PREVIOUS YEAR PAPER

RRB NTPC 2019 CBT-1 — 4 February 2021, Shift 1

RRB NTPC · 4 February 2021 · 10:30 AM - 12:00 PM

88 of the paper's 100 questions · +1 for a correct answer, −0.33 for a wrong one · 90 minutes

Left out of the original paper: 12 (any question that needs a figure or formatting we cannot show, has no answer in the response sheet, or could not be checked against a second copy of the paper).

The official booklet is a scan with no text; ExamBharo typed this paper from it by hand. Report a typing slip through exambharo.com/contact/.

Questions from the Railway Recruitment Board's paper of 4 February 2021, 10:30 AM - 12:00 PM. Each question is followed by its answer, and the answer key is repeated on the last page.

Take it as a timed practice test: exambharo.com/rrb-ntpc/previous-year-papers/rrb-ntpc-2019-cbt-1-4-feb-2021-shift-1/

CBT-1

1. If secθ - cosecθ = 0, then the value of 2 sin 2θ - 3 cos 2θ is:
   (a) 1/2
   (b) 2
   (c) 1
   (d) -1
   Answer: (b)

2. What was the main focus of the first Five Year Pla[illegible] India?
   (a) Development of research and development [illegible]ted to space
   (b) Development of primary sector with [illegible]griculture
   (c) Growth of information technology
   (d) Rapid development of heavy industries
   Answer: (b)

3. What do paintings at Ajanta caves illustrate?
   (a) Ramayana tales
   (b) Mahabharata tales
   (c) Jataka tales
   (d) Stories from vedas
   Answer: (c)

4. What is the ancient name of Iran?
   (a) Mesopotamia
   (b) Ceylon
   (c) Gaul
   (d) Persia
   Answer: (d)

6. The difference between the compound interest and the simple interest on a principal sum of ₹ 24,000 in 2 years at same rate of interest is ₹60. The rate of interest is:

(a) 7%
(b) 6%
(c) 8%
(d) 5%

Answer: (d)

7. If the length, breadth and height of a room are 20 m, 25 m and 35 m, respectively, then what will be the total surface area of the four walls of the room?

(a) 3145 m^2
(b) 3140 m^2
(c) 3150 m^2
(d) 3155 m^2

Answer: (c)

8. If one angle of a parallelogram is 28° less than thrice the smallest angle, then the largest angle of the parallelogram is:

(a) 126°
(b) 124°
(c) 122°
(d) 128°

Answer: (d)

9. In a certain code language, FURNITURE is written as RUFTINERU. How will FOUNTAINS be written as in that language?

(a) NIATNSUOF
(b) UOFATNSNI
(c) UOFNTNISI
(d) OFNUATSNI

Answer: (b)

10. If Z = 26 and ACT = 24, then BAT will be equal to:

(a) 23
(b) 21
(c) 26
(d) 24

Answer: (a)

11. Which one of these comprises the Golden Quadrilateral?

(a) Delhi-Jaipur-Agra-Meerut
(b) Delhi-Mumbai-Bangalore-Kolkata
(c) Delhi-Pune-Chennai-Bhubaneshwar
(d) Delhi-Mumbai-Chennai-Kolkata

Answer: (d)

12. Where in India was the most complete fossil of rare dinosaur-Ichthyosaur found in 2016?

(a) Madhya Pradesh
(b) Gujarat
(c) Arunachal Pradesh
(d) Rajasthan

Answer: (b)

13. What is the function of alveoli?

(a) To help digest food
(b) To provide a surface where exchange of gases takes place
(c) To aid in absorption of food
(d) To purify blood

Answer: (b)

14. X and Y can complete a task in 28 days and 20 days, respectively. X started the task alone. After 4 days Y joined him till the completion of the task. How long did the task last?

(a) 10 days
(b) 12 days
(c) 8 days
(d) 14 days

Answer: (d)

15. Name the strait that divides Morocco and Spain.

(a) English Channel
(b) Strait of Gibraltar
(c) Hudson Strait
(d) Bering Strait

Answer: (b)

16. How does most of India's foreign trade take place?

(a) Through land and sea routes
(b) Through sea and air routes
(c) Through land and air routes
(d) Equally through land, air and sea routes each

Answer: (b)

17. A sum of money becomes ₹6,400 in 2 years and ₹8,100 in 4 years on compound interest. Find the rate of compound interest.

(a) 14.5%
(b) 10.5%
(c) 12.5%
(d) 16.5%

Answer: (c)

18. Name the famous Indian writer who has written novels like 'Untouchable' and 'Coolie'.

(a) Anita Desai
(b) Mulk Raj Anand
(c) RK Narayan
(d) Kamla Das

Answer: (b)

19. There are five friends X, Y, Z, U and V. They are compared on the basis of height. Height of no two friends is same. U is shorter than Y but taller than X. Z is the tallest. X is taller than V. Who is the third tallest?

(a) U
(b) X
(c) V
(d) Y

Answer: (a)

20. Who was the founder of the Mizo National Front (MNF)?

(a) Khuangchera
(b) Chawngbawla
(c) Laldenga
(d) Lalnunmawia

Answer: (c)

21. The laws of inheritance were discovered by:

(a) Charles Darwin
(b) Archibald Garrod
(c) Hugo de Vries
(d) Gregor Mendel

Answer: (d)

22. A television manufacturer earns a profit of 10% by selling one TV set for ₹24,750. If the production cost is increased by 15%, then what should be the new selling price of the TV set so as to gain a profit of 15%?

(a) ₹27,756.25
(b) ₹29,756.25
(c) ₹28,756.25
(d) ₹26,756.25

Answer: (b)

23. Who out of the following led the Khilafat movement?

(a) Muhammad Ali Jinnah
(b) Bakht Khan
(c) Zakir Hussain
(d) Shaukat Ali

Answer: (d)

24. Which of the following is different from the rest?
Venus, Mars, Iapetus, Jupiter

(a) Iapetus
(b) Venus
(c) Jupiter
(d) Mars

Answer: (a)

25. Arrange the following in a meaningful order.
A. Pupa B. Imago C. Larva D. Egg

(a) D → C → B → A
(b) C → D → A → B
(c) D → C → A → B
(d) A → C → D → B

Answer: (c)

26. What is the name of the first dedicated Indian astronomy mission that is aimed at studying celestial sources in X-ray, optical and UV spectral bands simultaneously?

(a) OpticoSat
(b) AstroSat
(c) XtroSat
(d) AstroMat

Answer: (b)

27. What is the correct full form of MPEG fr[illegible]hel[illegible]

(a) Micro Pictures Expert Group
(b) Many Pictures Expert Group
(c) Moving Picture Experts Group
(d) Motion Pictures Expert Group

Answer: (c)

28. Find the difference between median and mode of the following data:
2, 3, 5, 7, 2, 3, 3, 5, 7 and 9.

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

Answer: (d)

29. Pointing to a lady, Raman said, "The son of her only brother is the brother of my wife". How is the lady related to Raman?

(a) Wife's mother

(b) Wife's father's sister

(c) Wife's brother's wife

(d) Father's sister

Answer: (b)

30. Sohan decreased his expenses by 25%. Later, he decreased them further by 10%. By what percentage did his expenses decrease altogether?

(a) 32.5%

(b) 34.5%

(c) 33.5%

(d) 31.5%

Answer: (a)

31. The minimum value of $11\sin^2\theta + 12\cos^2\theta$ is:

(a) 12

(b) 0

(c) 11

(d) 1

Answer: (c)

34. The approach based on the idea that 'organism[illegible]nich are more distantly related will accumulate a greater number of difference[illegible]the[illegible]NA' is called?

(a) The DNA study

(b) Morphological approach

(c) Molecular phylogeny

(d) Metamorphosis

Answer: (c)

35. The capacity of two pots is 132 litres and 69 litres, respectively. Find the maximum capacity of a container that can exactly measure the content of the two pots.

(a) 3040 cc

(b) 3060 cc

(c) 3000 cc

(d) 3080 cc

Answer: (c)

36. The sum of two numbers is 72. Their HCF and LCM are 2 and 102, respectively. The sum of the reciprocals of the same two numbers is:

(a) 5/17
(b) 6/17
(c) 7/19
(d) 8/19

Answer: (b)

37. Valence electrons are present in the:

(a) innermost as well as outermost shell of an atom
(b) innermost shell of an atom
(c) just outside an atom
(d) outermost shell of an atom

Answer: (d)

38. If x: y = 4 : 3, then the value of $x^3 - y^3 : x^3 + y^3$ is:

(a) 36 : 91
(b) 38 : 91
(c) 39 : 91
(d) 37 : 91

Answer: (d)

39. Kharai Camels are known to mainly feed on:

(a) Cactus
(b) Mangroves
(c) Joshua tree
(d) Brittlebush

Answer: (b)

40. Which of the following country follow more than one time zones?

(a) USA
(b) Argentina
(c) China
(d) India

Answer: (a)

41. The sum of two numbers is 40 and their product is 60. The sum of their reciprocals is:

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

Answer: (b)

42. Members of Rajya Sabha are elected for the duration of:

(a) 5 years
(b) 6 years
(c) 3 years
(d) 4 years

Answer: (b)

43. Karan works twice as fast as Shyam. Working together, they can complete a task in 20 days. In how many days will Karan alone complete the same task?

(a) 28 days
(b) 26 days
(c) 30 days
(d) 32 days

Answer: (c)

44. The angles of a quadrilateral are in the ratio of 5 : 8: 10 : 13. The smallest of these angles is:

(a) 50°
(b) 55°
(c) 45°
(d) 35°

Answer: (a)

45. What is the sum of the cubes of the natural numbers from 5 to 14?

(a) 10920
(b) 10925
(c) 10930
(d) 10935

Answer: (b)

46. What must be subtracted from each of the numbers 26, 44, 56 and 104 so that the remainders are in proportion?

(a) 6
(b) 9
(c) 8
(d) 7

Answer: (c)

47. What is the smallest five-digit number formed by using the digits 2, 3, 4, 0, 5?

(a) 20345
(b) 23045
(c) 20435
(d) 02345

Answer: (a)

48. Select the number that can replace the question mark (?) in the following series.
4, 13, 27, 82, 165, ?

(a) 497
(b) 495
(c) 494
(d) 496

Answer: (d)

49. Two numbers are in the ratio of 9 : 11. If 6 added to each number, then the ratio becomes 6 : 7. Find the greater number.

(a) 22
(b) 19
(c) 25
(d) 28

Answer: (a)

50. Pick the odd one out.
Rectangle, Triangle, Square, Parallelogram

(a) Triangle
(b) Parallelogram
(c) Rectangle
(d) Square

Answer: (a)

51. If a, b, c, d and e are the digits of a number, then the number is:

(a) 100a + 10b + 10c + d + e
(b) 1000a + 100b + 10c + 1d + e
(c) edcba
(d) $104a + 10^3b + 10^2c + 10d + e$

Answer: (d)

52. Who coined the phrase 'Survival of the fittest'?

(a) Archimedes
(b) Herbert Spencer
(c) Charles Darwin
(d) Albert Einstein

Answer: (b)

53. If J denotes addition, G denotes subtraction, M denotes multiplication, and B denotes division, then which of the following equations will NOT be correct?

(a) 8M2G6B3J7 = 21
(b) 4G16B2J6M5 = 26
(c) 6M5J4B2G10 = 22
(d) 6B2M8G10J4 = 20

Answer: (d)

54. In a right circular cylinder, the ratio of the curved surface area to the total surface area is 5 : 9. Find the ratio of the height of the cylinder to the radius of the cylinder.

(a) 3 : 5
(b) 5 : 4
(c) 4 : 5
(d) 5 : 3

Answer: (b)

55. Which of the following is a garrison town?

(a) Surat
(b) Udaipur
(c) Jalandhar
(d) Kota

Answer: (c)

56. How many columns are there in a sheet of Excel 2010?

(a) 16024
(b) 1024
(c) 16384
(d) 1600

Answer: (c)

57. Where are one-horned rhinoceros is found in Ind

(a) Assam
(b) Madhya Pradesh
(c) Bihar
(d) Meghalaya

Answer: (a)

58. There were 12 boys who got trapped in a cave in June 2018. A huge exercise had to be carried to rescue them. It became an internationally famous incident. Which country did this incident happen in?

(a) Thailand
(b) Bhutan
(c) Burma
(d) Malaysia

Answer: (a)

59. Shubham said, "I have no brother or sister. This man in the photograph is the husband of my mother's daughter-in-law". Whose photograph is Shubham referring to?

(a) Son-in-law
(b) Son
(c) Cousin
(d) Self

Answer: (d)

60. As of 30th November 2020, how many countries are members of the International Monetary Fund (IMF)?

(a) 89
(b) 190
(c) 198
(d) 99

Answer: (b)

61. Which among the following is the largest unit of memory of a computer system?

(a) Exabyte
(b) Yottabyte
(c) Petabyte
(d) Zetabyte

Answer: (b)

62. Select the letter that can replace the question mark (?) in the following series.
70, V, 63, R, 56, O, 49, ?

(a) K
(b) N
(c) M
(d) L

Answer: (c)

63. Which traveller from Uzbekistan visited India in 11th Century?

(a) Ibn Battuta
(b) Al-Beruni
(c) Mahmud Wali Balkhi
(d) Seydi Ali Reis

Answer: (b)

64. What is G-7?

(a) 7 sister states of India
(b) 7 seas of the world
(c) 7 continents of the world
(d) 7 IMF-described advanced economies in the world

Answer: (d)

65. What is the name of the world's smallest spacecraft launched by India?

(a) Sparkle
(b) Spring
(c) Sprites
(d) Star

Answer: (c)

66. The lengths of 2 adjacent sides of a square are increased by 35% and 25%. The area of the resulting rectangle exceeds the area of the square by:

(a) 69.75%
(b) 70.75%
(c) 67.75%
(d) 68.75%

Answer: (d)

67. A tailor can make 5 pieces out of 1 m of cloth. He has 57.6 m of cloth. How many pieces can he make out of this cloth?

(a) 288
(b) 289
(c) 290
(d) 286

Answer: (a)

68. Who designed the 'Statue of Unity', which was inaugurated by Prime Minister Narendra Modi on 31st October 2018?

(a) Krishna Reddy
(b) Ram Vanji Sutar
(c) S. N. Ganapathy
(d) Ramkinkar Baij

Answer: (b)

69. In which city of India did the East India [illegible]mpa[illegible]set up their first trading center?

(a) Delhi
(b) Mumbai
(c) Ahmedabad
(d) Surat

Answer: (d)

70. World Bamboo Day is celebrated every year on _____.

(a) 30th December
(b) 10th March
(c) 10th July
(d) 18th September

Answer: (d)

71. Five friends P, Q, R, S and T are compared on the basis of their height (not necessarily in the same order). Height of T is between P and Q. T is taller than S. R's height is more than P and T. Which of the following sequence of their height cannot be possible?
I. R > P > T > Q > S
II. R > S > Q > T > P
III. Q > R > T > S > P

(a) Only II
(b) II and III
(c) I and III
(d) Only I

Answer: (a)

72. X and Y can finish a task in 15 days and 20 days, respectively. The capacity of Z is 5/2 times that of X. Working together, in how many days will X, Y and Z finish the same task?

(a) 3 9/17 days
(b) 3 8/17 days
(c) 3 7/17 days
(d) 3 6/17 days

Answer: (a)

73. The east coast of India is a:

(a) coast with fjords
(b) low sedimentary coast
(c) concordant coastline
(d) rocky retreating coast

Answer: (b)

74. When did the Central Industrial Security Force come into existence in India?

(a) 1989
(b) 1990
(c) 1970
(d) 1969

Answer: (d)

75. Which of the following is a part of 'global commons'?

(a) Asia
(b) Africa
(c) Antarctica
(d) Australia

Answer: (c)

76. Consider the given statement and decide which of the given assumptions is/are implicit in the statement.
Statement:
On his second visit, the doctor changed the prescription.
Assumptions:
I. The patient did not show improvement with the earlier prescription.
II. The patient did not take the earlier prescription seriously.

(a) Only assumption II is implicit.
(b) Both assumptions I and II are implicit.
(c) Only assumption I is implicit.
(d) None of the assumptions is implicit.

Answer: (c)

77. In which year was the British East India Company formed?

(a) 1700
(b) 1650
(c) 1600
(d) 1750

Answer: (c)

78. The difference between the greatest and the smallest six-digit numbers is:

(a) 888888
(b) 899999
(c) 988888
(d) 999999

Answer: (b)

79. Congress Party observed 26th January 1930 as:

(a) Republic Day
(b) Independence Day
(c) Bharat Diwas
(d) Silent Protest Day

Answer: (b)

81. Read the following information carefully and answer the question that follows.
Sahil and Rohan are good at hockey and baseball. Gautam, Sahil and Mahesh are good at football and baseball. Kaushal and Gautam are good at cricket and volleyball. Kaushal and Rohan are good at hockey and volleyball.
Who is good at volleyball, hockey and baseball?

(a) Sahil
(b) Kaushal
(c) Gautam
(d) Rohan

Answer: (d)

82. In which Indian city was the first successful Cotton mill set up?

(a) Kolkata
(b) Mumbai
(c) Chennai
(d) Patna

Answer: (b)

83. Where was the Muslim League founded?

(a) Lucknow
(b) Kanpur
(c) Dhaka
(d) Bihar

Answer: (c)

84. Origin of State Bank of India (SBI) goes back to the year:

(a) 1806
(b) 1951
(c) 1948
(d) 1851

Answer: (a)

85. The HCF and LCM of two numbers are 60 and 42(espectively. If the first number is divided by 2, then the quotient is 60. The second number is:

(a) 150
(b) 190
(c) 170
(d) 210

Answer: (d)

92. Which of the following is NOT similar to the rest?
Coat, Shirt, Jacket, Sweater

(a) Coat
(b) Shirt
(c) Sweater
(d) Jacket

Answer: (b)

93. Read the given statements and conclusions carefully. Assuming that the information given in the statements is true, even if it appears to be at variance with commonly known facts, decide which of the given conclusions logically follow(s) from the statements.
Statements:
Some papers are pencils.
Some pencils are boards.
Conclusions:
I. No paper is a board.
II. All papers are boards.
III. Some boards are not papers.

(a) Either I or II follows.

(b) Only conclusion III follows.

(c) None of the conclusions follows.

(d) Only conclusion I follows.

Answer: (c)

94. 'Hand' is related to 'Finger' in the same way as 'Pen' is related to '_____'.

(a) Holder

(b) Ink

(c) Pencil

(d) Nib

Answer: (d)

96. Select the option that is related to the third term in the same way as the second term is related to the first term.
Carpenter: Saw:: Blacksmith:?

(a) Wood

(b) Hammer

(c) Gold

(d) Metal

Answer: (b)

97. In a certain code language, KNIFE is written as PMRUV. How will PAINTING be written as in that language?

(a) KZNIGRGN

(b) KARNGIMG

(c) KZRMGRMT

(d) GNITNIAD

Answer: (c)

98. Select the number that can replace the question mark (?) in the following series.
223, 111,?, 27, 13, 6.

(a) 56
(b) 54
(c) 52
(d) 55

Answer: (d)

99. Identify the letter that does NOT belong to the following series.
X, U, Q, M, F, Y

(a) Y
(b) F
(c) Q
(d) M

Answer: (d)

Answer key

Answer key as marked in the Railway Recruitment Board's response sheet. "—" means the sheet did not show it clearly.

CBT-1

1	**(b)**	2	**(b)**	3	**(c)**	4	**(d)**	6	**(d)**	7	**(c)**
8	**(d)**	9	**(b)**	10	**(a)**	11	**(d)**	12	**(b)**	13	**(b)**
14	**(d)**	15	**(b)**	16	**(b)**	17	**(c)**	18	**(b)**	19	**(a)**
20	**(c)**	21	**(d)**	22	**(b)**	23	**(d)**	24	**(a)**	25	**(c)**
26	**(b)**	27	**(c)**	28	**(d)**	29	**(b)**	30	**(a)**	31	**(c)**
34	**(c)**	35	**(c)**	36	**(b)**	37	**(d)**	38	**(d)**	39	**(b)**
40	**(a)**	41	**(b)**	42	**(b)**	43	**(c)**	44	**(a)**	45	**(b)**
46	**(c)**	47	**(a)**	48	**(d)**	49	**(a)**	50	**(a)**	51	**(d)**
52	**(b)**	53	**(d)**	54	**(b)**	55	**(c)**	56	**(c)**	57	**(a)**
58	**(a)**	59	**(d)**	60	**(b)**	61	**(b)**	62	**(c)**	63	**(b)**
64	**(d)**	65	**(c)**	66	**(d)**	67	**(a)**	68	**(b)**	69	**(d)**
70	**(d)**	71	**(a)**	72	**(a)**	73	**(b)**	74	**(d)**	75	**(c)**
76	**(c)**	77	**(c)**	78	**(b)**	79	**(b)**	81	**(d)**	82	**(b)**
83	**(c)**	84	**(a)**	85	**(d)**	92	**(b)**	93	**(c)**	94	**(d)**
96	**(b)**	97	**(c)**	98	**(d)**	99	**(d)**				