



(Download) Railway Recruitment Board : Junior Engineer (JE)  
Exam Papers-25-MAY-2019

**1. Which of the following teams won the final in Vijay-Hazare Trophy 2018?**

---

- A) Punjab
- B) Rajasthan
- C) Delhi
- D) Mumbai

**2. What day of the week will 1 January 2022 be?**

---

- A) Thursday
- B) Saturday
- C) Sunday
- D) Monday

**3. The radius of a sphere is 3 times the radius of a cylinder. If their volumes are equal, find the height of the cylinder.**

---

- A) 27 times its radius
- B) 3 times its radius

- C) 36 times its radius
- D) Equal to its radius

**4. Which of the following districts won the platinum of Web Ratna Award in Digital India Awards 2018?**

---

- A) Aurangabad
- B) Kurukshetra
- C) Koraput
- D) Chennai

**5. What is the shape of the Cocci bacteria?**

---

- A) Spherical
- B) Comma-shaped
- C) Spiral
- D) Rod shaped

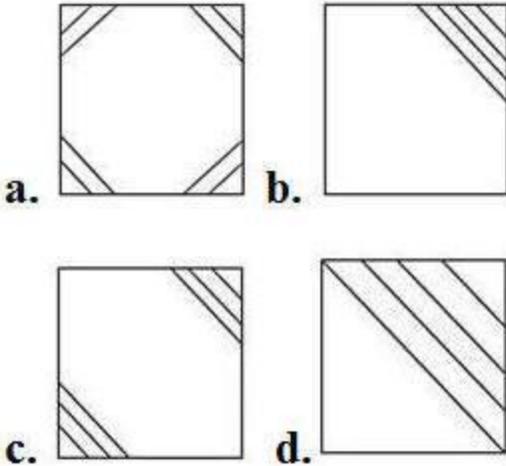
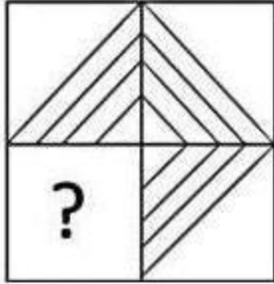
**6. Find the ODD one out from the given options.**

---

- A) 171, 19
- B) 162, 18
- C) 304, 16
- D) 117, 13

**7. Choose from the alternative the figure that best completes the pattern given below.**

---



**8. Simplify  $\frac{\sin 3A}{\sin A} + \frac{\cos 3A}{\cos A}$**

---

- A)  $2 \sin A$
- B)  $4 \cos 2 A$
- C)  $2 \cos A$
- D)  $-2$

**9. Vedha walked 15 m from point A in the east direction and turned south and walked 8 m to reach point B. What is the distance between point A and point B?**

---

- A) 15 m
- B) 12 m
- C) 18 m
- D) 17 m

**10. A group of more than three atoms carrying a charge is known as \_\_\_\_\_ ion.**

---

- A) Tri atomic
- B) Polyatomic
- C) Mono atomic
- D) Di atomic

**11. What is the aim of the 'Young Scientist Programme' for students, which was recently launched by ISRO?**

---

- A) To impart basic knowledge of biology
- B) To impart basic knowledge of space technology
- C) To impart basic knowledge of research
- D) To impart basic knowledge of computers

**12. If  $a/b$  is a fraction, where  $a = b - 3$  and  $(a + 10)/b - a/b = 10/7$ , then find  $a/b$ .**

---

- A)  $4/7$
- B)  $2/5$
- C)  $8/11$
- D)  $5/8$

**13. Which of the following former Indian Presidents served for the shortest duration?**

---

- A) Dr. Zakir Husain
- B) Dr. Rajendra Prasad
- C) Neelam S. Reddy
- D) R. Venkataraman

**14. Choose the alternative that best replaces the question mark(?) in the given figure.**

---

16	36	64
4	6	?
15	13	11
11	7	3

- A) 3
- B) 8
- C) 5
- D) 6

**15. If  $3\frac{2}{5} + 1\frac{2}{9} = 4\frac{4}{5} - a$ , find the value of 'a'.**

---

- A)  $\frac{4}{45}$
- B)  $\frac{11}{45}$
- C)  $\frac{16}{9}$
- D)  $\frac{6}{25}$

**16. Which of these diseases is communicable?**

---

- A) Hypertension
- B) Plague
- C) Cancer
- D) Diabetes

**17. Find the ODD one out from the given options.**

---

- A) Bus
- B) Auto
- C) Van
- D) Car

**18. The acceleration experienced by an object during a free fall is independent of its-**

---

- A) Mass
- B) Velocity

- C) Pressure
- D) Energy

**19. If a convex lens forms a real inverted same size image at 30cm, then the object is placed \_\_\_\_\_ in front of the lens.**

---

- A) 10 cm
- B) 20 cm
- C) 40 cm
- D) 30 cm

**20. A certain sum of money invested at Compound Interest, compounded annually, amounts to Rs.338 at the rate of 4% per annum for 2 years. Find the sum.**

---

- A) Rs.315
- B) Rs.320
- C) Rs.318.52
- D) Rs.312.50

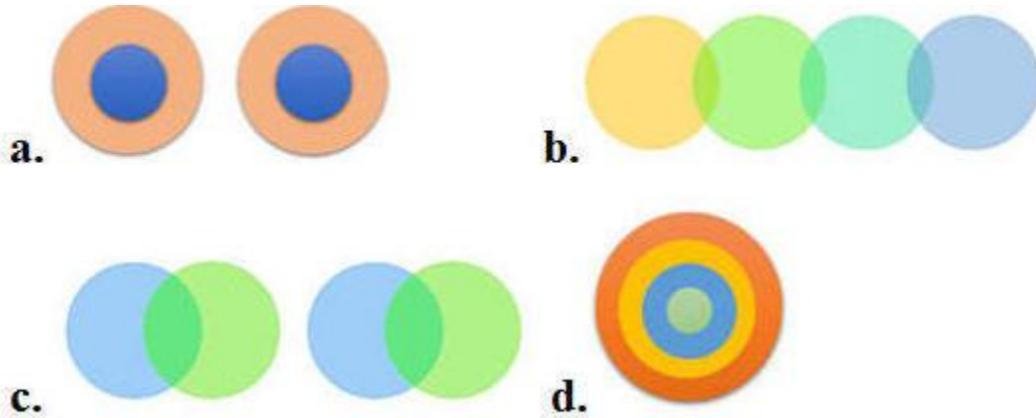
**21. K-shell is the \_\_\_\_\_ energy level.**

---

- A) Third
- B) First
- C) Second
- D) Fourth

**22. Choose the figure that best represents the relationships among the classes given below.  
Teachers, Language, Hindi, Educated**

---



**23. Simplify:  $(5 + 0.5 + 0.005 + 0.0005 + 0.05) \times 2$**

---

- A) 11.001
- B) 11.011
- C) 11.111
- D) 10.111

**24. How is the ammeter connected in all circuits to measure current flowing in it?**

---

- A) In series
- B) In line
- C) Across
- D) In parallel

**25. Which satellite is dedicated as India's first multi wavelength space observatory?**

---

- A) SRMSAT
- B) SARAL
- C) Jugnu
- D) Astrosat

**26. If in a certain code 'COLOURED' is written as 'XDPDNAQZ', then how will 'ORDER' be written in that code?**

---

- A) DAZAQ
- B) DAZQA
- C) DAQZA
- D) ADZQA

**27. What digit will come in the place of 'a' in the number 1a5a01, if it is divisible by 11?**

---

- A) 8
- B) 5
- C) 4
- D) 6

**28. Simplify :  $5 + 4 \times 5^2 + 4 \times 5^3 + 4 \times 5^4 + 4 \times 5^5$**

---

- A)  $5^2$
- B) 56
- C) 58
- D) 54

**29. P and Q can do a work individually in 15 days and 20 days respectively. Find the respective ratio of their efficiencies.**

---

- A) 4 : 3
- B) 3 : 4
- C) 4 : 5
- D) 5 : 4

**30. Which organ in the human body helps to maintain balance?**

---

- A) Ear
- B) Brain
- C) Heart
- D) Liver

**31. Which of the following is a use of ethanol?**

---

- A) In cough syrups
- B) All of the options
- C) In alcoholic drinks
- D) Manufacturing paints

**32. Gokul walks 8 km from his home towards east. He turns left to cover 2 km, and he turns right and walks 3 km. Find the distance he travelled towards east?**

---

- A) 14 km
- B) 8 km
- C) 11 km
- D) 5 km

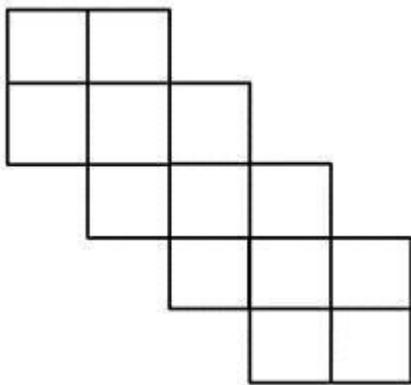
**33. Which Article of Indian Constitution gives the procedure for impeachment of the President?**

---

- A) Article 59
- B) Article 61
- C) Article 48
- D) Article 42

**34. How many squares are there in the given figure?**

---



- A)15
- B)17
- C)21
- D)19

**35. Which number will best complete the relationship given below?**

**6 : 24 :: 120 : ?**

---

- A) 212
- B) 215
- C) 229
- D) 210

**36. The liquid portion of blood is called-**

---

- A) Lymph
- B) Plasma
- C) Water
- D) Serum

**37. Which nutrient provides the maximum energy on breakdown?**

---

- A) Carbohydrates
- B) Fibres
- C) Proteins
- D) Fats

**38. In which part of the human ear is amplification of sound done by 3 bones?**

---

- A) Inner ear
- B) Auditory nerve
- C) Middle ear
- D) Outer ear

**39. Complete the series.**

**ABZ, BCY, CDX, DEW, (...)**

---

- A) DEV
- B) DEF
- C) FEV
- D) EFV

**40. Complete the series.  
B, C, F, G, J, K, (...)**

---

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

**41. Which Indian city is famous for the embroidery work called 'Chikankari'?**

---

- A) Hyderabad
- B) Lucknow
- C) Ahmedabad
- D) Puri

**42. Archery is the national game of-**

---

- A) Bhutan
- B) Switzerland
- C) Sri Lanka
- D) Denmark

**43. Sneha wants to go to the market. She starts from her home which is in the north and comes to the crossing. The road to her left ends in a park and straight ahead is the office complex, and market is located direct opposite to the park. In which direction is the market to the crossing?**

---

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

**44. Find the missing number in the following series.  
8 , 6 , 8 , 14 , 30 , (... ) , 233**

---

- A) 55
- B) 60
- C) 72
- D) 77

**45. Find the value of  $\sin 60^\circ \cos 30^\circ + \cos 60^\circ \sin 30^\circ$ .**

---

- A)  $3/4$
- B) 1
- C)  $1/4$
- D)  $1/2$

**46. Two stations A and B are 110 km apart on a straight line. One train starts from A at 7 a.m. and travels towards B at 20 km/h. Another train starts from B at 8 a.m. and travels towards A at a speed of 25 km/h. At what time will they meet?**

---

- A) 9 a.m.
- B) 10.30 a.m.
- C) 11 a.m.
- D) 10 a.m.

**47. Find the wrong number in the given series.  
6, 12, 21, 36, 56, 81**

---

- A) 12
- B) 36
- C) 21
- D) 56

**48. Which is the longest muscle in the body?**

---

- A) Soleus
- B) Trapezius
- C) Gracilis
- D) Sartorius

**49. If A and B are supplementary angles, then find the value of  $\frac{\tan A + \tan B}{1 - \tan A \tan B}$**

---

- A) 1
- B) 1/2
- C) 0
- D) -1

**50. To which of the following family of elements does potassium belong?**

---

- A) Halogens
- B) Noble gases
- C) Alkaline earth metals
- D) Alkali metals

**51. Find the ODD one out from the given options.**

---

- A) Cheetah
- B) Elephant
- C) Cougar
- D) Leopard

**52. Complete the series.  
4, 4, 8, 24, 96, (...)**

---

- A) 493
- B) 448
- C) 480
- D) 461

**53. Ten years ago, the ages of father and son were in the ratio 3 : 1. Ten years hence this ratio will be 2 : 1. What is the age of the father now?**

---

- A) 65
- B) 70

- C) 75
- D) 55

**54. Pure ghee costing Rs.100 per kilogram and vegetable oil costing Rs.50 per kilogram are mixed in some ratio and sold at Rs.96 per kilogram so as to gain 20%. In what ratio is ghee and oil mixed?**

---

- A) 3 : 4
- B) 2 : 3
- C) 4 : 3
- D) 3 : 2

**55. Which of the following diseases is a disease of the lung?**

---

- A) Allergy
- B) Tetanus
- C) Tuberculosis
- D) Cancer

**56. According to World Health Organization, the soft water has 0 to \_\_\_\_\_ milligram per litre as  $\text{CaCO}_3$ .**

---

- A) 120
- B) 60
- C) 30
- D) 90

**57. Read the following information carefully and answer the question given below.**

---

A, B, C, D, E, F, G and H are sitting around a circle facing the center. B is third to the right of F and third to the left of H. C is fourth to the left of A. A is not an immediate neighbor of F and B. E is not an immediate neighbor of B. G is second to the right of D.

Which of the following pairs represents the immediate neighbors of F?

- A) C and H
- B) E and D

- C) C and E
- D) H and D

**58. The price of a book was first increased by 25% and then reduced by 20%. What is the change in its original price?**

---

- A) 5% decrease
- B) 10% increase
- C) No change
- D) 10% decrease

**59. The cooking gas (LPG) mainly consists of-**

---

- A) Ethene
- B) Ethyne
- C) Propane and Butane
- D) Propene

**60. Which of these is a hill station in Rajasthan?**

---

- A) Nainital
- B) Mount Abu
- C) Kasauli
- D) Panchgani

**61. Which organ in the human body regulates the sugar content in the blood?**

---

- A) Gall bladder
- B) Liver
- C) Stomach
- D) Pancreas

**62. A vessel contains 20 litres containing milk and water in the ratio 3 : 2. Ten litres of this milk is removed and replaced with equal amount of pure milk. If this process**

**is repeated once again, find the final ratio of milk and water.**

---

- A) 5 : 3
- B) 1 : 4
- C) 4 : 1
- D) 9 : 1

**63. Which of these plants is mainly found in deserts?**

---

- A) Cactus
- B) Eucalyptus
- C) Oak
- D) Teak

**64. If the selling price is doubled, then profit triples. What is the profit per cent?**

---

- A) 120%
- B) 60%
- C) 80%
- D) 100%

**65. Which of these places was founded in 1577 by Guru Ram Das?**

---

- A) Jalandhar
- B) Chandigarh
- C) Ludhiana
- D) Amritsar

**66. In what time will a train 100 m long cross an electric pole, if its speed is 144 km/h?**

---

- A) 5 seconds
- B) 12.5 seconds
- C) 2.5 seconds
- D) 4.25 seconds

**67. Which disease is prevented with the help of Salk's vaccine?**

---

- A) Measles
- B) Chicken pox
- C) Small pox
- D) Polio

**68. Sodium metal is stored in-**

---

- A) Acetone
- B) Water
- C) Kerosene
- D) Ether

**69. Which of the following is NOT a celestial object?**

---

- A) Planets
- B) Stars
- C) Sun
- D) Ocean

**70. The process of movement of molecules from a higher concentration place to a lower concentration places is known as-**

---

- A) Diffusion
- B) Sublimation
- C) Condensation
- D) Evaporation

**71. A right circular cylinder just encloses a sphere of radius 6 cm. If A and B are their curved surface areas, then:**

---

- A)  $A < B$
- B)  $A = B$

- C)  $A > B$
- D) Cannot be determined

**72. Who is the present captain of India's men National field hockey team?**

---

- A) Harmanpreet Singh
- B) Manpreet Singh
- C) Rupinder Pal Singh
- D) Akashdeep Singh

**73. In universal indicators, red colour shows a pH of-**

---

- A) 0 to 3
- B) 8 to 11
- C) 12 to 14
- D) 4 to 7

**74. P takes 10 days and Q takes 24 days to complete a work. With the help of R, they all work together and finish it in 6 days. Find the payment they receive out of a total remuneration of Rs.1000.**

---

- A) P-Rs.500; Q-Rs.350; R-Rs.150
- B) P-Rs.600; Q-Rs.250; R-Rs.150
- C) P-Rs.500; Q-Rs.400; R-Rs.100
- D) P-Rs.400; Q-Rs.350; R-Rs.250

**75. When a decomposition reaction is carried out by heating, it is called-**

---

- A) Electrolytic decomposition reaction
- B) Thermal decomposition
- C) Photo decomposition reaction
- D) Non electrolytic decomposition reaction

**76. If  $9 \# 3 @ 4 = 31$  and  $8 \# 7 @ 2 = 58$ , then what will be  $5 \# 6 @ 7$ ?**

---

- A) 47
- B) 52
- C) 37
- D) 40

**77. What should be the smallest integer in place of \* if the number  $502*693$  is exactly divisible by 9?**

---

- A) 0
- B) 2
- C) 4
- D) 3

**78. Which of the following is equal to Hertz?**

---

- A)  $s^{-1}$
- B)  $m s^{-2}$
- C) s
- D)  $m / s$

**79. What is the name of the border line between India and China?**

---

- A) Durand Line
- B) McMahon Line
- C) Radcliffe Line
- D) 24th parallel

**80. A sum of Rs.25000 amounts to Rs.32000 in 4 years. What is the rate of interest?**

---

- A) 7%
- B) 6%
- C) 8%
- D) 6.5%

**81. Find the HCF of 513, 1134 and 1215.**

---

- A) 27
- B) 18
- C) 33
- D) 36

**82. Complete the series.  
38, 35, 34, 31, 30, (...)**

---

- A) 27
- B) 24
- C) 28
- D) 25

**83. If  $a(a + b + c) = 45$ ;  $b(a + b + c) = 75$  and  $c(a + b + c) = 105$ , then find the value of  $a^2 + b^2 + c^2$ .**

---

- A) 90
- B) 83
- C) 225
- D) 625

**84. Limestone, chalk and marble are different forms of-**

---

- A) Ammonium hydroxide
- B) Sodium hydroxide
- C) Calcium carbonate
- D) Calcium hydroxide

**85. Find the least number that is divisible by 12, 18, 21, and 30.**

---

- A) 1620
- B) 1260
- C) 1060
- D) 1020

**86. What is the length of the greatest rod that can be placed in a hall 12 m long, 4 m broad and 3 m high?**

---

- A) 9 m
- B) 13 m
- C) 15 m
- D) 18 m

**87. What is the minimum temperature to which a fuel must be heated so that it may catch fire and start burning?**

---

- A) Normal temperature
- B) Ignition temperature
- C) Neutral temperature
- D) Boiling temperature

**88. In a certain code, 'HUNTER' is coded as 'UHNTRE'. How is 'MANAGE' coded in that code?**

---

- A) EGNAAM
- B) MAANGE
- C) MNAAEG
- D) AMNAEG

**89. If the frequency of a sound wave is 100 Hz, then what is its time period?**

---

- A) 1 second
- B) 0.1 second
- C) 10 seconds
- D) 0.01 second

**90. Read the following information carefully and answer the question given below.**

---

Six boys—A, B, C, D, E, F are standing in one row, and six girls—G, H, I, J, K, L are standing in another row in such a way that each girl faces one boy, not necessarily in the same order. G is to the immediate right of the girl who is facing E, the boy at the extreme right. Only B is between D and E. F is to the immediate left of A and to the immediate right of C. I is facing A

and is to the immediate left of H. L is third to the left of J.

Which of the following boys is to the immediate left of D?

- A) B
- B) E
- C) F
- D) A

**91. A sum of Rs.1100 was taken as a loan. This is to be paid in two equal instalments. If the rate of interest is 20% per annum, compounded annually, find the amount payable in each instalment.**

---

- A) Rs.670
- B) Rs.720
- C) Rs.600
- D) Rs.620

**92. Where did Google launch its first drone delivery service in 2019?**

---

- A) Australia
- B) India
- C) England
- D) United States

**93. Find the least perfect square that is divisible by 21, 36 and 66.**

---

- A) 213444
- B) 214344
- C) 214434
- D) 231444

**94. An ammeter has \_\_\_\_\_ resistance, so that it passes maximum current through it.**

---

- A) Infinite
- B) High

- C) Very less
- D) Very high

**95. Which are the BRIC countries?**

---

- A) Brazil, Russia, India and Canada
- B) Brazil, Russia, India and China
- C) Britain, Russia, India and China
- D) Britain, Russia, India and Canada

**96. Two trains 100 m and 80 m in length are moving in the same direction, with speeds 51 m/s and 42 m/s respectively. In what time will they cross each other?**

---

- A) 30 seconds
- B) 20 seconds
- C) 25 seconds
- D) 18 seconds

**97. If 'PEOPLE' is coded as 'PLPOEE', how is 'TREND' coded?**

---

- A) DNERT
- B) NDETR
- C) TREDN
- D) TNERD

**98. If '+' means '-', '-' means '+', '÷' means 'x' and 'x' means '÷', then  $18 \times 3 \div 4 - 5 + 3 = ?$**

---

- A) 21
- B) 31
- C) 29
- D) 26

**99. In some machines, why is using oil as a lubricant not advisable?**

---

- A) Oil sometimes increases friction
- B) Oil makes the movement of the parts tough
- C) Oil makes the machine parts and the whole place dirty
- D) Sometimes oil leaks into the parts of the machine causing undesirable obstruction of working

**100. Which of the following will best complete the relationship given below?**

**BAT : YZG :: EMU : ?**

---

- A) FVN
- B) VNF
- C) VFN
- D) FNV

**Answer:-**

1. (d), 2. (b), 3. (c), 4. (b), 5. (a), 6. (c), 7. (d), 8. (b), 9. (d), 10. (b)  
11. (b), 12. (a), 13. (a), 14. (b), 15. (c), 16. (b), 17. (b), 18. (a), 19. (d), 20. (d)  
21. (b), 22. (a), 23. (c), 24. (a), 25. (a), 26. (b), 27. (a), 28. (b), 29. (a), 30. (a)  
31. (b), 32. (c), 33. (b), 34. (b), 35. (d), 36. (b), 37. (d), 38. (c), 39. (d), 40. (c)  
41. (b), 42. (a), 43. (c), 44. (d), 45. (b), 46. (d), 47. (a), 48. (d), 49. (c), 50. (d)  
51. (b), 52. (c), 53. (b), 54. (d), 55. (c), 56. (b), 57. (c), 58. (c), 59. (c), 60. (b)  
61. (d), 62. (d), 63. (a), 64. (d), 65. (d), 66. (c), 67. (d), 68. (c), 69. (d), 70. (a)  
71. (b), 72. (b), 73. (a), 74. (b), 75. (b), 76. (c), 77. (b), 78. (a), 79. (b), 80. (a)  
81. (a), 82. (a), 83. (b), 84. (c), 85. (b), 86. (b), 87. (b), 88. (d), 89. (d), 90. (d)  
91. (b), 92. (a), 93. (a), 94. (c), 95. (b), 96. (b), 97. (d), 98.

**(d), 99. (d), 100. (b)**

---