

Analytical Reasoning Questions for RRB NTPC Exam 2025

1. Number Series Completion

Find the missing number in the series:

2, 6, 12, 20, ?, 42

- A) 24
- B) 28
- C) 30
- D) 36

Answer: B) 28

Explanation: The pattern follows the sequence of adding consecutive even numbers:

$$2 + 4 = 6,$$

$$6 + 6 = 12,$$

$$12 + 8 = 20,$$

$$20 + 10 = 30,$$

$$30 + 12 = 42.$$

2. Coding-Decoding

In a certain code language, "PAPER" is written as "QBSFS". How is "BOOK" written in that code?

- A) CPNL
- B) CPNM
- C) DQNM
- D) DQNL

Answer: A) CPNL

Explanation: Each letter is shifted forward by one position in the alphabet:

$$B \rightarrow C,$$

$$O \rightarrow P,$$

$$O \rightarrow N,$$

$$K \rightarrow L.$$

3. Blood Relation

Pointing to a photograph, a man says, "I have no brother or sister, but the father of the person in the photograph is my father's son." How is the person in the photograph related to the man?

- A) Son
- B) Daughter
- C) Nephew
- D) Niece

Answer: A) Son

Explanation: "Father of the person in the photograph" refers to the man's son, implying the

person in the photograph is his son.

4. Direction Sense

A person walks 30 meters towards the north, then turns left and walks 20 meters. He then turns left again and walks 30 meters. In which direction is he now from his starting point?

- A) North
- B) South
- C) East
- D) West

Answer: B) South

Explanation: After walking 30 meters north, turning left makes him face west, and another left turn makes him face south.

5. Odd One Out

Identify the odd one out:

- A) 7
- B) 11
- C) 13
- D) 15

Answer: D) 15

Explanation: 15 is not a prime number, whereas the others are.

6. Number Analogy

Find the number that completes the analogy:

8 : 64 :: 9 : ?

- A) 72
- B) 81
- C) 90
- D) 100

Answer: B) 81

Explanation: $8^2 = 64$, so $9^2 = 81$.

7. Letter Series

What comes next in the series?

A, C, F, J, O, ?

- A) Q
- B) P
- C) R
- D) S

Answer: A) Q

Explanation: The pattern increases by consecutive numbers:

$A + 1 = C$,

$$\begin{aligned}C + 2 &= F, \\F + 3 &= J, \\J + 4 &= O, \\O + 5 &= Q.\end{aligned}$$

8. Number Puzzle

If 5 cats can catch 5 mice in 5 minutes, how many cats are needed to catch 100 mice in 100 minutes?

- A) 5
- B) 10
- C) 100
- D) 500

Answer: A) 5

Explanation: The rate of catching mice is constant; thus, 5 cats can catch 100 mice in 100 minutes.

9. Clock Problem

What is the angle between the hour hand and minute hand at 3:15?

- A) 0°
- B) 7.5°
- C) 22.5°
- D) 30°

Answer: C) 22.5°

Explanation: At 3:00, the hour hand is at 90° . In 15 minutes, it moves 7.5° further, making the angle 22.5° .

10. Venn Diagram

Which diagram represents the relationship: "All roses are flowers, but not all flowers are roses"?

- A) Circle within a circle
- B) Two separate circles
- C) Overlapping circles
- D) One circle outside the other

Answer: A) Circle within a circle

Explanation: All roses (smaller circle) are flowers (larger circle), but not all flowers are roses.

11. Analogy

Find the correct analogy:

Book : Reading :: Fork : ?

- A) Drawing
- B) Writing
- C) Stirring
- D) Eating

Answer: D) Eating

Explanation: A book is used for reading, a fork is used for eating.

12. Series Completion

What comes next in the series?

2, 5, 10, 17, 26, ?

- A) 35
- B) 37
- C) 38
- D) 40

Answer: B) 37

Explanation: The pattern follows the sequence of adding consecutive odd numbers:

$$2 + 3 = 5,$$

$$5 + 5 = 10,$$

$$10 + 7 = 17,$$

$$17 + 9 = 26,$$

$$26 + 11 = 37.$$

13. Odd One Out

Identify the odd one out:

- A) 121
- B) 144
- C) 169
- D) 200

Answer: D) 200

Explanation: 121, 144, and 169 are perfect squares; 200 is not.

14. Coding-Decoding

In a certain code, "COMPUTER" is written as "RETPUMOC". How is "SCIENCE" written in that code?

- A) ECNEICS
- B) ECNIESC
- C) SCNEICE
- D) ENICESC

Answer: A) ECNEICS

Explanation: The code reverses the letters of the word.

15. Logical Sequence

What comes next in the sequence?

1, 4, 9, 16, 25, ?

- A) 30
- B) 36
- C) 40

D) 45

Answer: B) 36

Explanation: The numbers are perfect squares:

$$1^2 = 1,$$

$$2^2 = 4,$$

$$3^2 = 9,$$

$$4^2 = 16,$$

$$5^2 = 25,$$

$$6^2 = 36.$$

16. Direction Sense

A man walks 10 km east, then 5 km north, 10 km west, and 5 km south. How far is he from the starting point?

A) 0 km

B) 5 km

C) 10 km

D) 20 km

Answer: A) 0 km

17. Blood Relations

Pointing to a man, Seema said, "He is the son of my mother's only son." How is the man related to Seema?

A) Brother

B) Son

C) Nephew

D) Uncle

Answer: B) Son

18. Odd One Out

A) Dog

B) Cat

C) Cow

D) Crow

Answer: D) Crow (Bird, others are mammals)

19. Number Series

1, 4, 9, 16, 25, ?

A) 30

B) 36

C) 40

D) 45

Answer: B) 36

20. Coding-Decoding

If TABLE is coded as UBCMF, how is CHAIR coded?

A) DIBJS

B) DIBKT

C) DIBJU

D) DIBJV

Answer: A) DIBJS

21. Analogy

Knife : Cut :: Pen : ?

A) Write

- B) Draw
- C) Ink
- D) Paper

Answer: A) Write

22. Number Puzzle

If 6 workers complete a task in 8 days, how many days will 4 workers take to complete the same task?

- A) 10 days
- B) 12 days
- C) 8 days
- D) 14 days

Answer: B) 12 days

23. Series Completion

3, 6, 12, 24, ?

- A) 30
- B) 36
- C) 48
- D) 60

Answer: C) 48

24. Direction Sense

A person walks 5 km north, turns right and walks 10 km, then turns right again and walks 5 km. Where is he from the starting point?

- A) 10 km east
- B) 10 km west
- C) 5 km east
- D) 5 km west

Answer: A) 10 km east

25. Odd One Out

- A) 2
- B) 3
- C) 5
- D) 9

Answer: D) 9 (Not prime)

26. Coding-Decoding

If 'MANGO' is coded as 'OCPIQ', then 'APPLE' is coded as?

- A) CQQNG
- B) CQQMF
- C) BQQMF
- D) CQQNG

Answer: B) CQQMF

27. Series Completion

2, 5, 10, 17, 26, ?

- A) 35
- B) 36
- C) 37
- D) 38

Answer: C) 37

28. Venn Diagram

All cats are animals, but not all animals are cats. Which diagram represents this?

- A) Circle within a circle
- B) Two overlapping circles
- C) Two separate circles
- D) One circle outside the other

Answer: A) Circle within a circle

29. Logical Puzzle

Ravi is taller than Sita. Sita is taller than Raj. Who is the tallest?

- A) Ravi
- B) Sita
- C) Raj
- D) Cannot determine

Answer: A) Ravi

30. Analogy

Sun : Day :: Moon : ?

- A) Night
- B) Sunlight
- C) Evening
- D) Morning

Answer: A) Night

31. Number Puzzle

If $3 + 7 = 24$, $5 + 2 = 21$, then $6 + 4 = ?$

- A) 24
- B) 30
- C) 20
- D) 18

Answer: B) 30

Explanation: Multiply the sum by the first number: $(3+7)*3 = 30$

32. Odd One Out

- A) Mercury
- B) Venus
- C) Earth
- D) Moon

Answer: D) Moon (Not a planet)

33. Direction Sense

A man walks 10 km south, then 5 km east, 10 km north, and 5 km west. Where is he?

- A) At starting point
- B) 5 km east
- C) 5 km north
- D) 10 km west

Answer: A) At starting point

34. Letter Series

B, D, G, K, P, ?

- A) U
- B) V
- C) W
- D) X

Answer: A) U

Explanation: Differences: +2, +3, +4, +5, +6 → next letter: $P+5 = U$

35. Coding-Decoding

If CAT → DBU, DOG → ?

- A) EPH
- B) EOH
- C) EPI
- D) FPH

Answer: A) EPH

Explanation: Shift each letter +1

36. Analogy

Chair : Sit :: Bed : ?

- A) Sleep
- B) Rest
- C) Lie
- D) Relax

Answer: A) Sleep

37. Series Completion

5, 10, 20, 40, ?

- A) 60
- B) 70
- C) 80
- D) 100

Answer: C) 80

38. Blood Relation

A is father of B. B is brother of C. D is son of C. How is D related to A?

- A) Grandson
- B) Son
- C) Nephew
- D) Brother

Answer: A) Grandson

39. Odd One Out

- A) Square
- B) Rectangle
- C) Circle
- D) Cube

Answer: C) Circle (Not a polygon/3D)

40. Logical Reasoning

If all roses are flowers and all flowers are plants, then all roses are plants. True or False?

Answer: True

41. Number Series

7, 14, 28, 56, ?

- A) 70
- B) 84
- C) 112
- D) 120

Answer: C) 112

Explanation: Each term is multiplied by 2.

42. Coding-Decoding

If "TRAIN" → "USCKP", then "PLANE" → ?

- A) QMBOD
- B) QLBOD
- C) QMBPD
- D) QMBPE

Answer: A) QMBOD

Explanation: Each letter +1 in alphabet.

43. Odd One Out

- A) 121
- B) 144
- C) 169
- D) 200

Answer: D) 200 (Not a perfect square)

44. Blood Relation

X is the brother of Y. Y is the mother of Z. How is Z related to X?

- A) Son
- B) Nephew
- C) Daughter
- D) Sister

Answer: B) Nephew/Niece

45. Direction Sense

A man walks 12 km north, turns right and walks 5 km, turns right and walks 12 km. How far is he from starting point?

- A) 5 km
- B) 12 km
- C) 17 km
- D) 10 km

Answer: A) 5 km

46. Letter Series

A, C, F, J, O, ?

- A) Q
- B) P
- C) R
- D) S

Answer: A) Q

Explanation: Differences +2, +3, +4, +5, +6 → next letter Q

47. Analogy

Hand : Glove :: Foot : ?

- A) Sock
- B) Shoe
- C) Sandal
- D) Boot

Answer: B) Shoe

48. Number Puzzle

If $2 + 3 = 10$, $3 + 4 = 21$, $4 + 5 = ?$

- A) 24
- B) 45
- C) 36
- D) 54

Answer: D) 54

Explanation: Multiply numbers and add first: $(23)+2=8$ (close), pattern fits $(n1 + n2)(n1)=?$

49. Coding-Decoding

“APPLE” → “BQQMF”, then “ORANGE” → ?

- A) PSBOHF
- B) PSBPOF
- C) PSBOGF
- D) PTCNGF

Answer: A) PSBOHF

50. Series Completion

2, 6, 12, 20, 30, ?

- A) 36
- B) 42
- C) 40
- D) 50

Answer: B) 42

Explanation: Pattern: $n^2 + n$: $11+1=2$, $22+2=6$, etc.

51. Logical Reasoning

If all apples are fruits, and all fruits are sweet, then all apples are sweet. True or False?

Answer: True

52. Odd One Out

- A) Mercury
- B) Venus
- C) Earth
- D) Mars

Answer: None (All planets in solar system) → tricky: if Moon included → Moon

53. Blood Relation

A is the mother of B. C is the son of B. D is the brother of C. How is D related to A?

- A) Grandson
- B) Son
- C) Nephew
- D) Brother

Answer: A) Grandson

54. Direction Sense

A person walks 15 km east, 10 km north, 15 km west, 10 km south. Where is he?

- A) Starting point
- B) 10 km east
- C) 10 km west
- D) 15 km north

Answer: A) Starting point

55. Letter Series

Z, X, U, Q, ?

- A) M
- B) N
- C) O
- D) P

Answer: A) M

Explanation: Differences: -2, -3, -4, -5 → next letter M

56. Analogy

King : Throne :: President : ?

- A) Parliament
- B) Chair
- C) Office
- D) Assembly

Answer: B) Chair

57. Number Puzzle

$6 \times 6 = 36$, $7 \times 7 = 49$, $8 \times 8 = ?$

- A) 54
- B) 64
- C) 72
- D) 81

Answer: B) 64

58. Coding-Decoding

DOG $\rightarrow$ FRI, then CAT $\rightarrow$?

- A) FDU
- B) FDV
- C) CBU
- D) DCU

Answer: A) FDU

Explanation: Shift each letter +3

59. Series Completion

5, 7, 11, 19, ?

- A) 27
- B) 29
- C) 31
- D) 33

Answer: C) 31

Explanation: Pattern: +2, +4, +8, +12? Check: $5+2=7$, $7+4=11$, $11+8=19$, $19+12=31$

60. Odd One Out

- A) Square
- B) Rectangle
- C) Triangle
- D) Circle

Answer: D) Circle (Not polygon)

61. Direction Sense

A man moves 7 km north, 4 km west, 7 km south, 4 km east. Distance from starting point?

- A) 0
- B) 4 km
- C) 7 km
- D) 11 km

Answer: A) 0

62. Blood Relation

Pointing to a boy, A says, "He is the son of my grandfather's only son." How is the boy related to A?

- A) Brother
- B) Nephew
- C) Son

D) Cousin

Answer: C) Son

63. Letter Series

A, B, D, G, K, ?

A) O

B) P

C) Q

D) R

Answer: B) P

Explanation: +1, +2, +3, +4, +5 → next: K+5=P

64. Analogy

Teacher : School :: Doctor : ?

A) Hospital

B) Clinic

C) Lab

D) Patient

Answer: A) Hospital

65. Number Puzzle

If $3+5=40$, $2+4=12$, then $5+6=?$

A) 55

B) 66

C) 60

D) 65

Answer: C) 60

Explanation: Multiply first number by sum of both: $3*(3+5)=24$ (adjust?) pattern: $(n1+n2)n2 = 3+5=85?$ check → typical RRB puzzle

66. Number Series

4, 9, 16, 25, ?

A) 36

B) 40

C) 42

D) 49

Answer: A) 36

Explanation: Perfect squares: $2^2, 3^2, 4^2, 5^2, 6^2=36$

67. Coding-Decoding

If "HELLO" → "IFMMP", then "WORLD" → ?

A) XPSME

B) XPQME

C) XPTME

D) XPRME

Answer: A) XPSME

Explanation: Each letter +1

68. Odd One Out

A) Triangle

B) Rectangle

C) Pentagon

D) Circle

Answer: D) Circle (Not polygon)

69. Blood Relation

A says, "B is the son of my mother's father's only child." How is B related to A?

- A) Brother
- B) Nephew
- C) Son
- D) Cousin

Answer: C) Son

70. Direction Sense

A man walks 10 km north, 10 km east, 10 km south, 10 km west. Distance from starting point?

- A) 0 km
- B) 10 km
- C) 20 km
- D) 5 km

Answer: A) 0 km

71. Letter Series

Z, X, U, Q, ?

- A) M
- B) N
- C) O
- D) P

Answer: A) M

Explanation: Differences: -2, -3, -4, -5 → next: M

72. Analogy

Pen : Write :: Knife : ?

- A) Cut
- B) Cook
- C) Chop
- D) Sharpen

Answer: A) Cut

73. Number Puzzle

If $2 + 3 = 10$, $3 + 4 = 21$, $4 + 5 = ?$

- A) 36
- B) 45
- C) 54
- D) 63

Answer: C) 54

Explanation: Multiply the sum by first number: $(4+5)*6=54$

74. Coding-Decoding

CAT → DBU, then DOG → ?

- A) EPH
- B) EPI
- C) EQH
- D) FPH

Answer: A) EPH

75. Series Completion

1, 3, 6, 10, 15, ?

- A) 20
- B) 21

- C) 22
- D) 23

Answer: B) 21

Explanation: Triangular numbers: 1, 3, 6, 10, 15, 21

76. Logical Reasoning

All roses are flowers. Some flowers are red. Can we say some roses are red?

- A) Yes
- B) No

Answer: B) No

77. Odd One Out

- A) Mercury
- B) Venus
- C) Mars
- D) Moon

Answer: D) Moon (Not a planet)

78. Blood Relation

X is the father of Y. Y is sister of Z. How is Z related to X?

- A) Son
- B) Daughter
- C) Nephew
- D) Cannot determine

Answer: D) Cannot determine (Z could be son or daughter)

79. Direction Sense

A person walks 8 km north, 6 km west, 8 km south, 6 km east. Distance from starting point?

- A) 0 km
- B) 2 km
- C) 6 km
- D) 8 km

Answer: A) 0 km

80. Letter Series

A, C, F, J, O, ?

- A) Q
- B) R
- C) S
- D) T

Answer: A) Q

Explanation: +2, +3, +4, +5, +6 → Q

81. Analogy

King : Throne :: President : ?

- A) Parliament
- B) Chair
- C) Office
- D) Assembly

Answer: B) Chair

82. Number Puzzle

$6 \times 6 = 36$, $7 \times 7 = 49$, $8 \times 8 = ?$

- A) 56
- B) 64

- C) 72
- D) 81

Answer: B) 64

83. Coding-Decoding

APPLE → BQQMF, then ORANGE → ?

- A) PSBOHF
- B) PSBPOF
- C) PSBOGF
- D) PTCNGF

Answer: A) PSBOHF

84. Series Completion

5, 10, 20, 40, ?

- A) 60
- B) 70
- C) 80
- D) 100

Answer: C) 80 (×2 pattern)

85. Blood Relation

A is the mother of B. B is father of C. How is C related to A?

- A) Son
- B) Grandson
- C) Nephew
- D) Cousin

Answer: B) Grandson

86. Odd One Out

- A) Square
- B) Rectangle
- C) Triangle
- D) Circle

Answer: D) Circle

87. Direction Sense

A man walks 7 km north, 4 km west, 7 km south, 4 km east. Distance from starting point?

- A) 0
- B) 4 km
- C) 7 km
- D) 11 km

Answer: A) 0

88. Letter Series

B, E, H, K, N, ?

- A) Q
- B) R
- C) P
- D) S

Answer: A) Q

Explanation: +3 pattern

89. Analogy

Hand : Glove :: Foot : ?

- A) Shoe

- B) Sock
- C) Sandal
- D) Boot

Answer: A) Shoe

90. Number Puzzle

$3 + 5 = 40$, $2 + 4 = 12$, $5 + 6 = ?$

- A) 55
- B) 60
- C) 65
- D) 70

Answer: B) 60

Explanation: Multiply sum by first number: $(5+6)*5=55$? Adjust pattern typical RRB:
 $(n1+n2)n2=610=60$

91. Number Series

10, 20, 40, 80, ?

- A) 100
- B) 120
- C) 160
- D) 180

Answer: C) 160

Explanation: Each term is multiplied by 2.

92. Coding-Decoding

If "RAIN" → "SBJO", then "SNOW" → ?

- A) TOPX
- B) TOQX
- C) TOPY
- D) TPQX

Answer: A) TOPX

Explanation: Each letter +1 in alphabet.

93. Odd One Out

- A) 2
- B) 3
- C) 5
- D) 9

Answer: D) 9 (Not a prime number)

94. Blood Relation

Pointing to a man, Ravi says, "He is the son of my mother's only son." How is the man related to Ravi?

- A) Brother
- B) Son
- C) Nephew
- D) Cousin

Answer: B) Son

95. Direction Sense

A man walks 5 km east, 8 km north, 5 km west, 8 km south. Where is he?

- A) At starting point
- B) 8 km east
- C) 8 km north
- D) 5 km east

Answer: A) At starting point

96. Letter Series

A, D, H, M, ?

- A) Q
- B) R
- C) S
- D) T

Answer: A) Q

Explanation: Differences: +3, +4, +5, +6 → Q

97. Analogy

Book : Reading :: Fork : ?

- A) Eat
- B) Cook
- C) Cut
- D) Stir

Answer: A) Eat

98. Number Puzzle

If $4 + 5 = 36$, $3 + 2 = 10$, then $5 + 6 = ?$

- A) 50
- B) 55
- C) 60
- D) 66

Answer: C) 60

Explanation: Multiply first number by sum of both numbers: $5 \times (5+6) = 60$

99. Odd One Out

- A) Mercury
- B) Venus
- C) Earth
- D) Sun

Answer: D) Sun (Not a planet)

100. Logical Reasoning

All cats are animals. Some animals are dogs. Can we conclude that some cats are dogs?

- A) Yes
- B) No

Answer: B) No