

SECTION - 2  
MATHEMATICS

Directions : For every question, four probable answers bearing numbers (A), (B), (C) and (D) are given. Only one out of these is correct. You have to select the correct answer and darken the circle in the OMR Answer Sheet against the number corresponding to the question.

41. Which of the following numbers are the first three common multiples of the numbers 8 and 12 ?

- (A) 24, 48, 72
- (B) 8, 16, 24
- (C) 12, 24, 36
- (D) 96, 192, 288

42. The next term of the sequence 1, 2, 4, 8, 16 ..... is

- (A) 20
- (B) 64
- (C) 24
- (D) 32

43. Which one of the following is not equal to 2.4 ?

- (A)  $2\frac{2}{5}$
- (B) 22.5
- (C)  $\frac{12}{5}$
- (D)  $2\frac{4}{2}$

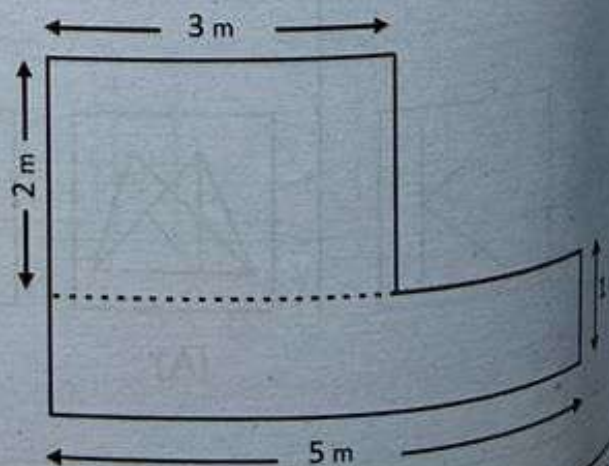
44. What is the sum of 6.666, 6.66 and 6.06 ?

- (A) 1.9386
- (B) 19.386
- (C) 193.86
- (D) 1938.6

45. A hall measures 24m x 20 m. The number of tiles of size 0.4 m x 0.3 m required to pave the floor is

- (A) 1500
- (B) 4000
- (C) 3000
- (D) 2500

46. In the figure given below, what is the perimeter of the carpet?



47. th  
tak  
48. 3/5  
of w  
49. each  
mini  
50. Navo

- (A) 16 m
- (B)  $16 \text{ m}^2$
- (C)  $11 \text{ m}^2$
- (D) 11 m

47. A train starts at 5.45 a.m and reaches the next station at 9:20 a.m. What is the time taken by the train to reach the next station?

- (A) 3 hr 35 min
- (B) 3 hr 15 min
- (C) 3 hr 25 min
- (D) 4 hr 35 min

48. A bucket can hold 20 litres of water. Its  $\frac{3}{5}$  part is filled with water. What is the amount of water required to fill the bucket completely?

- (A) 12 litres
- (B) 10 litres
- (C) 8 litres
- (D) 6 litres

49. A shopkeeper sells ball pen at ₹ 12 each or a packet of 5 for ₹ 50. How much minimum will it cost to purchase 23 ball pens?

- (A) ₹ 236
- (B) ₹ 276
- (C) ₹ 250
- (D) ₹ 230

50. In an examination, Ramesh scored 15

marks more than Gurdas, whereas Leela scored 7 marks less than Gurdas in the same examination. If their total score is 83, find the marks scored by Gurdas.

- (A) 18
- (B) 25
- (C) 40
- (D) 35

51. Kishore got medicines for ₹ 205.50 and a torch for ₹ 180.50, and paid for the bill with a 500 rupee note. The balance he got is.

- (A) ₹ 336
- (B) ₹ 114
- (C) ₹ 120
- (D) ₹ 115

52. Which is the smallest four-digit number formed, using different digits with 9 in the ten's place?

- (A) 1092
- (B) 1290
- (C) 2091
- (D) 2190

53.  $101 \times 0 \times 11$  is equal to

- (A) 112
- (B) 1010
- (C) 0

- (D) 11.11
54. Using the digits 9, 5, 0, 2, 4, the smallest five-digit even number is
- (A) 20594  
(B) 20459  
(C) 02594  
(D) 02459
55. 40% of the weight in a sweet is sugar. What amount of sugar is in such sweet of weight 4.8 kg?
- (A) 1.12 kg  
(B) 0.192 kg  
(C) 1.92 kg  
(D) 1.29 kg
56. 6 men or 10 women can do a piece of work in 12 days. In how many days the same work can be done by 3 men and 5 women ?
- (A) 6 days  
(B) 12 days  
(C) 18 days  
(D) 24 days
57. If  $5.28 \times 0.8 = 4.224$ , then the value of  $52.8 \times 0.8$  is \_\_\_\_\_
- (A) 42.24  
(B) 4.224  
(C) 422.4  
(D) 4224
58. 6% of 800 is
- (A) 12  
(B) 48  
(C) 80  
(D) 60
59. A man purchased a scooter for 47,000 and spent ₹ 3,000 on its repair. He sold it for ₹ 52,000. What is his gain/loss percentage?
- (A) gain 4%  
(B) loss 8%  
(C) loss 4%  
(D) gain 8%
60. In how much time a money will become double of itself at the rate of 10% per annum at simple interest?
- (A) 2 years  
(B) 5 years  
(C) 10 years  
(D) 15 years

# MATHEMATICS

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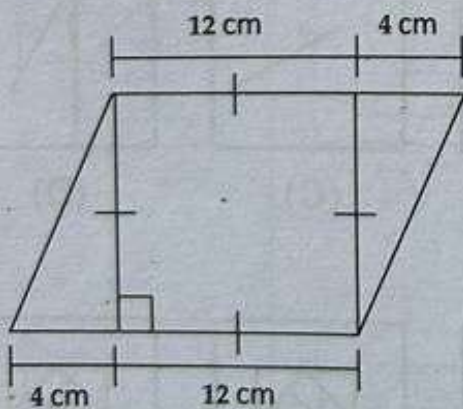
41) What should be side of square (in cm) if its perimeter is equal to area ?

- (A) 6 cm
- (B) 2 cm
- (C) 4 cm
- (D) 8 cm

42) Jammu express starts from Jammu at 8:20 am. It takes 8 hours 35 minutes to reach Delhi. If it is late by 25 minutes then at what time will it reach Delhi ?

- (1) 5 : 15 PM
- (2) 4 : 55 PM
- (3) 5 : 20 PM
- (4) 4 : 40 PM

43) The area of adjacent figure is :



- (A)  $144 \text{ cm}^2$
- (B)  $168 \text{ cm}^2$
- (C)  $192 \text{ cm}^2$
- (D)  $236 \text{ cm}^2$

44) A fish tank can hold 45 litres of water when filled to the brim. It is  $\frac{4}{9}$  filled, if  $\frac{2}{5}$  of the water is removed, how much more water must be added in order to fill the tank to the brim ?

- (A) 12 litres      (B) 20 litres
- (C) 33 litres      (D) 35 litres

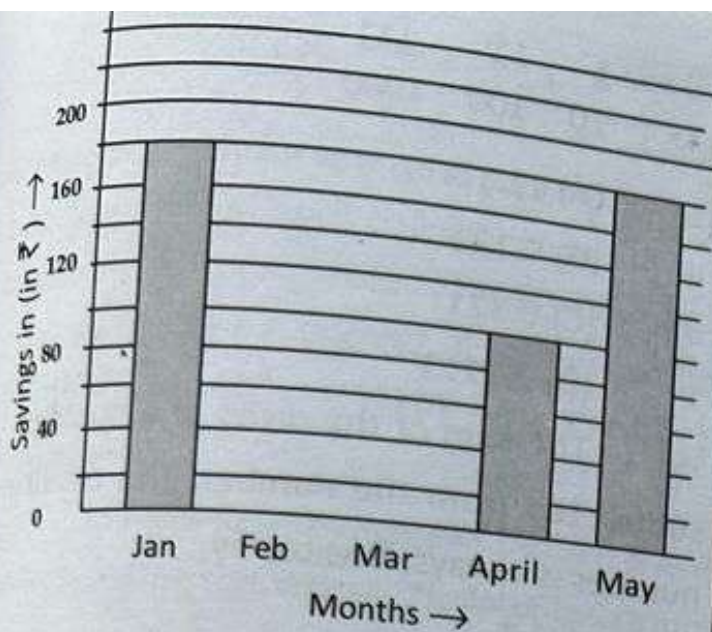
45) A fruit shop sells bananas at ₹ 40 per dozen or a banana for ₹ 5. How much will it cost to buy 99 bananas ?

- (A) ₹ 335
- (B) ₹ 320
- (C) ₹ 300
- (D) ₹ 495

46) 12 men or 15 women can finish a work in 24 days. In how many days the same work can be finished by 8 men and 8 women ?

- (A) 16 days
- (B) 20 days
- (C) 24 days
- (D) 28 days

47) The incomplete bar graph shows Samyukta's savings during the first five months of a particular year. She saved a total of ₹ 950 during five months. The amount of money saved in February was as much as that in March. How much did she save in February ?



- (A) ₹ 245  
 (B) ₹ 275  
 (C) ₹ 250  
 (D) ₹ 225

48) The pictograph shows the number of baskets of mangoes sold by a trader in five days

Monday	Tuesday	Wednes.	Thurs.	Friday
○○○○○	○○○○○ ○○○○○	○○○○○	○○○○○ ○○○○○	○○○○○

(○ represent 20 baskets)

If the trader still had 200 baskets left after 5 days, how many baskets did he have in the beginning?

- (A) 620  
 (B) 720  
 (C) 820  
 (D) 931
- 49) If  $a$  is the predecessor of  $b$ , then the value of  $(a-b)$  and  $(b-a)$  are  
 (A)  $-1$  and  $1$   
 (B)  $1$  and  $-1$

(C)  $0$  and  $1$

(D)  $1$  and  $0$

50) Joseph scored 8 marks fewer than Amit in an examination. Kumar scored 12 marks more than Amit. In total, they scored 205 marks. What was the score of Joseph?

- (A) 67  
 (B) 79  
 (C) 59  
 (D) 75

51) Sharada bought a note book for ₹ 25.20, a pen for ₹ 7.50 and 6 pencils each costing ₹ 1.25. She gave a 50 rupee note to the shopkeeper. The amount returned by the shopkeeper is :

- (A) ₹ 9.50  
 (B) ₹ 15.75  
 (C) ₹ 40.50  
 (D) ₹ 18.50

52) What is the length of the longest tape which can be used to measure exactly 1 m 75 cm, 4 m 50 cm and 6 m and 50 cm?

- (A) 25 cm  
 (B) 50 cm  
 (C) 55 cm  
 (D) 75 cm

53) The product of H. C. F. and L. C. M. of two numbers is 384. If one of them is 24, then other number is :

- (A) 18  
 (B) 6  
 (C) 32

(D) 16

54) The sum of two numbers is 345678. If one number is sixteen thousand sixteen greater than the other number, what is the greatest number?

(A) 164831

(B) 170847

(C) 180847

(D) 329662

55) 128 boxes are packed with 36 toffees in each box. If 4 toffees are packed less in a box, then the new number of boxes which can be filled with the same number of toffees is :

(A) 108

(B) 144

(C) 216

(D) 360

56) Rahul purchased old TV for ₹ 3,000. He spends ₹ 300 on its repair. He sold TV for ₹ 3,500. What is his profit?

(A) ₹ 500

(B) ₹ 250

(C) ₹ 200

(D) ₹ 300

57) Amar borrowed ₹ 800 at a rate of interest of 5% per annum. The amount he will pay after  $3\frac{1}{2}$  years is :

(A) ₹ 920

(B) ₹ 940

(C) ₹ 960

(D) ₹ 980

58) The decimal equivalent to

$\frac{1}{10} + \frac{11}{100} + \frac{111}{1000}$  is :

(A) 11.11

(B) 0.123

(C) 0.321

(D) 0.1111

59) The sum of the digits of a number is subtracted from the number. The resulting number is always divisible by

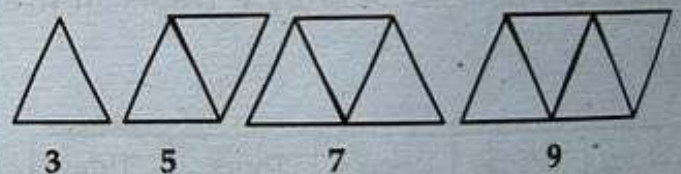
(A) 2

(B) 5

(C) 8

(D) 9

60) Observe the following pattern of triangles made of match-sticks:



Number of triangles	1	2	3	4
Number of matchsticks	3	5	7	9

How many match-sticks do you think are required to make 10 triangles?

(A) 15

(B) 19

(C) 21

(D) 25

SECTION - 2  
ARITHMETIC TEST

*Directions :* For every question, four probable answers bearing numbers (A), (B), (C) and (D) are given. Only one out of these is correct. You have to select the correct answer and darken the circle in the OMR Answer Sheet against the number corresponding to the question.

41. Which of the following statements is correct ?  
(A) Zero is an odd number.  
(B) Zero is an even number.  
(C) Zero is a prime number.  
(D) Zero is neither odd nor even number.
42. The difference between the greatest and the smallest 5-digit numbers, formed by the digits 0, 3, 6, 7 and 9 without repetition, is :  
(A) 93951  
(B) 67061  
(C) 66951  
(D) 60840
43. What is the sum of the place values of 5 in the number 5,84,356 ?  
(A) 10                      (B) 50,050  
(C) 5,050                  (D) 5,00,050
44. The number of a numbers which are multiples of both 3 and 5 in the first 100 natural numbers is :  
(A) 10                      (B) 9  
(C) 7                        (D) 6
45. Which of the following numbers is divisible by 3, 4, 5 and 6 ?  
(A) 36                      (B) 60  
(C) 80                      (D) 90
46. When -1 is multiplied by itself 100 times, the product is :  
(A) 1                        (B) -1  
(C) 100                     (D) -100
47. Simplification of the following gives :  
 $15\frac{1}{2} - [12/5 \times 5/8 + (7 \div 1\frac{3}{4})] \times 2$   
(A)  $2/9$                     (B)  $7/2$   
(C)  $9/2$                     (D)  $11/2$
48. Simplification of the following in fractional form is :  
 $2.75 - 1.25 + 4.75 - 3.80$   
(A)  $2\frac{9}{20}$                     (B)  $2\frac{9}{10}$   
(C)  $1\frac{9}{10}$                     (D)  $5\frac{9}{20}$
49. 150% is equal to :  
(A) 1.5                     (B) 5.1  
(C) 0.15                    (D) 15.0
50. 5 minutes past 3, in the afternoon, is written as ;  
(A) 5 : 30 am  
(B) 5 : 30 pm  
(C) 3 : 50 pm  
(D) 3 : 05 pm
51. A passenger train, running at a speed of 80 km/hr leaves a railway station 6 hours after a goods train leaves and overtakes it in

4 hours. What is the speed of the goods train ?

- (A) 32 km/hr
- (B) 48 km/hr
- (C) 60 km/hr
- (D) 50 km/hr

52. If a man travels at a speed of 30 km/hr, he reaches his destination 10 minutes late and if he travels at a speed of 42 km/hr, he reaches his destination 10 minutes early. the distance travelled is :

- (A) 36 km
- (B) 35 km
- (C) 40 km
- (D) 42 km

53. 5,045 grams is equal to :

- (A) 50 kg, 45 g
- (B) 5 kg, 45g
- (C) 5 kg, 450 g
- (D) 50 kg, 450 g

54. Two solid cubes of side 10 cm each are joined end to end. What is the volume of the resulting cuboid ?

- (A) 500 cm<sup>3</sup>
- (B) 2000 cm<sup>3</sup>
- (C) 1000 cm<sup>3</sup>
- (D) 10000 cm<sup>3</sup>

55. The length of a rectangular plot of land is twice its breadth. A square swimming pool of side 8 m, occupies one-eighth part of the plot. The length of the plot is :

- (A) 64 m
- (B) 32 m
- (C) 16 m
- (D) 12 m

56. There are 500 eggs in a box.  $\frac{3}{25}$  got broken,  $\frac{4}{5}$  of the remaining eggs were solid.

The number of eggs left is :

- (A) 80
- (B) 88
- (C) 40
- (D) 36

57. How many rectangular slabs of 10 cm × 8 cm are required to cover the floor of a hall of 12 m × 10 m ?

- (A) 12000
- (B) 15000
- (C) 10000
- (D) 18000

58. What sum will amount to ₹ 6,600 in 4 years at 8% per annum simple interest ?

- (A) ₹ 6,000
- (B) ₹ 5,000
- (C) ₹ 4,000
- (D) ₹ 6,200

59. An article is sold for ₹ 500 and hence a loss is incurred. Had the article been sold for ₹ 700, the shopkeeper would have gained three times the former loss. What is the cost price of the article ?

- (A) ₹ 525
- (B) ₹ 550
- (C) ₹ 600
- (D) ₹ 650

60. A fruit seller buys lemons at 2 for a rupee and sells them at 5 for three rupees. What is his profit percent ?

- (A) 8%
- (B) 10%
- (C) 15%
- (D) 20%