

Reso-NET SAMPLE TEST PAPER

FOR STUDENTS MOVING IN CLASS-IX (WISDOM) IN 2019-20

Time : 1½ Hr.

Max. Marks : 210

GENERAL INSTRUCTIONS

1. Question paper contains 70 questions of Mathematics (1 to 25), Physics (26 to 35), Chemistry (36 to 45), Biology (46 to 55) & Mental Ability (56 to 70), each question carry 3 mark.
2. Blank papers, clip boards, log tables, slide rule, calculators, mobile or any other electronic gadgets in any form is not allowed.
3. Write your Name and Roll No. in the space provided in the bottom of this booklet.
4. Before answering the paper, fill up the required details in the blank space provided in the answer sheet.
5. Do not forget to mention your roll number neatly and clearly in the blank space provided in the answer sheet.
6. There is no negative marks for wrong answer.
7. No rough sheets will be provided by the invigilators. All the rough work is to be done in the blank space provided in the question paper.
8. In case of any dispute, the answer filled in the OMR sheet available with the institute shall be final.

MARKING CRITERIA

No. of Questions	Type	Marks		
		Correct	Incorrect	Blank
1-70	Only one correct	Q. No. 1 to 70 (3 Mark each)	NO NEGATIVE MARKS	0

IMPORTANT

PROCEDURE OF FILLING UP THE ANSWERS IN OMR SHEET

Wrong Filling

- A B C D Tick mark
 A B C D Cross mark
 A B C D Half filled or semi dark
 A B C D Light filled

Right Filling

- A B C D Fully darken with HB Pencil
 A B C D Fully darken with HB Pencil
 A B C D Fully darken with HB Pencil
 A B C D Fully darken with HB Pencil

Name : _____ Roll No. : _____

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Syllabus of Class -VIII_Reso NET

Mathematics :

- ❖ Squares & Square Roots
- ❖ Cubes & Cube Roots
- ❖ Linear equation in one variable
- ❖ Quadrilaterals
- ❖ Playing with numbers
- ❖ Algebraic expressions
- ❖ Algebraic identities
- ❖ Exponents and powers
- ❖ Percentage and its applications
- ❖ Compound interest
- ❖ Direct n inverse variations
- ❖ Visualising solid shapes
- ❖ Mensuration
- ❖ Introduction to graph
- ❖ Statistics
- ❖ Probability

Physics :

- ❖ Force
- ❖ Pressure
- ❖ Friction
- ❖ Sound wave
- ❖ Electricity
- ❖ Light
- ❖ Earthquakes
- ❖ Rain, Thunder and Lightning
- ❖ Night Sky

Chemistry :

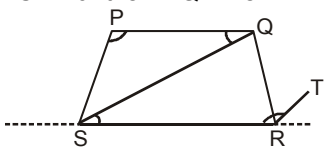
- ❖ Synthetic fibres and plastics
- ❖ Metals and non-metals
- ❖ Coal & Petroleum
- ❖ Combustion and Flame

Biology :

- ❖ Crop production & management
- ❖ Micro-Organism friend & foe
- ❖ Conservation of plants & animals
- ❖ Cellular level of organization
- ❖ Reproduction in Animal
- ❖ Pollution of Air & Water
- ❖ Reaching the Age of Adolescence

Mental Ability :

- ❖ Number Series
- ❖ Alphabet Series
- ❖ Letter Repeating Series
- ❖ Missing term in figure
- ❖ Mathematical Operations
- ❖ Coding-Decoding
- ❖ Direction Sense
- ❖ Ranking & Ordering-Test
- ❖ Blood Relation
- ❖ Sitting Arrangement
- ❖ Puzzle Test
- ❖ Venn Diagram
- ❖ Dice Test
- ❖ Analogy & Classification
- ❖ Non Verbal Series, Analogy, Classification

1. If a and b are positive integers such that $a^b = 125$, then $(a - b)^{a+b-4}$ is equal to
 (A) 25. (B) 16.
 (C) 28. (D) 30.
2. The sum of the digit of a number $10^n - 1$ is 3798. The value of n is :
 (A) 422 (B) 431
 (C) 501 (D) 673
3. If $x = 0.50$, then the value of the expression $\left\{ (1+x+x^2) + \frac{x^3}{1-x} \right\}$ is :
 (A) 4 (B) 2
 (C) 1.50 (D) 14.
4. In the given figure, line RT is drawn parallel to SQ . If $\angle QPS = 100^\circ$, $\angle PQS = 40^\circ$, $\angle PSR = 85^\circ$ and $\angle QRS = 70^\circ$ then $\angle QRT$ is.
- 
- (A) 45° (B) 65°
 (C) 85° (D) 90°
5. If $ABC \times CBA = 65125$, where A , B and C are single digits, then $A + B + C = ?$
 (A) 18 (B) 15
 (C) 8 (D) 7
6. The product of $(x^2 + 3x + 5)$ and $(x - 1)$ is .
 (A) $x^3 + 2x^2 + 2x - 5$ (B) $x^3 - 2x^2 + 2x - 5$
 (C) $x^3 + 2x^2 - 2x - 5$ (D) $x^3 + 2x^2 - 2x + 5$
7. The expression $x^2 - y^2 - z^2 + 2yz + x + y - z$ has a factor
 (A) $x - y + z + 1$ (B) $-x + y + z$
 (C) $x + y - z + 1$ (D) $x - y - z + 1$
8. If $a^x = b$, $b^y = c$ and $c^z = a$, then the value of xyz is :
 (A) 0 (B) 1
 (C) $x + y + z$ (D) abc
9. A shopkeeper fixes the marked price of a item 35% above its cost price. Then the percentage of discount allowed to gain 8% is :
 (A) 43% (B) 30%
 (C) 20% (D) 31%
10. A certain sum of money doubles itself at a compound interest in 10 years. It becomes eight times in :
 (A) 20 years (B) 30 years
 (C) 15 years (D) 13 years
11. A 400 m long train is running at the speed of 60 km per hour. It crosses a bridge of length 800 m in -
 (A) $6\frac{2}{3}$ seconds (B) 20 seconds
 (C) 2 seconds (D) 72 seconds
12. Number of vertices in a triangular prism is
 (A) 6. (B) 8.
 (C) 10. (D) 4.
13. If a rectangular paper of length 6cm and width 3 cm is rolled to form a cylinder with height equal to the width of the paper, then its base radius is-
 (A) $\frac{6}{\pi}$ cm (B) $\frac{3}{\pi}$ cm
 (C) $\frac{3}{2\pi}$ cm (D) $\frac{9}{2\pi}$ cm
14. The abscissa of a point is distance of that point from :
 (A) X-axis (B) Y-axis
 (C) Origin (D) None of these
15. You are given the five numbers p , q , r , s , t . If the average of p and t is 7, and if the average of q , r and s is 12, what is the average of all five number ?
 (A) 5 (B) 9.5
 (C) 10 (D) 19
16. If a fair coin is tossed , what is the probability of getting a head ?
 (A) $\frac{1}{2}$ (B) $\frac{1}{3}$
 (C) $\frac{1}{6}$ (D) $\frac{2}{3}$

(Space For Rough Work)

17. The least perfect square number divisible by 3, 4, 5, 6, 8 is
 (A) 900 (B) 1200
 (C) 2500 (D) 3600
18. The smallest number by which 1188 should be divided to make it a perfect cube is
 (A) 11. (B) 44.
 (C) 40. (D) 20
19. If $\frac{5x}{4} + \frac{6-x}{8} = \frac{6(x+3)}{3} - \frac{1}{6}$, then $x = ?$
 (A) $-\frac{121}{22}$ (B) $\frac{121}{12}$
 (C) $\frac{212}{21}$ (D) $-\frac{122}{21}$
20. If ABCD is an isosceles trapezium, $\angle C$ is equal to .
 (A) $\angle B$ (B) $\angle A$
 (C) $\angle D$ (D) 90°
21. Number of prime numbers ≤ 90 is -
 (A) 23 (B) 22
 (C) 24 (D) 25
22. Solve :
 $(x - a)(x - b)(x - c) \dots (x - z) = ?$
 (A) 0 (B) x
 (C) abc (D) None of these
23. What is the value of $x^2 + 32x + 256$ when $x = 34$?
 (A) 2500 (B) 2000
 (C) 2900 (D) None of these
24. The value of $2^9 \cdot 3^9$ is
 (A) $\frac{6}{81}$ (B) 6^9
 (C) $\frac{2}{9}$ (D) $\frac{3}{9}$
25. Of the 1000 inhabitants of a town, 60% are males of whom 20% are literate. If of all the inhabitants, 25% are literate, then what percent of the females of the town are literate ?
 (A) 22.5 (B) 32.5
 (C) 27.5 (D) 37.5
26. How much force is required to lift mass of 100g :
 (A) 10 N (B) 1 N
 (C) 100 N (D) 1000 N .
27. Sharper knives cut fruits easily because :
 (A) the area of contact is more
 (B) the area of contact is less
 (C) they shine more
 (D) none of these
28. In which case friction is less:
 (A) square block on straight line motion
 (B) spherical ball in straight line motion
 (C) both (A) and (B)
 (D) None of these
29. A thunder clap is heard 5.5 sec later than the lightning flash. The distance of the flash is (velocity of sound in air is 330 m/s)
 (A) 1780 m. (B) 1815 m.
 (C) 3560 m. (D) 300 m.
30. When electric current passes through a conductor it produces :
 (A) Magnetic effect
 (B) Heating effect
 (C) Chemical effect
 (D) All of these
31. We see different objects around us due to of light. :
 (A) Reflection (B) Refraction
 (C) Dispersion (D) None of these
32. Earthquakes are generally followed by :
 (A) rain (B) after shocks
 (C) thunder (D) lightning
33. Generally lower part of clouds has :
 (A) Positive charge. (B) Negative charge.
 (C) Zero charge (D) Any type of charge.

(Space For Rough Work)

34. Which planet is also known as red planet :
 (A) mercury (B) venus
 (C) earth (D) mars
35. Which of the following is a conducting material
 (A) Glass (B) Wood
 (C) Copper (D) All of these
36. Rayon was obtained by the chemical treatment of
 (A) plastics. (B) wood pulp.
 (C) fruit pulp. (D) cloth.
37. Antimony and arsenic belong to the category of -
 (A) metals (B) metalloids
 (C) non - metals (D) minerals
38. The calorific values of wood, bituminous coal, natural gas and charcoal vary in order -
 (A) Wood > Bituminous coal > Natural gas > Charcoal
 (B) Wood > Bituminous coal > Charcoal > Natural gas.
 (C) Natural gas > Charcoal > Bituminous coal > Wood
 (D) Natural gas > Bituminous coal > Wood > Charcoal.
39. The flame of candle has three zones. The outer zone is blue, the middle zone is yellow and the inner zone is black. Which is correct regarding this ?
 (A) The outer zone is least hot
 (B) The middle zone is hottest
 (C) The inner zone is least hot
 (D) All the zones have same temperature
40. An example of natural fibre is
 (A) nylon. (B) polyester.
 (C) rayon. (D) cotton.
41. The best conductor of electricity is
 (A) silver. (B) iron.
 (C) aluminum. (D) copper.
42. Coal and Petroleum are also called
 (A) fossil fuels. (B) fossils.
 (C) biogas. (D) natural gas.
43. Which of the following on burning does not produce a flame ?
 (A) Candle wick
 (B) A wick dipped in kerosene oil
 (C) Charcoal
 (D) Camphor
44. The metal that can be easily cut with a knife is
 (A) iron. (B) aluminum.
 (C) sodium. (D) zinc.
45. The resources present in unlimited quantity in nature are called
 (A) inexhaustible natural resources.
 (B) natural resources.
 (C) exhaustible natural resources.
 (D) exhaustible resources.
46. Fertilizers are harmful for soil because -
 (A) they increase soil fertility
 (B) they cause the soil pollution
 (C) provides the nutrients
 (D) they are inorganic salt.
47. Syphilis is caused by -
 (A) HIV
 (B) Traponema palidum
 (C) Mycobacterium tuberculosis
 (D) None of these
48. Proper management of the environment is important so that:
 (A) humans can continue to live
 (B) the balance of nature can be preserved
 (C) animals would not become extinct
 (D) plants would not become extinct
49. The colour that chromoplast gives to a plant is
 (A) red. (B) yellow.
 (C) Brown (D) All of the above
50. In most mammals, testes are located in scrotal sacs for -
 (A) sex differentiation
 (B) sperm development in cooler condition
 (C) independent functioning of kidneys
 (D) more space to visceral organs

(Space For Rough Work)

51. Which of the following is the major green house gas ?
 (A) H₂S (B) CO₂
 (C) CO (D) H₂

52. Zygote develops to form a/an
 (A) egg. (B) embryo.
 (C) ova. (D) sperms.

53. The animal in which internal fertilisation takes place is
 (A) toad. (B) frog.
 (C) fish. (D) pigeon.

54. Eutrophication is caused due to -
 (A) water pollution (B) air pollution
 (C) soil pollution (D) noise pollution

55. The hormone secreted by the pineal gland is
 (A) melatonin (B) adrenaline
 (C) Growth hormone (D) insulin

Directions : (56 to 57) Find the missing terms :

56. 2, 3, 10, 15, 26, ?, 50
 (A) 32 (B) 33
 (C) 34 (D) 35

57. T, V, Z, B, F, ?
 (A) G (B) H
 (C) K (D) J

Directions : (58) Which sequence of letters when placed at the blanks one after the other will complete the given letter series ?

58. mq _ sqm _ qssq _ m _ ssqmm _ s
 (A) qsmsq (B) qmsmq
 (C) smmqq (D) sqmss

Directions : (59) Find the missing terms :

25	17	41
32	83	11
26	?	31

59. (A) 26 (B) 25
 (C) 34 (D) 38

60. Which interchange of signs will make the following equation true ?
 $12 - 3 \times 2 \div 18 + 6 = 9$
 (A) $\div, -$ (B) $\div, +$
 (C) $\times, -$ (D) $+, -$

61. **PROMOTION** in a certain code is written as **QSP 86** how will you code **DEMOTION** ?
 (A) DE 98 (B) EF 98
 (C) EF 86 (D) EG 89

62. A man walks 9 km due East and then 12 km due South. How far is he from the starting point?
 (A) 15 kms. (B) 6 kms.
 (C) 7 kms. (D) none of these

63. In a row of girls, Mradula is **18th** from the right and Sanjana is **18th** from the left. If both of them exchange their position, Sanjana becomes **25th** from the left, how many girls are there in the row ?
 (A) 40 (B) 41
 (C) 42 (D) 35

64. Showing the lady in the park, Vineet said, "She is the daughter of my grand father's only son. "How is Vineet related to that lady?
 (A) Brother (B) Cousin
 (C) Father (D) Uncle

65. In a row of five persons, A is to the immediate left of B. E is on the right side of A who has D on his left side. If C is third to the left of B than who are sitting on the two ends of the row ?
 (A) C and E (B) A and D
 (C) B and C (D) C and A

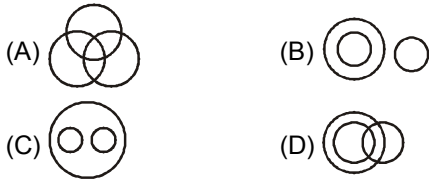
Directions : (66) Five students A, B, C, D & E of a class secured distinction in four subjects English, Science, Maths and Sanskrit as: A and C secured distinction in English and Science. B, C and E secured distinction in Science and Sanskrit, while A, D and E Secured distinction in English and Maths. find out the correct alternatives for given question.

66. The student who secured distinction in all the four subjects is -
 (A) A (B) E
 (C) C (D) D

(Space For Rough Work)

Direction : (67) Which of the Venn diagrams given in the alternatives best represents the relation between the given items ?

67. Mothers, Engineers, Females



68. Three positions of the same dice are given below. Observe the figures carefully and tell which number will appear on the face opposite the number 1 ?



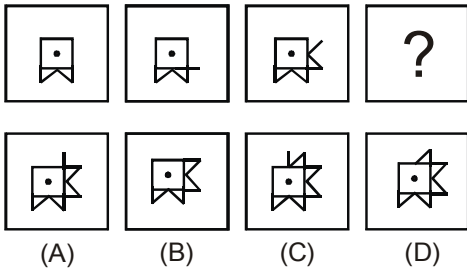
- (A) 4
- (B) 6
- (C) 5
- (D) 3

69. 'Eye' is related to 'See' in the same way as 'Ear' is related to-

- (A) Ring
- (B) Sound
- (C) Hear
- (D) Smell

Directions : (70) In the following question, some figures are given in a sequence. Find out the figure from the alternatives, which will come in place of the question mark to continue the sequence.

70.



ANSWER KEY

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