

BIGBANG

EDGE TEST

SAMPLE PAPER

For Students presently in Class V

Paper 2 - NTSE Science & Mathematics

Duration : 90 minutes

Paper Code: 56-2

Maximum Marks : 72

Please read the instructions and guidelines carefully :

Important Note : Please ensure to accurately input the details for the Question Paper Code as indicated at the top of this sheet (Side 2) into the corresponding columns / fields on the OMR sheet before proceeding with the paper. Incorrectly filled information regarding the class or paper may result in inaccurate outcomes or results.

"This paper has been scientifically designed to evaluate your potential – manifested and hidden for the target examinations mentioned in various sections of the paper. Thus, your adherence to the instructions is critical in the evaluation of the same"

1. This Question paper consists of 2 sections.
2. Student should devote allotted time for each section. If a section is easy, then it is easy for everyone & was meant to be like that with a goal in mind. Do not switch over to another section if you find the section to be easy. If a section is tough, then it is tough for everyone. Please note that each section has been allocated a time limit of 45 minutes. Dedicating the full 45 minutes to finish each section successfully is essential. Opening the next section before completing the allotted time for the preceding section is not permitted. This adherence is crucial for assessing your true potential, as each section is meticulously crafted to evaluate your potential for the corresponding competitive examinations.
3. Candidate should open the seal of Section-II only after completing 45 minutes of Section-I.
4. Sheets will be given to each candidate for rough work. Candidate must fill all details on the rough sheet and submit the same to invigilator along with OMR sheet. Candidate must mention the Question No. while doing the rough work in the sheet.
5. Please note candidates are not allowed to bring any prohibited items into the exam hall such as electronic devices, mobile phones, smart watch, earphones, calculators, books, notes, formula sheets, and bags.
6. Marking scheme is given in table below:

Section	Subject	Question no.	Marking Scheme for each question	
			Correct answer	Wrong answer
SECTION – I (NTSE-Science) Time Allotted: 45 Minutes	PHYSICS (Part-A)	1 to 12	+1	0
	CHEMISTRY (Part-B)	13 to 24	+1	0
	BIOLOGY (Part-C)	25 to 36	+1	0
SECTION – II (NTSE-Mathematics) Time Allotted: 45 Minutes	MATHEMATICS (Part-A)	37 to 72	+1	0

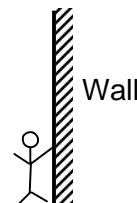
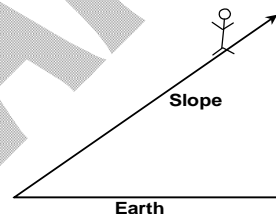
Section – I

Time: 45 Minutes

PHYSICS (PART – A)

*This part contains 12 Multiple Choice Questions number 1 to 12. Each question has 4 choices (A), (B), (C) and (D), out of which **ONLY ONE** is correct.*

1. Which of the following simple machine has one end of the flat surface higher than the other
(A) Wedge (B) Pulley
(C) Lever (D) Axle
2. When we throw a ball vertically up in space, the ball
(A) Will come to our hand again (B) Won't come back
(C) Start flying horizontally (D) Will come back after a long time
3. A child is at the top of a slider and free to slide, which of the following is correct?
(A) he will slide up due to earth's pull
(B) he will slide down due to earth's pull
(C) Both (A) & (B)
(D) None of these
4. A simple machine can do which of the following :–
(A) It can change the direction of effect (B) It can increase the force of effort
(C) It can increase speed (D) All of these
5. The stick to move a heavy stone lying on the surface is an example of
(A) Lever (B) Pulley
(C) Wheel (D) Screw
6. Wheel & rope to lift the load is an example of
(A) Wedge (B) Lever
(C) Pulley (D) Wheel & axle
7. Door knob is an example of which simple machine
(A) Wheel & axle (B) Inclined plane
(C) Both (A) & (B) (D) None of these
8. Which of the following is/are the example(s) of simple machine.
(A) Pulley (B) Wedge
(C) Inclined plane (D) All of these
9. Your friend pushing the wall with his hand is an example of :–
(A) Force (B) Work
(C) Distance (D) Pull
10. Which of the following is an example of a wedge?
(A) Knife (B) Pencil Sharpener
(C) Axe (D) both (A) and (B)



11. Grease is used to
 (A) reduce friction (B) increase friction
 (C) make a surface shiny (D) make a surface oily
12. $1 \text{ km} \times 1 \text{ m} =$ _____
 (A) 10^5 m (B) 1000 m^2
 (C) 10^5 m^2 (D) None

CHEMISTRY (PART – B)

*This part contains 12 Multiple Choice Questions number 13 to 24. Each question has 4 choices (A), (B), (C) and (D), out of which **ONLY ONE** is correct.*

13. Burning of candle is an example of
 (A) Physical change (B) Chemical change
 (C) Both physical and chemical change (D) None of these
14. Why water is cool inside the earthen pot?
 (A) It is the application of evaporation (B) It is the application of melting
 (C) Both (A) and (B) (D) None of these
15. Which main part in soil make it fertile?
 (A) Humus (B) Sand
 (C) Clay (D) None of these
16. Air is a
 (A) Mixture (B) Pure substance
 (C) Both (A) and (B) (D) None of these
17. Which of the following is not a natural disaster caused by water?
 (A) Tsunami (B) Drought
 (C) Flood (D) Earthquake
18. Which of the following is a way to check floods?
 (A) Dams (B) Reservoirs
 (C) Embankments (D) All of these
19. Coal, petroleum & minerals are
 (A) Artificial resources (B) Natural underground resources
 (C) Natural resource on earth's surface (D) None of these
20. Which of the following is a sedimentary rock?
 (A) Slate (B) Marble
 (C) Granite (D) Sandstone
21. Molecules are made up of
 (A) Atoms (B) Crystals
 (C) Compounds (D) Gases
22. Presence of toxic and harmful substances in water is known as
 (A) Water cycle (B) Oxygen cycle
 (C) Nitrogen cycle (D) Water Pollution
23. The liquid that flows out of an active volcano is?
 (A) Water (B) Petrol
 (C) Lava (D) Magma
24. _____ have a definite volume but do not have a definite shape
 (A) Solids (B) Liquids
 (C) Gases (D) Crystals

BIOLOGY (PART – C)

This part contains **12 Multiple Choice Questions** number **25 to 36**. Each question has 4 choices (A), (B), (C) and (D), out of which **ONLY ONE** is correct.

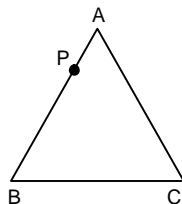
25. Plants get nutrients and water with the help of:
 (A) Leaves (B) Stem
 (C) Flower (D) Roots
26. Which of the following food we eat is a root?
 (A) Brinjal (B) Carrot
 (C) Cauliflower (D) Cabbage
27. Scurvy is caused by the deficiency of:
 (A) Vitamin A (B) Vitamin B
 (C) Vitamin C (D) Vitamin D
28. Which one of the following is not a mineral?
 (A) Calcium (B) Potassium
 (C) Iron (D) Vitamin
29. All infectious diseases are caused by:
 (A) Lack of any nutrients (B) Deficiency disease
 (C) Lack of water (D) Germs
30. The plants that need two seasons for their complete growth are:
 (A) Herbs (B) Annual plants
 (C) Biennial plants (D) Perennial plants
31. Match the following:
- | | | | |
|-------|-------------|-----|--------------------------|
| (i) | Chicken pox | (a) | Vomiting |
| (ii) | Cholera | (b) | Mosquito |
| (iii) | Measles | (c) | Spread through air |
| (iv) | Malaria | (d) | Prevented by vaccination |
- (A) (i → c), (ii → a), (iii → d), (iv → b) (B) (i → b), (ii → c), (iii → d), (iv → a)
 (C) (i → a), (ii → c), (iii → b), (iv → d) (D) (i → d), (ii → b), (iii → a), (iv → c)
32. The colourful part of a flower is called:
 (A) Sepal (B) Fruit
 (C) Petal (D) Flower
33. Which of these is not an insectivorous plant?
 (A) Pitcher plant (B) Sundew plant
 (C) Duck weed (D) Venus flytrap
34. Which class of animals can live both on land and in water?
 (A) Reptiles (B) Amphibians
 (C) Mammals (D) Aquatic
35. Food contains _____ that keeps us healthy.
 (A) nutrients (B) all of these
 (C) components (D) substances
36. Which among the following is not included in a balanced diet?
 (A) Roughage (B) Minerals
 (C) Protein (D) None of these

Section – II**Time: 45 Minutes****MATHEMATICS (PART – A)**

*This part contains 36 Multiple Choice Questions number 37 to 72. Each question has 4 choices (A), (B), (C) and (D), out of which **ONLY ONE** is correct.*

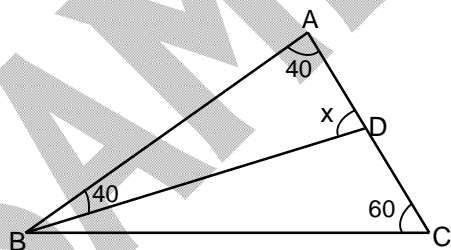
37. 70% of 80% of 30% of 3000 = ?
(A) 900 (B) 2400
(C) 2100 (D) 504
38. When a commodity is sold for Rs.34.80, there is a loss of 25%. What is the cost price of the commodity?
(A) Rs.26.10 (B) Rs.43
(C) Rs.43.20 (D) Rs.46.40
39. A shopkeeper sells one transistor for Rs.840 at a gain of Rs.40 and another for Rs.960 at a loss of Rs.40. His total gain or loss is
(A) Rs.40 gain (B) Rs.40 loss
(C) Rs.80 gain (D) No loss, no gain
40. Which of the following is multiple of 27?
(A) 268 (B) 246
(C) 161 (D) 216
41. If 28% of 75 students failed in an examination, find the number of students who passed in that examination.
(A) 21 (B) 54
(C) 28 (D) 47
42. The ratio of boys and girls in a school is 12 : 5. If the number of girls be 840, then total strength of the school is
(A) 1190 (B) 2380
(C) 2856 (D) 2142
43. A triangle having only two of its sides equal is called _____
(A) Equilateral (B) Isosceles
(C) Scalene (D) None of these
44. The sum of the angles of a triangle is _____
(A) Two acute angles (B) Two right angles
(C) Two obtuse angles (D) None of these
45. What percent of 9 km is 900 meters?
(A) 1% (B) 0.01%
(C) 10% (D) 0.001%

46. In the adjoining figure, the point P lies



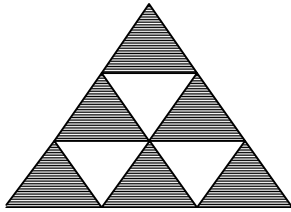
- (A) in the interior of $\triangle ABC$
 (B) on the $\triangle ABC$
 (C) in the exterior of $\triangle ABC$
 (D) none of these
47. The measures of two angles of a triangle are 75° and 65° . Then the 3^{rd} angle is
 (A) 45°
 (B) 40°
 (C) 50°
 (D) 55°
48. What is the sum of prime factors of 715?
 (A) 25
 (B) 29
 (C) 35
 (D) 39
49. In $\triangle ABC$, if $\angle A = \angle B$ then which of the following is correct.
 (A) $AC < BC$
 (B) $AC > BC$
 (C) $AC = BC$
 (D) $AB = AC$
50. By selling 21 mangoes, a vendor loses the selling price of 4 mangoes. Find the loss percent.
 (A) 14%
 (B) 16%
 (C) 18%
 (D) 21%
51. In a primary school with strength 600, there are 100 students in Nursery, Lower KG and KG 50% of all students are boys and 50% are girls. How many students are boys ?
 (A) 100
 (B) 200
 (C) 300
 (D) 400
52. Find the average of 5 primes between 15 and 35.
 (A) 23.5
 (B) 23.6
 (C) 23.7
 (D) 23.8

53. Find x.

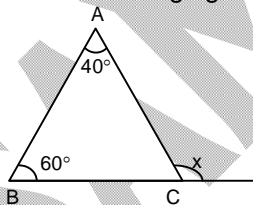


- (A) 140°
 (B) 100°
 (C) 80°
 (D) 120°
54. Two equal sides of a triangle are each 8 m less than twice the third side. If perimeter of triangle is 59 m. Find the third side.
 (A) 22 m
 (B) 15 m
 (C) 30 m
 (D) 8 m
55. The value of $12.05 \times 5.4 \div 0.6$ is equal to
 (A) 108.45
 (B) 109.45
 (C) 111.45
 (D) 1084.5

56. Preeti draw the following figure on a piece of paper. What fraction of the figure is shaded?



- (A) $\frac{5}{9}$ (B) $\frac{1}{3}$
 (C) $\frac{2}{3}$ (D) $\frac{2}{9}$
57. The L.C.M. of 12, 24 and 36 is
 (A) 24 (B) 36
 (C) 108 (D) 72
58. The product of three numbers is 29500, if two of the three numbers are 25 and 59 then the third number is
 (A) 15 (B) 18
 (C) 22 (D) 20
59. Which of the following are arranged in ascending order?
 (A) 0.09, 0.08, 0.0008 (B) 0.0008, 0.08, 0.09
 (C) 0.08, 0.0008, 0.09 (D) 0.08, 0.09, 0.0008
60. Find the average of 2, 4, 6, 3, 7, 9, 4
 (A) 0 (B) 1
 (C) 5 (D) 3
61. The sides of a triangle are in the ratio 1 : 3 : 5. If its perimeter is 90 cm, the length of its largest side is
 (A) 40 cm (B) 50 cm
 (C) 36 cm (D) 54 cm
62. In the following figure, find x.



- (A) 20 (B) 40
 (C) 60 (D) 100
63. The average of 5 numbers is 15. Later, it was found that a number 10 was wrongly written as 15, then find the correct average.
 (A) 17 (B) 20
 (C) 14 (D) 10
64. In word PEOPLE, what is the percentage of letter E.
 (A) 33.33% (B) 22.2%
 (C) 50% (D) 16.66%

65. A triangle is said to be scalene if all the 3 angles are _____
 (A) Unequal (B) Equal
 (C) Only two equal (D) none of these
66. The two angles of a triangle are complementary. The third angle is
 (A) 45° (B) 60°
 (C) 30° (D) 90°
67. With which of the given angle measurements can a triangle be constructed in any of the following cases?
 (A) $30^\circ, 60^\circ, 70^\circ$ (B) $50^\circ, 70^\circ, 60^\circ$
 (C) $40^\circ, 80^\circ, 65^\circ$ (D) $72^\circ, 28^\circ, 90^\circ$
68. Each angle of an equilateral triangle is
 (A) 90° (B) 60°
 (C) 45° (D) 70°
69. $4 + 1\frac{1}{5} + \frac{2}{3} - \frac{7}{15} =$
 (A) $4\frac{7}{15}$ (B) $3\frac{7}{15}$
 (C) $5\frac{6}{15}$ (D) $7\frac{5}{14}$
70. Which statement is false?
 (A) $4.69 > 4.6$ (B) $1061 > 10.601$
 (C) $1.09 < 1.089$ (D) $921.6 > 92.1601$
71. What is the sum of the reciprocals of 8 and $\frac{1}{6}$?
 (A) $6\frac{1}{8}$ (B) $\frac{8}{49}$
 (C) $8\frac{1}{6}$ (D) $\frac{6}{49}$
72. Simplify $\frac{\frac{5}{4} - \frac{1}{4}}{1\frac{9}{20} + 1\frac{3}{10}}$
 (A) $\frac{4}{11}$ (B) $\frac{3}{11}$
 (C) $\frac{2}{11}$ (D) None of these

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For Students presently in Class V

Paper 2 - NTSE Science & Mathematics

Paper Code: 56-2

ANSWER KEYS

1. A	2. B	3. B	4. D
5. A	6. C	7. A	8. D
9. A	10. D	11. A	12. B
13. C	14. A	15. A	16. A
17. D	18. D	19. B	20. D
21. A	22. D	23. C	24. B
25. D	26. B	27. C	28. D
29. D	30. C	31. A	32. C
33. C	34. B	35. A	36. D
37. D	38. D	39. D	40. D
41. B	42. C	43. B	44. B
45. C	46. B	47. B	48. B
49. C	50. B	51. C	52. D
53. B	54. B	55. A	56. C
57. D	58. D	59. B	60. C
61. B	62. D	63. C	64. A
65. A	66. D	67. B	68. B
69. C	70. C	71. A	72. A