RRB NTPC Exams

Mathematics (30 Questions)

1. **If 12 men complete a work in 15 days, in how many days will 10 men do it?**
   A) 18 days
   B) 20 days
   C) 15 days
   D) 12.5 days
   Answer: B

2. **A train running at 60 km/h crosses a pole in 30 seconds. What is the length of the train?**
   A) 500 m
   B) 600 m
   C) 450 m
   D) 750 m
   Answer: A

3. **A shopkeeper sells an item at a loss of 10%. If he had sold it for ₹100 more, he would have gained 5%. What is the cost price?**
   A) ₹500
   B) ₹600
   C) ₹700
   D) ₹800
   Answer: B

4. **If $x^2 + 1/x^2 = 25$, find $x + 1/x$.**
   A) 7
   B) 5
   C) 6
   D) 8
   Answer: A

5. **The average of 5 consecutive odd numbers is 45. What is the smallest of these numbers?**
   A) 41
   B) 43
   C) 45
   D) 39
   Answer: A

6. **A can do a piece of work in 20 days. B is 25% more efficient than A. In how many days can B do the same work?**
   A) 16 days
   B) 15 days
   C) 18 days
   D) 20 days
   Answer: A

7. **A man bought an article at 20% discount on the labelled price. He sold it at a 10% profit on the labelled price. What is the profit percentage?**
   A) 30%
   B) 35%
   C) 25%

D) 37.5%
Answer: D

8. **If 40% of a number is equal to 2/5 of another number and the second number is 75, what is the first number?**
   A) 75
   B) 60
   C) 90
   D) 85
   Answer: C

9. **What is the compound interest on ₹10,000 at 10% p.a. for 2 years?**
   A) ₹1,000
   B) ₹2,100
   C) ₹2,000
   D) ₹2,200
   Answer: B

10. **A sum of money triples itself in 8 years. In how many years will it become 9 times?**
    A) 24 years
    B) 16 years
    C) 18 years
    D) 20 years
    Answer: A

11. **What is the value of 111 × 111 − 11 × 11?**
    A) 12100
    B) 11100
    C) 12210
    D) 12321
    Answer: A

12. **If sin A = 3/5, find cos A.**
    A) 4/5
    B) 3/4
    C) 5/3
    D) 2/5
    Answer: A

13. **The LCM of two numbers is 240 and their HCF is 12. If one number is 48, what is the other number?**
    A) 60
    B) 72
    C) 80
    D) 90
    Answer: C

14. **If A:B = 2:3 and B:C = 4:5, find A:C.**
    A) 8:15
    B) 2:5
    C) 3:4
    D) 5:8
    Answer: A

15. **What is the area of a rhombus with diagonals 10 cm and 8 cm?**
    A) 40 cm²
    B) 50 cm²

C) 80 cm²
D) 60 cm²
Answer: A

16. **Find the smallest number which when divided by 8, 12, and 16 leaves a remainder of 5.**
    A) 101
    B) 101
    C) 197
    D) 101
    Answer: D

17. **A train 180 m long passes a platform 120 m long in 15 seconds. Find the speed of the train.**
    A) 72 km/h
    B) 60 km/h
    C) 90 km/h
    D) 96 km/h
    Answer: A

18. **If the angles of a triangle are in the ratio 2:3:4, find the largest angle.**
    A) 40°
    B) 60°
    C) 80°
    D) 100°
    Answer: D

19. **A person marks his goods 60% above cost price and allows a discount of 25%. What is the gain percent?**
    A) 20%
    B) 25%
    C) 30%
    D) 35%
    Answer: A

20. **A tank is filled by one tap in 12 minutes and emptied by another in 20 minutes. How long will it take to fill the tank if both are opened together?**
    A) 30 min
    B) 32 min
    C) 40 min
    D) 48 min
    Answer: D

21. **What is the LCM of 12, 15, and 20?**
    A) 60
    B) 120
    C) 240
    D) 30
    Answer: A) 60

22. **Simplify: (1/2 + 1/3 + 1/4) = ?**
    A) 13/12
    B) 1
    C) 9/10
    D) 1.5
    Answer: A) 13/12

23. **A train 120 m long is running at 54 km/h. How much time will it take to pass a man standing on the platform?**
    A) 8 sec
    B) 10 sec
    C) 12 sec
    D) 15 sec
    Answer: C) 8 sec
24. **If the cost price of an article is ₹500 and the selling price is ₹600, what is the profit percentage?**
    A) 10%
    B) 15%
    C) 20%
    D) 25%
    Answer: C) 20%
25. **What is the simple interest on ₹1000 at 5% per annum in 3 years?**
    A) ₹150
    B) ₹120
    C) ₹200
    D) ₹180
    Answer: A) ₹150
26. **If 12 men can complete a work in 15 days, in how many days can 10 men complete the same work?**
    A) 18 days
    B) 20 days
    C) 16 days
    D) 14 days
    Answer: B) 18 days
27. **The average of 5, 10, 15, 20, and 25 is:**
    A) 10
    B) 15
    C) 12.5
    D) 13
    Answer: B) 15
28. **What is the square root of 1444?**
    A) 38
    B) 36
    C) 34
    D) 32
    Answer: A) 38
29. **A man covers a distance of 240 km in 6 hours. What is his speed?**
    A) 30 km/h
    B) 40 km/h
    C) 45 km/h
    D) 50 km/h
    Answer: B) 40 km/h
30. **Ratio of 2:3 is equal to which of the following?**
    A) 4:6
    B) 6:10
    C) 8:10

D) 10:15
Answer: A) 4:6 and D) 10:15 (both correct)

✅ Science (30 Questions)

1. **Which gas is used in the preparation of soda water?**
   A) Oxygen
   B) Carbon Dioxide
   C) Hydrogen
   D) Nitrogen
   Answer: B
2. **Which part of the plant conducts photosynthesis?**
   A) Root
   B) Stem
   C) Leaf
   D) Flower
   Answer: C
3. **The hardest natural substance is:**
   A) Gold
   B) Iron
   C) Diamond
   D) Platinum
   Answer: C
4. **Which vitamin helps in blood clotting?**
   A) A
   B) B
   C) K
   D) D
   Answer: C
5. **The instrument used to measure atmospheric pressure is:**
   A) Thermometer
   B) Barometer
   C) Hygrometer
   D) Anemometer
   Answer: B
6. **Which planet has the highest number of moons?**
   A) Jupiter
   B) Saturn
   C) Uranus
   D) Neptune
   Answer: B
7. **The SI unit of electric current is:**
   A) Watt
   B) Ampere
   C) Volt
   D) Ohm
   Answer: B

8. **The phenomenon of bending of light around corners is called:**
    A) Reflection
    B) Refraction
    C) Diffraction
    D) Dispersion
    Answer: C
9. **Who discovered the neutron?**
    A) J.J. Thomson
    B) Rutherford
    C) Chadwick
    D) Bohr
    Answer: C
10. **Which gas is responsible for global warming?**
    A) CO_2
    B) O_2
    C) H_2
    D) N_2
    Answer: A
11. **What is the chemical formula of Baking Soda?**
    A) NaCl
    B) $NaHCO_3$
    C) $CaCO_3$
    D) Na_2CO_3
    Answer: B
12. **Which part of the cell contains genetic material?**
    A) Cytoplasm
    B) Nucleus
    C) Cell wall
    D) Ribosome
    Answer: B
13. **Which one is a Newton's Third Law example?**
    A) A ball falling under gravity
    B) Rocket launch
    C) Moon orbiting Earth
    D) Water boiling
    Answer: B
14. **Acid turns litmus paper from:**
    A) Red to blue
    B) Blue to red
    C) Green to yellow
    D) Colorless to pink
    Answer: B
15. **Which disease is caused by a virus?**
    A) Tuberculosis
    B) Typhoid
    C) AIDS
    D) Cholera
    Answer: C
16. **The boiling point of water is:**
    A) 50°C

B) 90°C
C) 100°C
D) 120°C
Answer: C

17. **Which gas is used in fire extinguishers?**
    A) Oxygen
    B) Hydrogen
    C) Carbon Dioxide
    D) Helium
    Answer: C

18. **Which blood cells help in clotting?**
    A) RBC
    B) WBC
    C) Platelets
    D) Plasma
    Answer: C

19. **The speed of light in vacuum is:**
    A) 3×10^8 m/s
    B) 1.5×10^8 m/s
    C) 2.5×10^6 m/s
    D) 3×10^6 m/s
    Answer: A

20. **Which part of the human brain controls breathing?**
    A) Cerebrum
    B) Cerebellum
    C) Medulla
    D) Pons
    Answer: C

21. **What is the chemical formula of water?**
    A) H2O
    B) CO2
    C) H2SO4
    D) NaCl
    Answer: A) H2O

22. **Which part of the plant conducts photosynthesis?**
    A) Root
    B) Stem
    C) Leaf
    D) Flower
    Answer: C) Leaf

23. **Which gas is used for respiration by humans?**
    A) Oxygen
    B) Nitrogen
    C) Carbon Dioxide
    D) Hydrogen
    Answer: A) Oxygen

24. **Which vitamin is produced by sunlight in the human body?**
    A) Vitamin A
    B) Vitamin B
    C) Vitamin C

D) Vitamin D
Answer: D) Vitamin D

25. **Which organ is called the "control center" of the human body?**
    A) Heart
    B) Brain
    C) Liver
    D) Kidney
    Answer: B) Brain

26. **What is the SI unit of force?**
    A) Joule
    B) Watt
    C) Newton
    D) Pascal
    Answer: C) Newton

27. **Which of the following is a non-metal?**
    A) Iron
    B) Copper
    C) Carbon
    D) Zinc
    Answer: C) Carbon

28. **Which planet is known as the Red Planet?**
    A) Venus
    B) Mars
    C) Jupiter
    D) Mercury
    Answer: B) Mars

29. **What is the boiling point of water in Celsius?**
    A) 0°C
    B) 100°C
    C) 50°C
    D) 212°C
    Answer: B) 100°C

30. **Which metal is liquid at room temperature?**
    A) Iron
    B) Mercury
    C) Lead
    D) Copper
    Answer: B) Mercury