RRB Group D 2026 Memory Based Paper PDF (03-Aug-2026)

Q1. An object is displaced by $5\ \mathrm{m}$ in the direction of a constant force of $12\ \mathrm{N}$. What is the work done on the object?

(a) 60 W (b) 60 J (c) 2.4 J (d) 17 J

Q2. Which of the following statements about magnetic field lines is INCORRECT?

(a) They emerge from the North Pole and merge at the South Pole outside the magnet.
(b) The degree of closeness of the field lines indicates the relative strength of the magnetic field.
(c) Two magnetic field lines can intersect each other near the poles.
(d) Inside the magnet, the direction of field lines is from the South Pole to the North Pole.

Q3. What gas is typically liberated when zinc metal reacts with dilute sulfuric acid?

(a) Oxygen (b) Nitrogen (c) Hydrogen (d) Carbon dioxide

Q4. Which of the following factors increases the rate of evaporation of a liquid?

(a) Decrease in surface area (b) Increase in humidity (c) Decrease in temperature (d) Increase in wind speed

Q5. The movement of molecules from a region of their higher concentration to a region of their lower concentration is known as:

(a) Plasmolysis (b) Osmosis (c) Active Transport (d) Diffusion

Q6. According to Ohm's Law, if the voltage across a conductor is doubled while the resistance remains constant, the current will:

(a) Be halved (b) Double (c) Remain unchanged (d) Quadruple

Q7. A car starts from rest and accelerates uniformly at $2\ \mathrm{m/s^2}$ for 10 seconds. What is the final velocity of the car?

(a) 10 m/s (b) 15 m/s (c) 20 m/s (d) 25 m/s

Q8. Match the plant parts (Column A) with their respective functions/descriptions (Column B).
Column A: 1. Xylem, 2. Phloem, 3. Stomata, 4. Root Hairs
Column B: a. Translocation of food, b. Absorption of water from soil, c. Transport of water and minerals, d. Exchange of gases

(a) 1-c, 2-a, 3-d, 4-b (b) 1-a, 2-c, 3-b, 4-d (c) 1-c, 2-a, 3-b, 4-d (d) 1-b, 2-a, 3-d, 4-c

Q9. Clove, a commonly used spice, is obtained from which part of the plant?

(a) Root (b) Stem (c) Flower bud (d) Fruit

Q10. The mode of nutrition in which organisms take in nutrients in solution form from dead and decaying matter is called:

(a) Autotrophic nutrition (b) Parasitic nutrition (c) Holozoic nutrition (d) Saprotrophic nutrition

Q11. The mass number of an atom is defined as the total number of:

(a) Electrons in the outer shell (b) Protons and electrons (c) Protons and neutrons in the nucleus (d) Neutrons in the nucleus

Q12. In the extraction of metals, the process of converting sulfide ores into oxides by heating strongly in the presence of excess air is known as:

(a) Calcination (b) Roasting (c) Smelting (d) Refining

Q13. Calculate the kinetic energy of an object of mass $10\ \text{kg}$ moving with a velocity of $4\ \text{m/s}$.

(a) 40 J (b) 80 J (c) 160 J (d) 20 J

Q14. Which of the following microorganisms is used in the commercial production of alcohol and wine?

(a) Lactobacillus (b) Rhizobium (c) Yeast (d) Penicillium

Q15. Which of the following is considered the most environmentally friendly method of waste disposal?

(a) Open dumping (b) Incineration without filters (c) Composting (d) Discharging into rivers

Q16. In flowering plants, the process of double fertilization involves:

(a) Fusion of one male gamete with the egg and another with the synergids.
(b) Fusion of one male gamete with the egg and another with the polar nuclei.
(c) Fusion of two male gametes with a single egg cell.
(d) Fusion of the pollen tube with the ovary wall.

Q17. Quicklime reacts vigorously with water to produce slaked lime. What is the chemical formula of slaked lime?

(a) CaO (b) $CaCO_3$ (c) $Ca(OH)_2$ (d) $CaCl_2$

Q18. The twinkling of stars in the night sky is primarily due to:

(a) Atmospheric refraction of starlight (b) Dispersion of starlight (c) Scattering of starlight by dust particles (d) Internal reflection of starlight

Q19. An object has a mass of 12 kg on Earth. What will be its mass on the surface of the Moon?

(a) 2 kg (b) 12 kg (c) 72 kg (d) 1.2 kg

Q20. Identify the correctly balanced chemical equation from the following:

(a) $H_2 + O_2 \rightarrow H_2O$
(b) $2Mg + O_2 \rightarrow 2MgO$
(c) $Fe + H_2O \rightarrow Fe_3O_4 + H_2$
(d) $N_2 + H_2 \rightarrow NH_3$

Q21. Which organelle is known as the "powerhouse" of the cell?

(a) Endoplasmic Reticulum (b) Golgi Apparatus (c) Nucleus (d) Mitochondria

Q22. Based on the reactivity series, which of the following metals can displace iron from iron(II) sulfate solution?

(a) Silver (b) Copper (c) Zinc (d) Gold

Q23. In which of the following plants are seeds primarily dispersed by wind?

(a) Coconut (b) Dandelion (c) Mango (d) Lotus

Q24. When salt is dissolved in water, the water level does not rise immediately. This demonstrates that:

(a) Matter is continuous. (b) Salt evaporates in water. (c) Particles of matter have spaces between them. (d) Water particles absorb salt particles chemically.

Q25. How many atoms of hydrogen are present on the right side of the chemical equation: $CH_4 + 2O_2 \rightarrow CO_2 + 2H_2O$?

(a) 2 (b) 4 (c) 6 (d) 8

Q26. If $\sin\theta = \frac{3}{5}$, find the value of $(\tan\theta + \cos\theta)$.

(a) 31/20 (b) 27/20 (c) 17/12 (d) 23/15

Q27. A man spends 75% of his income. His income increases by 20% and his expenditure increases by 10%. Find the percentage increase in his savings.

(a) 25% (b) 40% (c) 50% (d) 60%

Q28. The mean of 5 observations is 12. If a new observation is included, the new mean becomes 13. What is the value of the new observation?

(a) 15 (b) 18 (c) 16 (d) 17

Q29. Pipes A, B, and C together can fill a tank in 6 hours. They work together for 2 hours, and then pipe C is closed. Pipes A and B fill the remaining tank in 8 hours. In how many hours can pipe C alone fill the empty tank?

(a) 10 (b) 12 (c) 14 (d) 16

Q30. The population of a town increases by 10% in the first year and decreases by 20% in the second year. If the current population is 44,000, what was the population two years ago?

(a) 50,000 (b) 48,000 (c) 55,000 (d) 60,000

Q31. A solid metallic hemisphere is melted and recast into a cylinder of the same base radius as the hemisphere. What is the ratio of the curved surface area of the hemisphere to the curved surface area of the cylinder?

(a) 2 : 1 (b) 3 : 2 (c) 4 : 3 (d) 1 : 1

Q32. A shopkeeper offers the following discount schemes on an article:
A: Successive discounts of 20% and 15%.
B: Buy 4 get 1 free.
Which scheme gives the maximum discount percentage to the customer, and what is it?

(a) Scheme A, 32% (b) Scheme B, 25% (c) Scheme A, 35% (d) Scheme B, 20%

Q33. If $3^{x+2} + 3^x = 90$, then the value of x is:

(a) 1 (b) 2 (c) 3 (d) 4

Q34. Simplify: $48 \div 12 \times [\{5 + (7 - 2)\} \div 2]$

(a) 10 (b) 20 (c) 15 (d) 25

Q35. Simplify: $\frac{a^3+b^3}{a^2-ab+b^2}$ given $a = 14$ and $b = 6$.

(a) 8 (b) 20 (c) 84 (d) 196

Q36. A rectangular water tank is 5m long, 3m wide, and 2m deep. How many liters of water can it hold? (1 m^3 = 1000 liters)

(a) 30,000 liters (b) 15,000 liters (c) 25,000 liters (d) 35,000 liters

Q37. In a triangle ABC, if $\angle A = 40^\circ$ and the bisectors of $\angle B$ and $\angle C$ meet at point O inside the triangle, what is the measure of $\angle BOC$?

(a) 110° (b) 120° (c) 130° (d) 140°

Q38. The circumference of a circular park is 88 m. Find the area of the park. (Use $\pi = \frac{22}{7}$)

(a) 616 m^2 (b) 308 m^2 (c) 154 m^2 (d) 1232 m^2

Q39. The length, breadth, and height of a cuboid are in the ratio 3:2:1. If its total surface area is 88 cm^2, find its volume.

(a) 24 cm^3 (b) 48 cm^3 (c) 64 cm^3 (d) 36 cm^3

Q40. An article is sold at a profit of 15%. If it had been sold for ₹ 27 more, the profit would have been 20%. Find the cost price of the article.

(a) ₹ 500 (b) ₹ 540 (c) ₹ 450 (d) ₹ 600

Q41. If $a + b + c = 6$ and $ab + bc + ca = 11$, find the value of $a^3 + b^3 + c^3 - 3abc$.

(a) 18 (b) 24 (c) 36 (d) 42

Q42. Find the compound interest on ₹ 40,000 at 10% per annum for 1.5 years, compounded half-yearly.

(a) ₹ 6,150 (b) ₹ 6,305 (c) ₹ 6,000 (d) ₹ 6,620

Q43. For a moderately skewed distribution, the mean is 24 and the median is 26. What is the approximate value of the mode?

(a) 28 (b) 30 (c) 32 (d) 25

Q44. The angle of elevation of the top of a tower from a point on the ground, which is 30 m away from the foot of the tower, is 45°. Find the height of the tower.

(a) 15 m (b) 30 m (c) $30\sqrt{3}$ m (d) $15\sqrt{3}$ m

Q45. The average of 5 consecutive even numbers is 42. What is the largest number among them?

(a) 44 (b) 46 (c) 48 (d) 50

Q46. From a point P on the ground, the angle of elevation of the top of a 10m tall building is 30°. A flag is hoisted at the top of the building and the angle of elevation of the top of the flagstaff from P is 45°. Find the length of the flagstaff. (Take $\sqrt{3} = 1.732$)

(a) 7.32 m (b) 5.45 m (c) 10 m (d) 8.32 m

Q47. Simplify: $\sqrt{1.44} + \sqrt{0.0144} - \sqrt{0.000144}$

(a) 1.308 (b) 1.318 (c) 1.212 (d) 1.452

Q48. A train 150 m long passes a bridge 250 m long in 20 seconds. What is the speed of the train in km/hr?

(a) 72 km/hr (b) 54 km/hr (c) 90 km/hr (d) 60 km/hr

Q49. Find the fourth proportional to 3, 7, and 15.

(a) 30 (b) 28 (c) 35 (d) 42

Q50. A pie chart represents the expenses of a family. If the central angle for food is 108°, what percentage of the total expenditure is spent on food?

(a) 25% (b) 30% (c) 35% (d) 40%

Q51. Six friends P, Q, R, S, T, and U are sitting around a circular table facing the center. P is second to the left of R. T is immediate right of R. Q is between P and S. Who is sitting to the immediate left of U?

(a) T (b) P (c) R (d) S

Q52. Five girls A, B, C, D, and E are sitting in a straight line facing North. C is sitting exactly in the middle. A is to the immediate right of C. E is to the immediate left of D. B is at one of the extreme ends and next to D. Who is sitting at the right extreme end?

(a) A (b) C (c) D (d) E

Q53. Seven boxes M, N, O, P, Q, R, and S are kept one above the other. Three boxes are between M and Q. N is immediately above Q. Two boxes are between N and O. R is kept at the top. P is exactly between M and O. Which box is at the bottom?

(a) Q (b) S (c) O (d) M

Q54. Select the related word pair:
Telescope : Distant :: Microscope : ?

(a) Heavy (b) Minute (c) Stars (d) Blood

Q55. If 'A $ B' means 'A is the father of B', 'A # B' means 'A is the mother of B', and 'A * B' means 'A is the sister of B', how is P related to R in 'P * Q $ R'?

(a) Aunt (b) Mother (c) Grandmother (d) Sister

Q56. Find the next term in the letter series: BDF, HJL, NPR, ?

(a) TVX (b) UWY (c) SUW (d) TVY

Q57. In a certain code, 'SMART' is written as 'UKCPV'. How will 'BRAIN' be written in that code?

(a) DTEKP (b) DTCKP (c) CSBJO (d) DPCKP

Q58. Study the given series: 4 A 7 $ 8 % 9 B & 3 2 # C 5. How many symbols are immediately preceded by a number and immediately followed by a letter?

(a) 1 (b) 2 (c) 3 (d) 4

Q59. If 'GREEN' is coded as '7185514', what is the code for 'WHITE'?

(a) 2389205 (b) 2388205 (c) 2289205 (d) 2489205

Q60. If '+' means 'multiplied by', '-' means 'added to', '×' means 'divided by', and '÷' means 'subtracted from', find the value of $18 + 4 \div 12 \times 3 - 5$.

(a) 70 (b) 73 (c) 65 (d) 69

Q61. Select the set of numbers that is similar to the given set: (8, 24, 72)

(a) (5, 15, 30) (b) (6, 18, 54) (c) (7, 21, 42) (d) (9, 27, 63)

Q62. In a sequence of numbers: 5, 8, 2, 4, 9, 6, 4, 3, 8, 4, 7. How many 4s are immediately followed by an odd number and immediately preceded by an even number?

(a) None (b) 1 (c) 2 (d) 3

Q63. Find the missing number in the series: 12, 14, 18, 26, 42, ?

(a) 68 (b) 72 (c) 74 (d) 82

Q64. Five students took an exam. A scored more than B but less than C. D scored less than E but more than C. Who scored the highest?

(a) C (b) D (c) E (d) A

Q65. In a row of 40 girls facing North, Kavita is 15th from the left end. What is her position from the right end?

(a) 24th (b) 25th (c) 26th (d) 27th

Q66. Four people play a game of carrom. P and Q are partners, R and S are partners. S faces North. If P faces West, then who faces South?

(a) R (b) Q (c) P (d) Cannot be determined

Q67. Statements: All cups are plates. Some plates are bowls.
Conclusions: I. Some cups are bowls. II. Some bowls are plates.

(a) Only conclusion I follows (b) Only conclusion II follows (c) Both I and II follow (d) Neither I nor II follows

Q68. Six books A, B, C, D, E, F are placed one above the other. B is immediately above C. A is placed anywhere above E. D is immediately below F. C is immediately above F. Which book is at the bottom?

(a) D (b) E (c) Cannot be determined (d) F

Q69. Pointing to a photograph of a boy, Suresh said, "He is the son of the only son of my mother." How is Suresh related to that boy?

(a) Brother (b) Uncle (c) Father (d) Cousin

Q70. Statements: No tree is a flower. All flowers are fruits.
Conclusions: I. No tree is a fruit. II. Some fruits are flowers.

(a) Only conclusion I follows (b) Only conclusion II follows (c) Both I and II follow (d) Neither I nor II follows

Q71. Among A, B, C, D, and E, each having a different weight, D is heavier than only A. C is lighter than B and heavier than E. Who among them is the heaviest?

(a) B (b) C (c) E (d) Data inadequate

Q72. If $14\#3 = 45$ and $12\#4 = 52$, then what is the value of $18\#2$?

(a) 38 (b) 40 (c) 36 (d) 42

Q73. Rahul walks 10 km towards North. He then turns right and walks 5 km. He turns right again and walks 10 km. How far is he from his starting point and in which direction?

(a) 5 km, East (b) 5 km, West (c) 10 km, East (d) 15 km, South

Q74. If all the vowels from the word "REPRESENTATION" are removed, which letter will be the 4th from the right end?

(a) N (b) R (c) S (d) T

Q75. Choose the odd one out:

(a) FHK (b) PRU (c) LNO (d) UWZ

Q76. Choose the odd number pair:

(a) 12 - 144 (b) 15 - 225 (c) 18 - 326 (d) 21 - 441

Q77. What will come in place of the question mark? 2, 5, 11, 23, 47, ?

(a) 93 (b) 95 (c) 97 (d) 91

Q78. One morning after sunrise, Vimal started walking. During this walk, he met Stephen, whose shadow was falling exactly to the right of Vimal. If they were face to face, which direction was Vimal facing?

(a) North (b) South (c) East (d) West

Q79. If the mathematical signs '+' and '÷' are interchanged, and numbers '6' and '3' are interchanged, what will be the value of: $12 + 6 \div 3$?

(a) 8 (b) 9 (c) 10 (d) 15

Q80. In a circle of 6 people (A,B,C,D,E,F) facing center: A is opposite C, B is immediate right of A, D is immediate left of C. Who is opposite B if E is between A and D?

(a) E (b) F (c) C (d) D

Q81. What is the primary function of the Monetary Policy Committee (MPC) established by the Reserve Bank of India?

(a) Printing new currency notes
(b) Regulating the stock market
(c) Fixing the benchmark interest rate to control inflation
(d) Managing foreign direct investments

Q82. Who took over as the Chief of the Naval Staff of India in May 2024?

(a) Admiral Dinesh K Tripathi (b) Admiral R. Hari Kumar (c) Admiral Karambir Singh (d) Admiral Sunil Lanba

Q83. Which country hosted the ICC Men's Cricket World Cup in 2023?

(a) Australia (b) England (c) India (d) South Africa

Q84. The "Aditya-L1" mission launched by ISRO is designed to study which of the following?

(a) The Moon's south pole (b) Mars atmosphere (c) The Sun (d) Deep space black holes

Q85. In recent economic surveys, which sector contributes the most to India's Gross Domestic Product (GDP)?

(a) Agriculture Sector (b) Industrial Sector (c) Manufacturing Sector (d) Services Sector

Q86. India’s first solar mission, Aditya-L1, was placed in a halo orbit around which Lagrange point?

(a) L1 (b) L2 (c) L3 (d) L4

Q87. The 'PM Vishwakarma' scheme, launched by the Government of India, is primarily aimed at supporting which group of people?

(a) IT professionals (b) Traditional artisans and craftspeople (c) Female entrepreneurs (d) Farmers

Q88. The G20 Summit in 2023 was held in New Delhi. Which organization was inducted as a permanent member of the G20 during this summit?

(a) ASEAN (b) African Union (c) SAARC (d) European Union

Q89. What is the purpose of the 'UDGAM' portal launched by the Reserve Bank of India?

(a) To track real-time GDP growth (b) To search for unclaimed deposits across multiple banks
(c) To apply for MSME loans (d) To monitor digital payment frauds

Q90. Who won the gold medal in the men's javelin throw event at the World Athletics Championships 2023?

(a) Arshad Nadeem (b) Jakub Vadlejch (c) Neeraj Chopra (d) Julian Weber

Q91. Which Indian state recently became the first to pass the Uniform Civil Code (UCC) Bill in its legislative assembly in 2024?

(a) Gujarat (b) Uttarakhand (c) Assam (d) Uttar Pradesh

Q92. The new Parliament building of India was designed by which prominent architect?

(a) Raj Rewal (b) Charles Correa (c) Bimal Patel (d) Hafeez Contractor

Q93. World Environment Day is celebrated globally every year on which date?

(a) April 22 (b) May 1 (c) June 5 (d) July 11

Q94. Which two countries participated in the joint military exercise named "Mitra Shakti"?

(a) India and Nepal (b) India and Bangladesh (c) India and Sri Lanka (d) India and France

Q95. India ranks what position in the Global Innovation Index (GII) 2023 published by WIPO?

(a) 40th (b) 46th (c) 52nd (d) 63rd

Q96. The "BrahMos" is a supersonic cruise missile developed jointly by India and which other country?

(a) Israel (b) France (c) USA (d) Russia

Q97. Which railway station in India was recognized with the 'Green Railway Station' certification with the highest Platinum rating in 2023?

(a) New Delhi Railway Station (b) Vijayawada Railway Station (c) Chhatrapati Shivaji Maharaj Terminus (d) Howrah Railway Station

Q98. Who was awarded the Bharat Ratna, India's highest civilian award, posthumously in 2024 for his contribution to agriculture (often known as the Father of the Green Revolution in India)?

(a) M.S. Swaminathan (b) Verghese Kurien (c) C.N.R. Rao (d) Norman Borlaug

Q99. What is the theme of International Women's Day 2024?

(a) Gender equality today for a sustainable tomorrow
(b) Invest in women: Accelerate progress
(c) DigitALL: Innovation and technology for gender equality
(d) Choose To Challenge

Q100. The Consumer Price Index (CPI) in India is released by which of the following organizations?

(a) Reserve Bank of India (RBI) (b) National Statistical Office (NSO) (c) Ministry of Finance (d) NITI Aayog