SPECTRA

PATH TO SUCCESS

NEET | JEE | FOUNDATIONS

CLASS VII   **STAARS MODEL PAPER**   **TIME: 01:00 HR**

PART A – SCIENCE (40 Marks)

1. Which of the following materials is a poor conductor of heat?
   a) Copper   b) Aluminium   c) Plastic   d) Iron

2. Which of these processes involves heat transfer without actual movement of particles?
   a) Conduction   b) Convection   c) Radiation   d) Both (a) and (c)

3. The pitch of a sound depends on its:
   a) Amplitude   b) Frequency   c) Speed   d) Echo

4. Which one of the following substances turns red litmus paper blue?
   a) Vinegar   b) Lemon juice   c) Baking soda   d) Orange juice

5. Which of the following is a physical change?
   a) Rusting of iron   b) Melting of ice   c) Burning of paper   d) Digestion of food

6. The chemical formula of common salt is:
   a) Na_2CO_3 b) $NaCl$ c) KCl d) $NaOH$

7. Which of the following is a good source of carbohydrates?
   a) Milk   b) Meat   c) Rice   d) Spinach

8. The main organs of the human respiratory system are:
   a) Heart and Lungs   b) Nose and Lungs   c) Lungs and Trachea   d) Mouth and Heart

9. In plants, the process of removing waste is called:
   a) Excretion   b) Transpiration   c) Photosynthesis   d) Diffusion

10. Which of these is not a part of the circulatory system?
    a) Heart   b) Blood   c) Kidney   d) Blood vessels

PART B – MATHEMATICS (40 Marks)

11. The value of (−5) + (−8) + (3) is:
    a) −10   b) −13   c) −8   d) −9

12. Simplify: $3x + 5x – 7 = 9$
    a) $x = 2$ b) $x = 3$ c) $x = 4$ d) $x = 5$

13. The number which is neither prime nor composite is:
    a) 0   b) 1   c) 2   d) 3

14. The sum of angles in a quadrilateral is:
    a) 90°　　　　　　b) 180°　　　　　　c) 270°　　　　　　d) 360°

15. A shopkeeper buys 10 pens for ₹120 and sells each for ₹15. Find his profit.
    a) ₹20　　　　　　b) ₹25　　　　　　c) ₹30　　　　　　d) ₹40

16. The perimeter of a rectangle is 40 cm and its length is 12 cm. Find its breadth.
    a) 8 cm　　　　　　b) 10 cm　　　　　　c) 12 cm　　　　　　d) 14 cm

17. A fraction equivalent to 3/5 is:
    a) 9/10　　　　　　b) 6/10　　　　　　c) 12/15　　　　　　d) 15/20

18. If $2x + 3 = 11$, find x.
    a) 2　　　　　　b) 3　　　　　　c) 4　　　　　　d) 5

19. The area of a triangle with base 10 cm and height 8 cm is:
    a) 40 cm²　　　　　　b) 80 cm²　　　　　　c) 50 cm²　　　　　　d) 60 cm²

20. The side of a square is 9 cm. Its perimeter is:
    a) 18 cm　　　　　　b) 27 cm　　　　　　c) 36 cm　　　　　　d) 45 cm

PART C – MENTAL ABILITY (20 Marks)

21. Find the missing number: 3, 6, 12, 24, ?
    a) 36　　　　　　b) 40　　　　　　c) 46　　　　　　d) 48

22. If A = 1, B = 2, C = 3, then the value of the word CAT is:
    a) 24　　　　　　b) 25　　　　　　c) 26　　　　　　d) 27

23. Choose the odd one out:
    a) Square　　　　　　b) Rectangle　　　　　　c) Triangle　　　　　　d) Circle

24. Which number will complete the series? 2, 4, 8, 16, ?
    a) 18　　　　　　b) 24　　　　　　c) 30　　　　　　d) 32

25. In a certain code, FLOWER = GMPXFS. What is GARDEN in that code?
    a) HBSFEO　　　　　　b) HBSFDO　　　　　　c) FZQDCL　　　　　　d) HCTFDO

26. If 3 + 4 = 25 and 5 + 2 = 49, then 4 + 6 = ?
    a) 64　　　　　　b) 81　　　　　　c) 100　　　　　　d) 121

27. Find the next term in the series: 7, 10, 8, 11, 9, 12, ?
    a) 10　　　　　　b) 13　　　　　　c) 14　　　　　　d) 15

28. A clock shows 6:00. The angle between the hour and minute hand is:
    a) 90°　　　　　　b) 120°　　　　　　c) 150°　　　　　　d) 180°

29. Choose the odd pair:
    a) Doctor – Hospital   b) Teacher – School   c) Pilot – Plane   d) Farmer – Ship

30. If MONDAY = 72, what is SUNDAY?
    a) 84   b) 87   c) 90   d) 93

Note to Parents and Students:

This is a model paper designed to show the pattern and standard of the STAARS Scholarship Test.
The actual paper's difficulty and question distribution may vary slightly in the final test.