 14. What decimal of an hour is a second?
  - (A) 0.0025
- (B) 0.0256
- (C) 0.00027
- (D) 0.000126
- 15. Which of the following expression is NOT true?
  - (A)  $12 \times 89 = 89 \times 12$
  - (B)  $12 \times 89 = 12 \times (80 + 9)$
  - (C)  $12 \times 89 = (10 + 2) \times 89$
  - (D)  $12 \times 89 = (12 \times 8) + (12 \times 9)$
- 16. What should come in the place of (?) in the following question?

$$3\frac{1}{2} + 4\frac{1}{4} + 9\frac{3}{4} + 6\frac{7}{8} = ? + 5\frac{3}{4} \times 2\frac{1}{4}$$

- (A)  $11\frac{7}{16}$  (B)  $3\frac{1}{2}$
- (C)  $4\frac{3}{4}$  (D)  $7\frac{4}{15}$
- 17.  $1m^2 = \dots$ 
  - (A) 100cm<sup>2</sup>
- (B) 100m<sup>2</sup>
- (C) 10000cm<sup>2</sup>
- (D) 10000m<sup>2</sup>
- 18. The H.C.F. of the two number is 23

- and the other two factors of their L.C.M. are 13 and 14. The larger of the two numbers is
- (A) 276
- (B) 299
- (C) 322
- (D) 345
- The sum of two prime numbers may be
  - (A) a prime number
  - (B) a composite number
  - (C) an even number
  - (D) all the above
- Amal wrote the expression shown
  - below.  $5 \times \frac{4}{3}$ . Which of the following statements about the vlaue of Amal's expression is true?
  - (A) The value is between 6 and 7.
  - (B) The value is between 5 and 6.
  - (C) The value is between 4 and 5.
  - (D) The value is between 3 and 4.
- 21. The sum of two numbers is eight times their difference. If the smaller number is 35, the other number is
  - (A) 45

(B) 44

- (C) 55
- (D) 54

- 22. Julie uses 4 green beads and 6 blue beads in each bracelet she makes. What is the total number of green beads. Julie will use when she uses
  - (A) 6
- (B) 10
- (C) 12

24 blue beads?

- (D) 16
- 23. 45% of ? + 30% of 90 = 30% of 210
  - (A) 120
- (B) 80
- (C) 90
- (D) 16
- 24. The value of

$$17\frac{1}{2} - \left\{8\frac{1}{4} - \frac{3}{4}\left(2\frac{1}{2} + 1\frac{3}{4}\right)\right\}$$

- (A)  $12\frac{7}{16}$  (B)  $1\frac{1}{2}$
- (C)  $3\frac{1}{2}$  (D)  $12\frac{16}{7}$
- Mani offers 2kl of milk, Chaoton offers 7HI and Sanathoi offers only 5I. The total quantity of milk is
  - (A) 2.75 KI
- (B) 5.75 KI
- (C) 2.075KI
- (D) 2.705KI

- The area of one surface of a cube is 36 cm<sup>2</sup>, then the value of the cube is
  - (A) 72 cm<sup>2</sup>

- (4) -

- (B) 216 cm<sup>2</sup>
- (C) 36 cm<sup>2</sup>
- (D) 94 cm<sup>2</sup>
- Consider the statements:
  - (i) The length of a diameter is twice the radius of the circle
  - (ii) A diameter is a chord of the greatest
  - (iii) Any part of a circle between two points on it is called a semi circle. Which of the following statement / s is / are true?
  - (A) only I
- (B) only II (D) ||&|
- (C) | | & | | |
- Two angles forming a linear pair are
- (A) equal
- (B) supplementary
- (C) unequal
- (D) complementary
- Consider the statements:
  - (i) The sum of the angles of a triangle can be less than 180°.
  - (ii) A triangle can have two right angles.
  - (iii) Atleast two angles of a triangle are