



MATHEMATICS

Grade 5

National Level Examination

NLE 2024

Subject Code:

2	0	1
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Total Questions: 30

Time: 1 hour

DO NOT OPEN THIS BOOKLET UNTIL INSTRUCTED TO DO SO

- All questions are compulsory.
- Read the instructions on the **ANSWER SHEET** and fill in your **NAME, CLASS** and **OTHER INFORMATION**.
- To mark your choice of answer by darkening the circles in the **ANSWER SHEET**, use an **HB PENCIL** only.
- You **MUST** record your answers on the **ANSWER SHEET** only.
- There are **30 MULTIPLE CHOICE QUESTIONS**. Use the information provided to choose the **BEST** possible answer among the four options. On your **ANSWER SHEET** fill in the circle that matches your answer.
- $\frac{1}{2}$ **MARK** will be deducted for every **WRONG ANSWER**.
- Return the **ANSWER SHEET** to the invigilator at the end of the examination.
- You are **NOT** allowed to use a calculator. You may use a ruler and spare paper for rough work.



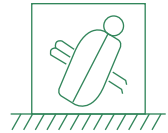
This question paper contains a total of 30 questions divided into three sections—A, B and C. Read the instructions carefully before attempting these questions.


Section A (Logical Reasoning)

1. If in a certain code language, CERTAIN is written as DFSTCKP, then how will POPULAR be written in that language?

- (A) QNPUNDT (B) RQRUNCT
(C) QPQVNCT (D) QPQUNCT

2. Find the water image of the given symbol :



- (A)  (B) 
(C)  (D) 

3. Which of the following Venn-diagrams correctly illustrates the relationship among tennis followers, cricket players and students?

- (A)  (B) 
(C)  (D) 

4. A, B, C and D are playing carom. A and B are partners. If B is facing East and C is sitting on the left side of B. Which direction is D facing?

- (A) South (B) North
(C) West (D) East

5. Choose the correct set of symbols which make the given statement true. $43 \bigcirc 16 \bigcirc 13 = 40$

- (A) (+, +) (B) (+, -)
(C) (-, -) (D) (-, +)




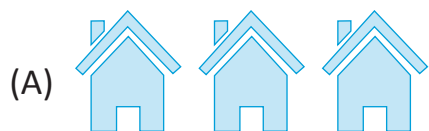
Section B (Subject Specific)


6. What should be subtracted from 90 to get 33.65?
- (A) 56.39 (B) 56.35
(C) 57.35 (D) 33.60
7. What is the sum of the measures of two supplementary angles?
- (A) 360° (B) 180°
(C) 60° (D) 90°
8. Which of the following is not a pair of composite numbers?
- (A) [2, 5] (B) [4, 8]
(C) [9, 54] (D) [21, 39]
9. Greatest five-digit number that can be formed using 7, 9, 0, 5 and 2 is _____.
- (A) 90,527 (B) 95,025
(C) 97,520 (D) 97,025
10. $6 - 3\frac{1}{2} - 2\frac{1}{5}$ can be simplified as _____.
- (A) $\frac{4}{5}$ (B) $\frac{1}{10}$
(C) $\frac{7}{12}$ (D) $\frac{3}{10}$
11. Sanya has ₹50. She spent $\frac{2}{5}$ of it in buying a book. How much amount is now left with her?
- (A) ₹30.2 (B) ₹45.3
(C) ₹25 (D) ₹30
12. LCM is the lowest common multiple of the given numbers in a set. What will be the LCM of two co-prime numbers?
- (A) Product of two numbers (B) Difference of two numbers
(C) Sum of two numbers (D) Quotient of two numbers





13. If one  represents 10 houses, then which of the following collections represents 35 houses?



14. Rashmi joined an institute in Delhi on 6th March, and after a short period of completing 70 days in Delhi, she shifted to another city. When did she shift to new place?
- (A) 13th May (B) 14th May
(C) 15th May (D) 16th May
15. What least value should come at the unit's place of the given number, so that the number 9369  is exactly divisible by 4?
- (A) 2 (B) 4
(C) 6 (D) 8
16. _____ is a solid geometric figure whose two ends are similar, equal and parallel rectilinear figures, and whose side-faces are parallelograms or rectangles.
- (A) Cone (B) Prism
(C) Sphere (D) Pyramid

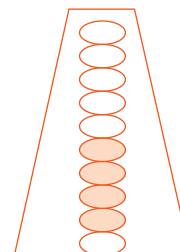
17. Which decimal number is represented by the shaded part?

(A) $\frac{4}{20}$

(B) $\frac{4}{5}$

(C) $\frac{10}{4}$

(D) $\frac{2}{5}$



18. The student-teacher ratio in a school is 45:2. If there are 4050 students in the school, how many teachers are there in school?
- (A) 200 (B) 8
(C) 180 (D) 11

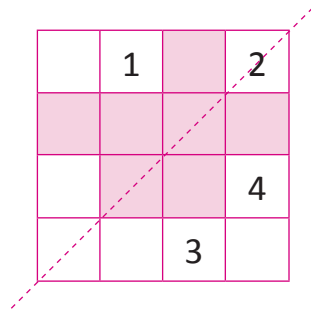


19. Bulbul bought 1750 g of sugar. After using some sugar to make 12 sugar tarts. She had 250 g of sugar left. How much sugar did she use for 1 fruit tart?
- (A) 125 g (B) 150 g
(C) 155 g (D) 160 g
20. Perimeter of a rectangle is 13 cm. If its width is $\frac{11}{4}$ cm, its length is _____ cm.
- (A) $\frac{15}{4}$ (B) $\frac{4}{15}$
(C) $\frac{6}{13}$ (D) $\frac{13}{6}$
21. Find the length of the wall needed to fence a rectangular garden of length 18.4 m and breadth 6.6 m.
- (A) 100 m (B) 23.5 m
(C) 50 m (D) 36.6 m
22. Kim can walk 4 km in one hour. How long does it take Kim to walk 18 km?
- (A) 2 hours 30 min (B) 1 hour 30 min
(C) 4 hours 30 min (D) 30 min
23. A bucket contained 12 L of syrup. Some of the syrup was used to fill 27 bottles, each with an exact capacity of 375 ml. How much syrup was left in the bucket?
- (A) $1\frac{7}{8}$ L (B) $1\frac{2}{5}$ L
(C) $2\frac{1}{2}$ L (D) $1\frac{3}{4}$ L
24. A rectangular swimming pool with length 30 m and width 10 m is surrounded by green grass. The pool with the grassy area makes a large rectangle whose length is 50 m and width is 20 m. What area is occupied by the grass?
- (A) 900 m² (B) 700 m²
(C) 950 m² (D) 750 m²





25. Which square should be shaded so that the figure is symmetrical along the given line?

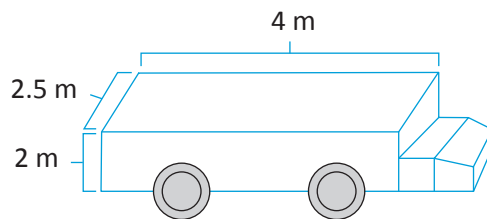


- (A) 1
- (C) 3

- (B) 2
- (D) 4

Section C (Competency Enhancement)

26. The following diagram shows a lorry with marked dimensions:



Find the volume of the load-carrying part of the lorry.

- (A) 22 m^3
- (B) 20 m^3
- (C) 21 m^3
- (D) 20 cm^3

27. How many parts should be shaded in figure Q to make it represent the same fraction as the unshaded part of figure P?

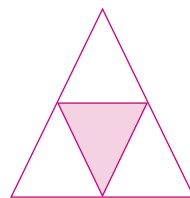


Figure P

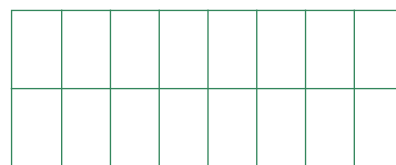


Figure Q

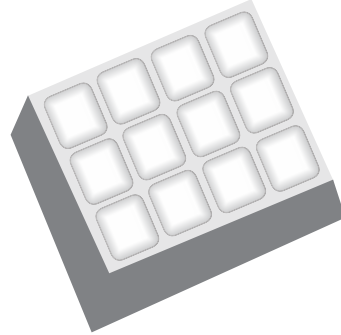
- (A) 12
- (C) 4

- (B) 9
- (D) 3





28. Arun, Bharat and Chetan each had a chocolate bar of the same size. Arun broke his chocolate into quarters. Bharat broke his chocolate into sixths. Chetan broke his chocolate into thirds. Whose chocolate was broken into the largest sized pieces?



- (A) Bharat's
(B) Chetan's
(C) Arun's
(D) Both Arun's and Chetan's
29. Each floor of a building is fitted with 20 doors. There are 12 floors in each building. There are 25 such buildings in a complex. Calculate the total number of doors fitted in the complex.
- (A) 2400
(B) 3000
(C) 6000
(D) 5000
30. Karan walks around a square park whose side is 50 m. One day he walked around the park 6 times. How much distance did he walk on that day?
- (A) 1450 m
(B) 1500 m
(C) 1800 m
(D) 1200 m





$\sqrt{a-\sqrt{b}}$ $V_n^k = \frac{n^k - 1}{(n-1)^k}$ $N \frac{3}{8} = 0.375 = 37.5\%$ $S \frac{1}{x} dx = 1 \ln|x| + c$ $f(x) = a(x+b) = -(ax-b)$

12^2 $T = 2\pi\sqrt{\frac{1}{g}}$ $2+2=4$ $f(x) = a(x+b) = -(ax-b)$

$a^3 + b^3 = (a+b)(a^2 - ab + b^2)$ $y = bxn$ $T = 2\pi\sqrt{\frac{1}{g}}$ $V_n^k = \frac{n^k - 1}{(n-1)^k}$ $T = 2\pi\sqrt{\frac{1}{g}}$ $N \frac{3}{8} = 0.375 = 37.5\%$

$\Delta 3 = \Delta mc^2$ $T = 2\pi\sqrt{\frac{1}{g}}$ $f(x)$ S c_1 B_1 B A $P = nkt$ $\frac{1}{4}$ $E = mc^2$

$V_n^k = \frac{n^k - 1}{(n-1)^k}$ $\Delta 3 = \Delta mc^2$ $f(x) = a(x+b) = -(ax-b)$ $\Delta 3 = \Delta mc^2$ $E = mc^2$ $V_n^k = \frac{n^k - 1}{(n-1)^k}$

$N \frac{3}{8} = 0.375 = 37.5\%$ $\sum \frac{(-1)^n x^{2n}}{(2n)}$ $E = mc^2$ $\theta = 2, 7g$ $E = mc^2$ $T = 2\pi\sqrt{\frac{1}{g}}$

$S \frac{1}{x} dx = 1 \ln|x| + c$ $E = mc^2$ $\Delta 3 = \Delta mc^2$ $T = 2\pi\sqrt{\frac{1}{g}}$

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$f(x) = a(x+b) = -(ax-b)$ $E = mc^2$ $\Delta 3 = \Delta mc^2$ $V_n^k = \frac{n^k - 1}{(n-1)^k}$ $\Delta 3 = \Delta mc^2$

$\frac{x}{a^2} + \frac{y}{b^2} - \frac{z}{c^2} = 1$ $\Delta 3 = \Delta mc^2$ $\frac{x}{a^2} + \frac{y}{b^2} - \frac{z}{c^2} = 1$

$P = \frac{F}{S}$ $v(-2,0)$ $y = bxn$ $T = 2\pi\sqrt{\frac{1}{g}}$