49. 0.35 of a number is 105, what is $\frac{8}{5}$ of that number?

(A) 525 (B) 104
(C) 840 (D) 480

50. What should be substracted from $x^3-3x^2+3y^2-y^3$ to get x^3+y^3?
(A) $-3x^2+3y^2-2y^3$ (B) x^3-y^3
(C) $3x^2-3y^2-2y^3$ (D) $4x^2-3y^2-y^3$

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SPACE FOR ROUGH WORK

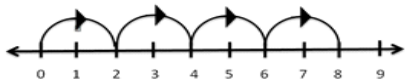
26th MVI
(MATHEMATICS)

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 questions are compulsory and each question carries 2 marks.
3. 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.
5. 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).**
6. **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)
9. 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.
10. You are not allowed to leave the examination hall until you are advised to do so by the invigilator.

1. Commas are inserted in a number after each .....
   (A) place (B) digit
   (C) period (D) none of these
2. What does the given number line represent?



   (A) $8 \div 2$ (B) 2 x 8
   (C) 2 x 4 (D) 8 - 2
3. If a and b are two whole numbers, then commutative law is applicable on substraction if and only if _____
   (A) a=b (B) a=b
   (C) a>b (D) a<b
4. Which of the following is NOT correct?
   (A) 0+0=0 (B) 0-0=0
   (C) 0x0=0 (D) $0 \div 0=0$
5. Which of the following is INCORRECT?
   (A) every whole numbers has a successor
   (B) every whole numbers has a predecessor
   (C) 0 is the least whole number
   (D) every natural number is a whole number
6. Which of the following properties is not applicable of the substraction of different whole numbers?
   (A) Associative property
   (B) Commutative property
   (C) Closure property
   (D) All of these
7. Which of the following operations satisfy the associative law for whole numbers?
   (A) Substraction and division
   (B) substraction and multiplication
   (C) Division and multiplication
   (D) Addition and multiplication
8. Million period consists of the places _____
   (A) M, TM (B) TTH, HTH, M
   (C) M, TM, HM (D) O, T, M
9. If a and b are any two whole numbers and b>a , then a-b is a
   (A) Whole numbers
   (B) Integers
   (C) Natural numbers
   (D) None of these
10. Which of the following are in the ascending order?

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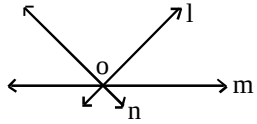
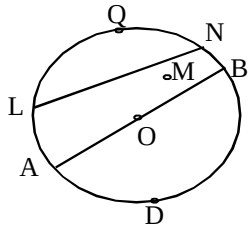


(A) Transversal
(B) Parallel
(C) Concurrent
(D) None of these

44. The region bounded by chord and minor arc is called _____
   (A) Minor segment
   (B) Major arc
   (C) Major segment
   (D) Semicircle
45. A pair of lines donot intersect at any point is called
   (A) Perpendicular (B) Parallel
   (C) Concurrent (D) Intersecting
46. Kanchan borrowed `5000 from Mr A at the rate of 7% per annum. Find the amount to cleared by Kanchan after 15 months.
   (A) `5233.50 (B) `5244.50
   (C) `5437.50 (D) `5750.50
47. Find the amount for the sum of `3500 for 3 years at the rate of 4% per month.(Simple Interest).
   (A) `8540 (B) `5350
   (C) `6430 (D) `7400
48. Which of the following statement is INCORRECT in the given circle?



   (A) AB is the diameter
   (B) ABD is the semicircle
   (C) LN is the chord
   (D) M is the centre of the circle

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(A) `424 (B) `240
(C) `224 (D) `442

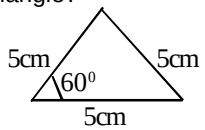
36. A shopkepeer bought 60 oranges at the rate of `20 per dozen and sold them `23 per dozen. He makes a
(A) profit `15 (B) profit `18
(C) Loss `9 (D) Loss `12

37. Which of the following is not correct ?
(A) 1 Ream = 20 Quires
(B) 1 Gross = 12 Dozens
(C) 1 Dozen = 12 Article
(D) 1 Quire = 12 pages

38. Convert into millimetre :
10hectometres 5decametres and 2metres.
(A) 1052000mm (B) 105200mm
(C) 1050200mm (D) 152000mm

39. Through how many degrees does the hour hand of a clock turn in 10 minutes?
(A) 5^0 (B) 12^0
(C) $\left(3\frac{1}{2}\right)^0$ (D) $\left(2\frac{1}{2}\right)^0$

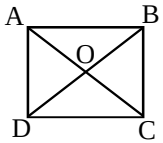
40. Which of the following describes the given triangle?



(A) Isosceles, obtuse
(B) Equilateral, obtuse
(C) Isosceles, right
(D) Equilateral, acute

41. The faces of the cube is ____shape.
(A) circle (B) triangle
(C) square (D) pentagon

42. In a square ABCD, the diagonals bisect at O. Then triangle ABC is



(A) Equilateral
(B) Isosceles but not right angled
(C) Right angle but not isosceles
(D) Isosceles right angled

43. In the given figure, lines l,m and n are called _____lines.

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(A) $\frac{1}{2},\frac{1}{3},0.25$
(B) $\frac{1}{4},\frac{1}{3},\frac{1}{2}$
(C) $0.25,\frac{1}{2},\frac{1}{3}$
(D) $\frac{1}{3},\frac{1}{2},0.25$

11. Which of the following is the largest fraction ?
(A) $\frac{7}{9}$ (B) $\frac{10}{11}$
(C) $\frac{9}{11}$ (D) $\frac{5}{6}$

12. By how much does $\frac{6}{7/8}$ exceed $\frac{6/7}{8}$?
(A) $6\frac{3}{4}$ (B) $6\frac{2}{3}$
(C) $7\frac{1}{2}$ (D) $8\frac{3}{4}$

13. Prime factorization of 18900 is
(A) 2x2x2x3x3x5x5x7
(B) 2x2x2x2x3x3x5x5x7
(C) 2x3x5x5x7x7x5
(D) 2x2x3x3x3x5x5x7

14. Find the value when the sum of all prime numbers less than 30 is divided by 5.
(A) 110 (B) 55
(C) 22 (D) 105

15. An article is sold for `10 which is a 10% profit of C.P., What is the C.P.?
(A) `10 (B) `9.09
(C) `11 (D) `10.09

16. Find the value of
$[2(DXXX + XC) \div XX] - CM$
(A) -624 (B) 530
(C) 990 (D) -838

17. Find the H.C.F of 3^5, 5^4, 7^2
(A) 49 (B) 12
(C) 22 (D)1

18. A man bought 50 kg of rice at `2.30 per kg and 60kg of rice at `3.50 per kg. At what rate should he sell it per kg by mixing the two so as to gain `115 on the whole ?

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(A) `3 (B) `6
(C) `4 (D) `5

19. Sonia can do a piece of work in 20 hours while Tamna can do the same work in 30 hours. How long will they take to complete the work if they both work together?
(A) 15 hrs (B) 12 hrs
(C) 18 hrs (D) 20 hrs

20. Mr. A bought a packet of pen for `75. What will be the S.P. if he sells it at a gain of 25%.
(A) `93.75 (B) `98.57
(C) `103.55 (D) `143.25

21. By selling a cow at `540 a man incures a loss of 10% of cost price. For how much should he sold the cow to make a 10% profit on cost price?
(A) `660 (B) `520
(C) `430 (D) `710

22. Find the number of envelops that can be made out of a sheet of paper 384 cm by 172 cm, if each envelope requires a piece of paper of size 16 cm by 12 cm .
(A) 342 (B) 344
(C) 338 (D) 340

23. An athelete takes 15 rounds of a rectangle park, 30 m long and 20 m wide. The total distance covered by him is
(A) 1550m (B)1300m
(C) 1200m (D) 1500m

24. The number of paving stones, each measuring 10dm by 9dm requires to pave a rectanglular veranda 60m by 6m is _____ .
(A) 200 (B) 160
(C) 400 (D) 300

25. The area of square is numerically equal to the perimetre of the square, then the side of square is _____ .
(A) 2 units (B) 3 units
(C) 4 units (D) 6 units

26. If x:y = 5:10 , then
(10x+5y) : (10x-2y) is equal to
(A) 10:3 (B) 41:10
(C) 16:25 (D) 25:18

27. If a:b :: c:d, then the correct statement is _____
(A) bc = ad (B) abc=d
(C) bcd = a (D) *ab=cd*

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28. Jamuna weights 34.5kg. Her father weights thrice as much as Jamuna. What is their total weight?
(A) 172.50kg (B) 103.50kg
(C) 138kg (D) 69kg

29. If the sum of two angles is greater than 180^0, Which of the following is not possible for the two angles?
(A) Two obtuse angle
(B) One reflex angle and one acute angle
(C) One obtuse angle and one acute angle
(D) Two right angles

30. Find the value of the expressions:
$$\frac{1}{5} of \left\{\left(\frac{1}{3}-\frac{1}{4} of \frac{3}{4}\right) \div \frac{1}{3}-\frac{1}{4}\times\frac{3}{4}\right\}$$
(A) $\frac{1}{20}$ (B) $-\frac{1}{20}$
(C) $-\frac{3}{20}$ (D) $\frac{3}{20}$

31. The floor of a room is rectangular in shape. Its length, breadth and height of the room are 6m, 5m and 4m respectively. Find the area of the four walls of the room.
(A) $82m^2$ (B) $89m^2$
(C) $88m^2$ (D) $86m^2$

32. Weight of an empty glass is $\frac{1}{3}$th of the glass full of milk. If the weight of a glass full of milk is 780gm, how much will it contain when half full?
(A) 260gm (B) 420gm
(C) 310gm (D) 180gm

33. A man bought a music player for `400. He paid `150 in cash and remaining in installment of `25.00 each. Find the number of installment.
(A) 10 (B) 8
(C) 12 (D) 15

34. How many minutes are there in 12 hours, 15 days and a week?
(A) 10,080 (B) 21,600
(C) 32,400 (D) 9,000

35. 6 tables and 7 chairs cost `5,494. If each table cost `400, find the cost of each chair.

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