

RRB Group D Memory Based Paper (Aug 06, 2026)

Q1. Which of the following is a classic example of a chemical change?

- (a) Boiling of water to form steam
- (b) Melting of wax
- (c) Souring of milk to form curd
- (d) Dissolving sugar in hot water

Q2. In the human body, the hormone responsible for regulating the sleep-wake cycle (circadian rhythm) is secreted by the:

- (a) Pituitary gland (b) Thyroid gland (c) Pineal gland (d) Pancreas

Q3. What happens to the magnetic field inside a long, straight, current-carrying solenoid?

- (a) It is zero at all points.
- (b) It is uniform and parallel to the axis of the solenoid.
- (c) It decreases as we move towards the ends.
- (d) It increases exponentially towards the center.

Q4. Three resistors of 2Ω , 3Ω , and 6Ω are connected in parallel across a battery. What remains constant across each of the three resistors?

- (a) Current (b) Resistance (c) Potential Difference (Voltage)
- (d) Power Dissipated

Q5. Consider the following statements regarding the human nervous system:

1. The cerebellum is responsible for maintaining posture and balance.
 2. Involuntary actions like blood pressure and vomiting are controlled by the medulla.
- Which of the statements given above is/are correct?

- (a) Only 1 (b) Only 2 (c) Both 1 and 2 (d) Neither 1 nor 2

Q6. An electric bulb is rated 220 V and 100 W. When it is operated on 110 V, the power consumed will be:

- (a) 100 W (b) 75 W (c) 50 W (d) 25 W

Q7. Saponification is the chemical reaction used to manufacture soap. The major by-product generated in this process is:

- (a) Ethanol (b) Glycerol (c) Sodium chloride (d) Citric acid

Q8. An object is placed at the center of curvature (C) of a concave mirror. The image formed will be:

- (a) Virtual, erect, and magnified
(b) Real, inverted, and of the same size, formed at C
(c) Real, inverted, and diminished, formed between F and C
(d) Virtual, erect, and diminished

Q9. In the plant kingdom, plants that possess naked seeds (seeds not enclosed within a fruit) are classified as:

- (a) Pteridophytes (b) Angiosperms (c) Bryophytes (d) Gymnosperms

Q10. What is the general chemical formula for the homologous series of alkynes?

- (a) C_nH_{2n+2} (b) C_nH_{2n} (c) C_nH_{2n-2} (d) C_nH_{2n-4}

Q11. The severe pain caused by an ant sting is due to the injection of which of the following acids into the skin?

- (a) Lactic acid (b) Methanoic (Formic) acid (c) Citric acid (d) Oxalic acid

Q12. Which chamber of the human heart forcefully pumps oxygenated blood to all parts of the body through the aorta?

- (a) Right Atrium (b) Right Ventricle (c) Left Atrium (d) Left Ventricle

Q13. In the human respiratory system, the actual exchange of gases (oxygen and carbon dioxide) takes place in the:

- (a) Trachea (b) Bronchi (c) Alveoli (d) Larynx

Q14. Which enzyme present in pancreatic juice is specifically responsible for the emulsification and digestion of fats?

- (a) Amylase (b) Trypsin (c) Lipase (d) Pepsin

Q15. The phenomenon of the twinkling of stars is primarily caused by:

- (a) Dispersion of starlight by water droplets
- (b) Atmospheric refraction of starlight
- (c) Total internal reflection of light
- (d) Scattering of light by dust particles

Q16. According to the reactivity series of metals, which of the following is the most reactive metal?

- (a) Iron (b) Zinc (c) Potassium (d) Copper

Q17. Given below are two statements labeled Assertion (A) and Reason (R).

Assertion (A): Silver articles turn black after being kept in the open air for a few days.

Reason (R): Silver reacts with sulphur present in the air to form a coating of silver sulphide.

Select the correct option:

- (a) Both A and R are true, and R is the correct explanation of A.
- (b) Both A and R are true, but R is not the correct explanation of A.
- (c) A is true, but R is false.
- (d) A is false, but R is true.

Q18. The chemical reaction $\text{Fe(s)} + \text{CuSO}_4(\text{aq}) \rightarrow \text{FeSO}_4(\text{aq}) + \text{Cu(s)}$ is an example of:

- (a) Combination reaction (b) Decomposition reaction (c) Displacement reaction
- (d) Double displacement reaction

Q19. A student stretches a metallic wire so that its length is doubled while keeping its volume constant. The new resistance of the wire will become:

- (a) Half of the original (b) Double the original (c) Four times the original
- (d) Unchanged

Q20. Which cell organelle contains its own DNA and ribosomes, thus being able to synthesize some of its own proteins?

- (a) Golgi Apparatus (b) Lysosome (c) Mitochondria (d) Endoplasmic Reticulum

Q21. What is the longest and heaviest bone in the human body?

- (a) Tibia (b) Femur (c) Humerus (d) Fibula

Q22. A standard fuse wire used in household electrical circuits should possess which of the following combinations of properties?

- (a) High resistance and high melting point
(b) Low resistance and low melting point
(c) High resistance and low melting point
(d) Low resistance and high melting point

Q23. A diverging lens (concave lens) always produces an image that is:

- (a) Real, inverted, and magnified
(b) Virtual, erect, and diminished
(c) Virtual, inverted, and of the same size
(d) Real, erect, and diminished

Q24. In the Modern Periodic Table, elements belonging to Group 17 are collectively known as:

- (a) Alkali metals (b) Alkaline earth metals (c) Halogens (d) Noble gases

Q25. In a standard terrestrial food chain, primary consumers are exclusively:

- (a) Carnivores (b) Herbivores (c) Omnivores (d) Decomposers

Q26. The LCM of three numbers 15, 25, and 30 is 150. What is the HCF of these three numbers?

- (a) 3 (b) 5 (c) 10 (d) 15

Q27. The salary of a worker is first increased by 20% and then decreased by 20%. What is the net percentage change in his salary?

- (a) 0% (No change) (b) 4% Increase (c) 4% Decrease (d) 2% Decrease

Q28. A 6-digit number 34A56B is divisible by 9. What is the maximum possible value of $(A + B)$?

- (a) 9 (b) 12 (c) 18 (d) 27

Q29. A boy is flying a kite at a height of 50 m above the ground. The string attached to the kite makes an angle of 30° with the horizontal. Assuming there is no slack in the string, find its length.

- (a) 50 m (b) $50\sqrt{3}$ m (c) 100 m (d) $100/\sqrt{3}$ m

Q30. Two concentric circles have radii of 13 cm and 5 cm. Find the length of the chord of the larger circle which touches the smaller circle.

- (a) 12 cm (b) 24 cm (c) 20 cm (d) 18 cm

Q31. 'P' and 'Q' enter into a business partnership. 'P' invests ₹40,000 for 12 months, and 'Q' invests ₹60,000 for 8 months. If the total profit at the end of the year is ₹30,000, what is the share of 'P'?

- (a) ₹15,000 (b) ₹12,000 (c) ₹18,000 (d) ₹20,000

Q32. Find the median of the first 9 prime numbers.

- (a) 9 (b) 11 (c) 13 (d) 7

Q33. A train covers a distance of 240 km in 4 hours. If it has to cover the same distance in 3 hours, at what speed must it travel?

- (a) 60 km/h (b) 70 km/h (c) 80 km/h (d) 90 km/h

Q34. The mean of 10 observations is 20. If 5 is added to each observation, what will be the new mean?

- (a) 20 (b) 25 (c) 15 (d) 100

Q35. A shopkeeper sells an article at a loss of 10%. If he had sold it for ₹ 90 more, he would have gained 5%. Find the cost price of the article.

- (a) ₹ 600 (b) ₹ 500 (c) ₹ 450 (d) ₹ 700

Q36. When the recurring decimal $0.\overline{45}$ is expressed as a fraction in its simplest form $\frac{p}{q}$, what is the value of the numerator p ?

- (a) 45 (b) 9 (c) 5 (d) 11

Q37. 'X' can complete a task in 10 days, while 'Y' can complete the same task in 15 days. If they work together, in how many days will the task be completed?

- (a) 5 days (b) 6 days (c) 8 days (d) 12 days

Q38. A man travels the first 30 km of his journey at 10 km/h and the remaining 30 km at 15 km/h. What is his average speed for the entire journey?

- (a) 12.5 km/h (b) 12 km/h (c) 13 km/h (d) 14 km/h

Q39. A principal amount of ₹ 5,000 yields an amount of ₹ 6,000 in 4 years at simple interest. Find the rate of interest per annum.

- (a) 4% (b) 5% (c) 6% (d) 8%

Q40. The base and corresponding height of a triangle are in the ratio 3 : 2. If the area of the triangle is 108 cm^2 , find the length of its base.

- (a) 12 cm (b) 16 cm (c) 18 cm (d) 24 cm

Q41. Find the volume of a right circular cylinder having a base radius of 7 cm and a height of 10 cm. (Use $\pi = \frac{22}{7}$)

- (a) 1540 cm^3 (b) 1440 cm^3 (c) 2200 cm^3 (d) 1250 cm^3

Q42. Two numbers are in the ratio 2 : 3. If 5 is added to both the numbers, their ratio becomes 5 : 7. What is the larger number?

- (a) 20 (b) 30 (c) 40 (d) 45

Q43. Calculate the compound interest (compounded annually) on a sum of ₹ 8,000 at 5% per annum for 2 years.

- (a) ₹ 800 (b) ₹ 820 (c) ₹ 8820 (d) ₹ 840

Q44. Two circles with radii 9 cm and 4 cm touch each other externally. Calculate the length of their direct common tangent.

- (a) 10 cm (b) 12 cm (c) 13 cm (d) 15 cm

Q45. The difference between the Compound Interest and Simple Interest on a sum of money for 2 years at 10% per annum is ₹ 40. Find the principal sum.

- (a) ₹ 3,000 (b) ₹ 4,000 (c) ₹ 5,000 (d) ₹ 4,500

Q46. The current population of a town is 10,000. If it increases at a uniform rate of 10% per annum, what will be the population after 2 years?

- (a) 12,000 (b) 12,100 (c) 11,000 (d) 12,200

Q47. A retailer offers two successive discounts of 20% and 10% on an item. What is the single equivalent discount percentage?

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

Q48. A milkman mixes water with milk which costs ₹ 40 per litre. He sells the mixture at ₹ 40 per litre and makes a profit of 25%. In what ratio does he mix milk and water? (Assume water is free).

- (a) 4 : 1 (b) 3 : 1 (c) 5 : 1 (d) 2 : 1

Q49. What is the radian measure equivalent of 60° ?

- (a) $\frac{\pi}{2}$ (b) $\frac{\pi}{4}$ (c) $\frac{\pi}{3}$ (d) $\frac{\pi}{6}$

Q50. If the cost price of an article is 80% of its selling price, what is the profit percentage?

- (a) 20% (b) 25% (c) 15% (d) 30%

Q51. Read the following relationships:

A is the brother of B.

C is the mother of B.

D is the father of C.

How is A related to D?

- (a) Son (b) Grandson (c) Nephew (d) Brother

Q52. Consider the statements:

1. All cups are books.

2. Some books are pens.

Which of the following conclusions logically follows?

I. Some pens are cups.

II. Some pens are books.

- (a) Only Conclusion I follows
(b) Only Conclusion II follows
(c) Both Conclusions I and II follow
(d) Neither Conclusion I nor II follows

Q53. Six people P, Q, R, S, T, and U are sitting in a circle facing the center. P is sitting second to the left of S. R is sitting to the immediate right of Q. S is sitting opposite to Q. Who is sitting between P and R?

- (a) S (b) T (c) U (d) Q

Q54. If '+' means '-', '-' means '×', '×' means '÷', and '÷' means '+', what is the value of:

$$10 \times 2 - 5 + 3 \div 2$$

- (a) 15 (b) 24 (c) 20 (d) 26

Q55. If all the letters of the word 'BEAUTIFUL' are arranged in alphabetical order from left to right, the position of how many letters will remain unchanged?

- (a) None (b) One (c) Two (d) Three

Q56. Select the option that is related to the third word in the same way as the second word is related to the first word.

KING : MKPI :: ROSE : ?

- (a) TQUG (b) SPVF (c) TQVF (d) UQWG

Q57. A, B, C, D, and E live on five different floors of a building. The bottom floor is 1 and the top floor is 5. A lives on the topmost floor. B lives exactly between A and C. D lives on the lowermost floor. On which floor does E live?

- (a) 1st Floor (b) 2nd Floor (c) 3rd Floor (d) 4th Floor

Q58. Find the missing number in the series:

12, 14, 18, 26, 42, ?

- (a) 58 (b) 74 (c) 64 (d) 82

Q59. In a row of students, Position of Ramesh from the left is 15th and from the right is 20th. How many students are there in the row?

- (a) 34 (b) 35 (c) 36 (d) 33

Q60. Five people are sitting in a straight row facing North. A sits to the immediate left of B. C sits to the immediate right of D. E sits exactly in the middle of the row. If B sits at the extreme right end, who sits at the extreme left end?

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

Q61. In a certain code language, if CAT = 24 and MAT = 34, then what is the numerical value of DOG?

- (a) 25 (b) 26 (c) 27 (d) 28

Q62. Which two signs should be interchanged to make the following equation correct?

$$12 + 6 \div 3 \times 2 - 8 = 10$$

- (a) + and - (b) $\times$ and $\div$ (c) $\div$ and + (d) $\times$ and -

Q63. Find the odd one out from the given sets of numbers.

- (a) (3, 9, 27) (b) (4, 16, 64) (c) (5, 25, 125) (d) (6, 36, 210)

Q64. In a specific code, 'apple is red' is coded as '1 2 3', 'red blood' is coded as '3 4', and 'apple juice' is coded as '1 5'. Which digit represents 'is'?

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

Q65. Select the odd letter-cluster from the given options.

- (a) CEG (b) IKM (c) OQS (d) VXZ

Q66. In a class, Rohit is taller than Suraj but shorter than Amit. Kunal is shorter than Suraj. Who is the tallest among them?

- (a) Rohit (b) Suraj (c) Amit (d) Kunal

Q67. Based on alphabetical order, select the option that correctly completes the analogy:

ABC : ZYX :: DEF : ?

- (a) WVU (b) VUT (c) UVW (d) WUV

Q68. A boy walks 10 meters North from his home, turns right and walks 5 meters, then turns right again and walks 10 meters. How far is he from his home?

- (a) 10 meters (b) 5 meters (c) 15 meters (d) 25 meters

Q69. Which of the following Venn diagrams accurately represents the relationship between: **Men, Doctors, and Singers**?

- (a) Three concentric circles.
(b) Three mutually intersecting circles.
(c) Two separate circles inside a larger circle.
(d) Three separate non-intersecting circles.

Q70. Select the missing term in the sequence:

1Z, 4Y, 9X, 16W, ?

- (a) 25U (b) 25V (c) 36V (d) 24V

Q71. Ravi is facing South. He walks 5 meters, turns left and walks 3 meters, then turns left again and walks 5 meters. What direction is he facing now?

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

Q72. Given that Bag A is heavier than Bag B. Bag C is lighter than Bag B. Bag D is heavier than Bag A. Which bag is the lightest?

- (a) Bag A (b) Bag B (c) Bag C (d) Bag D

Q73. If the word 'WARD' is coded as '4194', how is the word 'DARK' coded? (Note: Code relies on alphabetical position but specific digits are assigned).

- (a) 4192 (b) 4191 (c) 4181 (d) 4172

Q74. Complete the number series:

2, 5, 10, 17, 26, ?

- (a) 37 (b) 35 (c) 39 (d) 41

Q75. How many such symbols are there in the sequence below, which are immediately preceded by a letter and immediately followed by a number?

A # 3 B \$ C % 2 D & 5 E * F 7 @

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

Q76. Find the missing letter in the series:

B, E, H, K, N, ?

- (a) P (b) Q (c) R (d) S

Q77. If $5 * 4 = 41$ and $6 * 2 = 40$, then what is $7 * 3 = ?$ (Hint: squares)

- (a) 58 (b) 50 (c) 45 (d) 52

Q78. Five friends are standing in a line facing South. M is at the right extreme end. N is standing to the immediate left of M. O is standing to the immediate right of P. Q is in the exact middle. Who is standing at the left extreme end? (Recall right/left is relative to South facing).

- (a) O (b) P (c) N (d) Q

Q79. Identify the odd number out.

- (a) 121 (b) 169 (c) 225 (d) 289

Q80. Next in the series: AA, BB, EE, FF, II, ?

- (a) JJ (b) KK (c) LL (d) MM

Q81. India's first dedicated solar space mission, aimed at studying the Sun's outermost layer (corona), is named:

- (a) Surya-1 (b) Aditya-L1 (c) Bhaskar-1 (d) Ravi-X

Q82. The famous 'Hornbill Festival', showcasing rich cultural heritage and traditions, is celebrated annually in which Indian state?

- (a) Assam (b) Manipur (c) Nagaland (d) Meghalaya

Q83. Under the Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA), how many minimum days of guaranteed wage employment are provided in a financial year to a rural household?

- (a) 100 days (b) 120 days (c) 150 days (d) 200 days

Q84. Neeraj Chopra, the legendary Indian athlete who secured an Olympic gold medal, is associated with which sport?

- (a) Shot Put (b) Discuss Throw (c) Long Jump (d) Javelin Throw

Q85. Which of the following rivers is known as the "Dakshin Ganga" and is the longest river in Peninsular India?

- (a) Krishna (b) Cauvery (c) Godavari (d) Narmada

Q86. India's first semi-high speed train, Vande Bharat Express (Train 18), was initially flagged off on which of the following routes?

- (a) New Delhi to Mumbai
(b) New Delhi to Varanasi
(c) Mumbai to Ahmedabad
(d) Chennai to Bengaluru

Q87. 'Operation Ganga' was a major evacuation mission launched by the Government of India to bring back its citizens stranded in which war-torn country?

- (a) Afghanistan (b) Sudan (c) Ukraine (d) Israel

Q88. Which popular Indian song made history by winning the Academy Award (Oscar) for Best Original Song in 2023?

- (a) Jai Ho (b) Naatu Naatu (c) Vande Mataram (d) Kesariya

Q89. The supersonic cruise missile 'BrahMos' is a highly successful joint venture between India and which other country?

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

Q90. The historic "Quit India Movement", calling for the end of British rule in India, was launched by Mahatma Gandhi in which year?

- (a) 1930 (b) 1942 (c) 1945 (d) 1947

Q91. In India, which institution is the sole authority entrusted with the responsibility of issuing currency notes (except the one-rupee note)?

- (a) Ministry of Finance (b) State Bank of India (c) Reserve Bank of India

- (d) NITI Aayog

Q92. Which city has been officially designated to host the 2028 Summer Olympic Games?

- (a) Paris (b) Brisbane (c) Los Angeles (d) Tokyo

Q93. Article 32 of the Indian Constitution, referred to as the "heart and soul of the Constitution" by Dr. B.R. Ambedkar, deals with:

- (a) Right to Equality
(b) Right to Constitutional Remedies
(c) Freedom of Speech and Expression
(d) Protection of Life and Personal Liberty

Q94. Originally formed as 'BRIC', which country joined in 2010 to make the grouping 'BRICS'?

- (a) South Korea (b) Spain (c) Saudi Arabia (d) South Africa

Q95. 'Project Tiger', a massive wildlife conservation initiative in India, was launched in the year:

- (a) 1972 (b) 1973 (c) 1980 (d) 1986

Q96. Who was appointed as the very first Chief of Defence Staff (CDS) of the Indian Armed Forces?

- (a) General Manoj Mukund Naravane (b) General Dalbir Singh Suhag
(c) General Bipin Rawat (d) Admiral Karambir Singh

Q97. The widely read autobiography "Wings of Fire" was authored by:

- (a) Mahatma Gandhi (b) Jawaharlal Nehru (c) A.P.J. Abdul Kalam
(d) Pranab Mukherjee

Q98. Which country held the presidency and successfully hosted the G20 Summit in the year 2023?

- (a) Indonesia (b) Brazil (c) India (d) Italy

Q99. The touchdown site of the Chandrayaan-3 'Vikram' lander on the lunar South Pole was officially named as:

- (a) Tiranga Point (b) Jawahar Point (c) Shiv Shakti Point (d) Bharat Point

Q100. The Government of India's flagship social campaign "Beti Bachao Beti Padhao" was initially launched from which state, aiming to address the declining Child Sex Ratio?

- (a) Rajasthan (b) Haryana (c) Punjab (d) Uttar Pradesh