BK BIRLA CENTRE FOR EDUCATION

SARALA BIRLA GROUP OF SCHOOLS

SENIOR SECONDARY CO-ED DAY CUM BOYS' RESIDENTIAL SCHOOL

ANNUAL EXAMINATION 2024-25

MATHEMATICS (041)

ANSWER KEYS

Class : IV
Date : 12.03.2025
Admission No.:

Duration: 1½ Hrs
Max. Marks: 40
Roll No.:

General Instructions:

Questions 1 to 10 are 1 mark each.
Questions 11 to 14 are of 2 marks each.
Questions 15 to 18 are of 3 marks each.
Questions 19 to 20 are of 5 marks each.

SECTION –A

Choose the correct answer. **(1 mark for each correct answer)** $(10 \times 1 = 10)$

1) Which of the following is mixed fraction?

$a)\ \frac{1}{7}$ b) $\frac{3}{7}$ **c) $3\frac{2}{5}$** d) $\frac{7}{5}$

2) The number with unit digit 0 ,2,4,6 or 8 is divisible by.

a) **2** b) 3 c) 4 d) 5

3) Unit of area is

a) Cu.cm **b) sq.cm** c) cm d) None of these

4) The longer hand in the clock is called

a) Hour hand **b) Second hand** c) Minute hand d) None of these

5) There are _____ days in a leap year.

a) 364 b) 365 **c) 366** d) None of thes

6) Which is the best unit to measure the length of a pencil?

a) Km b) m **c) cm** d) None of these.

7) Rs 45.50 when converted into paise is equal to

a) 455.0 P b) 0.4550 P c) 4.550 P **d) 4550 P**

8) Which list shows the factors of 16

a) 1, 2, 3, 4, **b) 1, 2, 4, 8, 16** c) 16, 32, 48, 64 d) None of these

9) $\frac{8}{5}+\frac{3}{5}(\quad)\frac{13}{5}-\frac{2}{5}$

a) > b) < **c) =** d) none of these

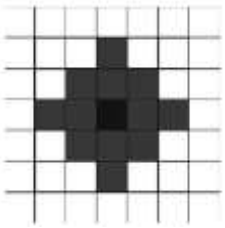
10) How many lines of symmetry does the butterfly have?

a) **1** b) 2 c) 4 d) None of these.

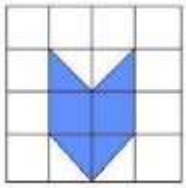
SECTION –B

$(4 \times 2 = 8)$

11) Find the areas of the following figures by counting square: (■=1 square cm)



(a)



(b)

(a) 13 sq cm _____ (1)

(b) 4 sq cm _____ (1)

12) Write the next four equivalent fractions of 5/9

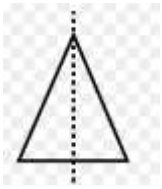
$\frac{5}{9} = \frac{10}{18} = \frac{15}{27} = \frac{20}{36} = \frac{25}{45} = \frac{30}{54} = \frac{35}{63}$ _____ (2)

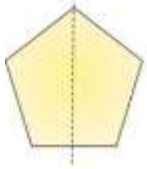
OR

Express 25/40 in the lowest form.

$\frac{25}{40} = \frac{5}{8}$ **_____ (2)**

13) In the following figures, the mirror line is given as a dotted line. Complete each figure performing reflection in the dotted line. Write the name of the figure you complete? (a) **_____ (1)** (b) **_____ (1)**





OR

Write the next four numbers according to given pattern:

(a) 100, 95, 90, 85, **80, 75, 70 ,65** **_____ (1)**

(b) 23 , 26 ,29 , **32 , 35 , 38 , 41 , 44** **_____ (1)**

14) Convert 2hours 45 minutes into minutes.

Minutes Total = (Hours × 60) + Minutes

=(2 × 60) + 45 _____ (1)

=120 + 45=165 _____ (1)

SECTION –C $(4 \times 3 = 12)$

Solve.

15) Tarun cycled 3 km 750 m on Monday and 4 km 850 m on Tuesday how much distance did he cycled altogether on these two days?

Distance travelled on Monday =3km750m

=3×1000m+750m

=3000+750m=3750m **_____ (1)**

Distance travelled on Tuesday =4km850m

=4×1000m+850m

=4000+850m=4850m **_____ (1)**

Total distance travelled = 3750+4850 =8600=8km 600m _____ (1)

OR

Express following as instructed:

(a) **3785 cm (in meter) = (3785÷ 100) = $37.85m$ _____ (1)**

(b) 8 kg (in gram) =(8 × 1000) =8000g _____ (1)

(c) 7 KL 600 L(in liter) =(7 ×1000) + 600

=7600L _____ (1)

16) If 7 books cost Rs 217, what is the cost of 12 book?

7 books cost = Rs 217 _____ (1)

1 books cost =Rs 217÷ 7 = 31 _____ (1)

12 books cost= Rs 31×12 = Rs372_____ (1)

17) Find the HCF of 15 and 18.

factors of 15 = 1, 3, 5, 15; _____ (1)

factors of 18 = 1, 2, 3, 6, 9, 18_____ (1)

15 and 18= 3. _____ (1)

OR

Find the LCM of 6 and 8 by common multiples.

multiples of 6 = 6, 12, 18, 24; _____ (1)

multiples of 8 = 8, 16, 24, 32 _____ (1)

The smallest multiple that is exactly divisible by 6 and 8, i.e., 24.

LCM of 6 and 8=24 _____ (1)

18) Find the perimeter of rectangles with the given dimensions.
Length = 12 cm, Breadth = 8 cm

Perimeter of rectangle = 2(length + breadth) . _____ (1)

Given that, Length = 12 cm, and breadth = 8 cm.

Perimeter = 2(12+ 8) =40 cm. _____ (2)

Therefore, the perimeter of the rectangle is 40 cm.

SECTION –D $(2 \times 5 = 10)$

19) Ritu's science tuition class begins at 4:20 p.m. and finishes at 5:35 p.m. She then goes for Guitar class at 5:45 p.m. and leaves at 7:15 p.m. Find out the duration of her

a) Science tuition class

- **Start time: 4:20 p.m.**
- **End time : 5:35 p.m.**

To calculate the duration:

From 4:20 p.m. to 5:00 p.m. is 40 minutes.

From 5:00 p.m. to 5:35 p.m. is 35 minutes.

So, the total duration of the Science tuition class is 1 hour and 15 minutes**.**

_____ $(2\frac{1}{2})$

b) Guitar tuition class

- **Start time: 5:45 p.m.**
- **End time: 7:15 p.m.**

To calculate the duration:

- **From 5:45 p.m. to 6:45 p.m. is 1 hour.**
- **From 6:45 p.m. to 7:15 p.m. is 30 minutes.**

So, the total duration of the Guitar tuition class is 1 hour and 30 minutes**.**

_____ **($2\frac{1}{2}$)**

OR

Convert the following into months

i) 2 years 4 months

1 years =12 months

2 year4 months =2×12+4

=28 months _____ **($2\frac{1}{2}$)**

ii) 5 leap years 6 months

1 leap years =12 months

5 leap year =5×12+6

=66 months_____ **($2\frac{1}{2}$)**

20) The below pictograph shows the data on the number of vehicles parked in a parking lot throughout the week.

Answer the following questions:

a) On **Thursday** was the maximum number of vehicles parked. _____ **(1)**

b) On **Sunday** was the minimum number of vehicles parked. _____ **(1)**

c) On **Tuesday, Wednesday, Saturday** the same number of vehicles were parked **(1)**

d) Total vehicles were parked throughout the week **= 140** _____ **(2)**

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