

RAILWAY TECHNICAL EXAM

- Which of the following states of India has the longest coastline?
 - Kerala
 - Gujarat
 - Tamil Nadu
 - Andhra Pradesh
- Where was the capital of Ranjit Singh, the king of Punjab, located?
 - Peshawar
 - Amritsar
 - Lahore
 - Rawalpindi
- The fundamental duties are enshrined in which Article of the Indian Constitution?
 - Article 51 A
 - Article 50 A
 - Article 50 B
 - Article 51 B
- The mineral structure of diamond is
 - Zinc
 - Nickel
 - Nitrogen
 - Carbon
- Which part of the body is affected by Jaundice?
 - Small intestine
 - Liver
 - Stomach
 - Pancreas
- Which country of the world has the largest number of post offices?
 - France
 - China
 - India
 - Japan
- Uttar Pradesh tops in the production of _____ in India.
 - sugar cane
 - rice
 - barley
 - wheat
- The safe temperature to keep eatables Fresh in refrigerator is
 - 4°C
 - 0°C
 - 18°C
 - 10°C
- The instrument used to measure the blood pressure of human body is
 - Barometer
 - Actimeter
 - Sphygmomanometer
 - Tachometer
- Automatic wrist watches get energy from
 - twist in spring
 - liquid crystal
 - kinetic energy
 - movement of our hands
- When a television is switched on
 - We listen the sound first and then see the picture
 - We see the picture first and then listen the sound
 - It depends on the TV manufacturing company
 - We get audio and visual at the same time
- Goitre in human body is caused due to deficiency of
 - Iodine
 - Phosphorus
 - Nitrogen
 - Calcium
- Who sent Huen Tsang as ambassador in the court of Harsha?
 - Fu Chen-Chu
 - Tai Sung
 - Tung Chuan-teria
 - None of these
- Who wrote Akbarnama?
 - Faizi
 - Abdul Rahim Khankhana
 - Abul Fazal
 - Abdul Kadir Badayun
- Which metal is generally used to make electromagnets?
 - Copper
 - Nickel
 - Iron
 - Cobalt
- Saina Nehwal of India won which medal in the women's singles badminton at the London Olympics in August 2012?
 - bronze
 - silver
 - gold
 - no medal
- Dynamo converts
 - electrical energy into mechanical energy
 - high voltage into low voltage
 - low voltage into high voltage
 - mechanical energy into electrical energy
- The instrument used to measure the electric current is
 - Barometer
 - Altimeter
 - Ammeter
 - Anemometer
- The best conductor of electricity is
 - Aluminium
 - Copper
 - Iron
 - Silver
- If the length of a rectangle is increased by 20% and its breadth is decreased by 20%, its area
 - increases by 4%
 - decreases by 4%
 - decreases by 1%
 - does not change
- A train crosses two persons travelling at 3 kmph and 5 kmph in the same direction in 10 seconds and 11 seconds respectively. The speed of the train is
 - 28 kmph
 - 27 kmph
 - 25 kmph
 - 24 kmph
- A is 20% less skilled woman than B. If A takes $7\frac{1}{2}$ hours to complete a work, then what time will B take to complete the work?
 - 5 hours
 - $5\frac{1}{2}$ hours
 - 6 hours
 - $6\frac{1}{2}$ hours
- The difference between the compound interest and simple interest on a certain sum at the rate of 5 p.c.p.a. in 3 years is Rs.15.25. The sum is
 - Rs. 2000
 - Rs. 1000
 - Rs. 2500
 - Rs. 1500
- A man pays Rs. 20 in the first month for clearing a debt of Rs.3250 and increases the monthly payment by Rs. 15 in every succeeding month. How many months will he take to pay the debt?

- (1) 20 months
(2) 23 months
(3) 25 months
(4) 26 months
25. On adding a natural number P to the product of four consecutive natural numbers we get a perfect square number. The value of P is
(1) 8 (2) 2
(3) 4 (4) 1
26. The fraction lying between $\frac{2}{3}$ and $\frac{3}{5}$ is
(1) $\frac{2}{5}$ (2) $\frac{31}{50}$
(3) $\frac{1}{15}$ (4) $\frac{1}{3}$
27. The smallest 5-digit number divisible by 41 is
(1) 10045 (2) 10041
(3) 10004 (4) 41000
28. In the letters left between nearest letters of a sequence, there is a decrease by one. In the following letter series which one follows this rule?
(1) DJOTV (2) DJOSV
(3) DJOSW (4) DIOSU
29. Choose the odd one out:
(1) 42 - 4 (2) 36 - 6
(3) 32 - 2 (4) 15 - 5
30. If the word CLOCK is written in a certain code language as 34235 and TIME is written as 8679, then how will MOLEK be written in the same code language?
(1) 62495 (2) 62945
(3) 72495 (4) 72945
31. If ASSIGN is written as SAS-ING in a certain code language, then KIDNAP will be written as
(1) IKNDPA (2) IKDNPA
(3) IKDNAP (4) IKAPDN
32. Urea supplies — to the plants.
(1) Calcium
(2) Phosphorus
(3) Potassium
(4) Nitrogen
33. Mica is used in
(1) furance
(2) electric industry
(3) steel industry
(4) glass manufacturing
34. Which of the following is a physical change?
(1) Burning of cooking gas
(2) Fermentation of milk
(3) Digestion of food
(4) Dissolution sugar in water
35. The chemical compound used in photography is
(1) Aluminium Hydroxide
(2) Silver Bromide
(3) Potassium Nitrate
(4) Sodium Chloride
36. What causes cholera?
(1) Bacteria (2) Virus
(3) Fungus (4) Algae
37. An apparatus for viewing objects lying above the eye level of the observer and whose direct vision is obstructed is known as
(1) Photometer
(2) Periscope
(3) Planimeter
(4) Spectrometer
38. Which atom has only one electron?
(1) Potassium (2) Nitrogen
(3) Oxygen (4) Hydrogen
39. What the electrode that is connected to the negative pole of the battery is called?
(1) Cathode
(2) Electroplate
(3) Ion (4) Anode
40. The organic acid present in vinegar is
(1) butanoic acid
(2) propanoic acid
(3) methanoic acid
(4) ethanoic acid
41. Which of the following is an example of fossil fuel?
(1) Coke
(2) Natural gas
(3) Coal gas
(4) Producer gas
42. Water gas consists of
(1) a mixture of carbon monoxide and hydrogen
(2) water vapour and coal dust
(3) a mixture of carbon monoxide and nitrogen
(4) water vapour and methane
43. A body strikes the floor vertically with a velocity u and re- bounds at the same speed. The change of speed would be
(1) 3u (2) Zero
(3) u (4) 2u
44. Which of the following is different from others?
(1) Speed (2) Time
(3) Density (4) Force
45. Momentum has the same unit as that of
(1) torque
(2) couple
(3) impulse
(4) moment of momentum
46. What is the momentum of a man of mass 75 kg when he walks with a uniform velocity of 2m/s?
(1) 50 kg m/s
(2) 75 kg m/s
(3) 100 kg m/s
(4) 150 kg m/s
47. At the centre of the earth, the value of g becomes
(1) infinity
(2) unity
(3) zero
(4) None of these
48. Two unequal masses possess the same momentum, then the kinetic energy of the heavier mass is the kinetic energy of the lighter mass.
(1) smaller than
(2) greater than
(3) same as
(4) None of these
49. 15 bulbs of 60W each, run for 6 hours daily and a fridge of 300W runs for 5 hours daily. Find the fortnightly bill at the rate of 30 paise per unit.
(1) Rs. 31.05
(2) Rs. 45.55
(3) Rs. 62.10
(4) Rs. 75.10
- Directions (50 - 55) :** In each of the following questions, a number series is given with one term missing. Choose the correct alternative that will continue the same pattern and fill in the blank spaces :
50. 1, 2, 3, 6, 9, 18, (.....), 54
(1) 18 (2) 27
(3) 36 (4) 81

51. 4, 5, 9, 18, 34, (...)
 (1) 43 (2) 49
 (3) 50 (4) 59
52. 66, 36, 18, (...)
 (1) 3 (2) 6
 (3) 8 (4) 9
53. 3, 6, 5, 20, 7, 42, 9, (...)
 (1) 54 (2) 60
 (3) 66 (4) 72
54. 1, 3, 4, 8, 15, 27, (...)
 (1) 37 (2) 44
 (3) 50 (4) 55
55. 8, 10, 14, 18, (...), 34, 50, 66
 (1) 24 (2) 25
 (3) 26 (4) 27
56. The connected load of a consumer is 2 KW and his maximum demand is 1.5 KW. The load factor of the consumer is
 (1) 0.75
 (2) 0.375
 (3) 1.33
 (4) None of these
57. Sheaths are used in cables to
 (1) provide proper insulation
 (2) provide mechanical strength
 (3) prevent ingress of moisture
 (4) None of these
58. For the stable operation of interconnected system, the passive element that can be used as interconnecting element is
 (1) Reactor
 (2) Resistor
 (3) Capacitor
 (4) Resistor and Capacitor
59. The insulation resistance of a cable of length 10 km is 1M Ω , its resistance for 50 km length will be
 (1) 1 M Ω
 (2) 5 M Ω
 (3) 0.2 M Ω
 (4) 10 M Ω
60. The rate of change of momentum is directly proportional to
 (1) Force
 (2) Inertia
 (3) Moment
 (4) None of these
61. If four 80 μ F capacitors are connected in parallel, the net capacitance is
 (1) 20 μ F
 (2) 80 μ F
 (3) 160 μ F
 (4) 320 μ F
62. The transformer used to decrease the magnitude of the alternating voltage is a
 (1) step-up transformer
 (2) step-down transformer
 (3) step-in transformer
 (4) step-out transformer
63. When two bodies are rubbed against each other
 (1) They acquire equal and similar charges
 (2) They acquire equal and opposite charges
 (3) They acquire unequal and similar charges
 (4) They acquire unequal and opposite charges
64. Lightning is caused in the sky due to the flow of charge between
 (1) two oppositely charged clouds
 (2) two similarly charged clouds
 (3) one neutral and one charged clouds
 (4) None of these
65. Which of these converts sunlight directly into electrical energy? studymateriale.org
 (1) Solar cooker
 (2) Solar cell
 (3) Solar furnace
 (4) Solar water heater
66. Electric charge can flow through
 (1) insulators
 (2) conductors
 (3) Both insulators and conductors
 (4) Neither conductors nor insulators
67. The electric current which changes its direction after fixed intervals of time is called
 (1) induced current
 (2) direct current
 (3) alternating current
 (4) None of these
68. A device used to stabilise the voltage supplied by electric supply station is a
 (1) dynamo
 (2) transformer
 (3) ammeter
 (4) generator
69. Silver is a
 (1) magnetic substance
 (2) good conductor of electricity
 (3) bad conductor of electricity
 (4) None of these
70. An instrument used to observe heavenly bodies is the
 (1) telescope
 (2) camera
 (3) microscope
 (4) periscope
71. The maximum percentage in the atmosphere is of
 (1) Oxygen
 (2) Nitrogen
 (3) Carbon dioxide
 (4) Helium
72. What is the function of Ozone layer?
 (1) Prevents harmful infra-red rays of the sun from reaching the earth
 (2) Prevents radiation escaping the earth, hence keeping it warm
 (3) It is essential for rainfall
 (4) It filters harmful ultra-violet rays of the sun
73. In the International system of measurement, the 'Kelvin' is the unit of
 (1) mass
 (2) temperature
 (3) electric current
 (4) air
74. Which group of letters will complete the letter series being placed in the blanks in order.
 a _bbc _aab _caa _bbcc
 (1) bacb (2) acba
 (3) abba (4) caba
- Directions (75-79) :** In each question, a sequence has been given which has a missing term. Pick out the right alternative that completes the sequence.
75. U, O, ?, E, A
 (1) I (2) K
 (3) M (4) N
76. OTE, PUF, QVG, RWH, ?
 (1) SYJ (2) TXI
 (3) SXJ (4) SXI
77. 33, 28, 24, 2, 19, 18
 (1) 21 (2) 22
 (3) 20 (4) 23
78. 6, 10, 18, 34, 2
 (1) 46 (2) 56
 (3) 66 (4) 76

79. 7, 12, 19, 28, 39 ?
 (1) 72 (2) 60
 (3) 144 (4) 52
80. Choose the odd one out
 (1) Wool (2) Fur
 (3) Hair (4) Grass
81. Game : Ground : Cinema : ?
 (1) Hall (2) Stage
 (3) Screen (4) Drama
82. Girl : Beautiful :: Boy : ?
 (1) Smart (2) Heroic
 (3) Courageous
 (4) Handsome
83. Court : Justice : School : ?
 (1) Teacher (2) Student
 (3) Ignorance (4) Education
84. Fruit : Banana : Mammal : ?
 (1) Cow (2) Snake
 (3) Fish (4) Duck
85. The first atomic power plant was started in India at
 (1) Narora (2) Tarapur
 (3) Rawatbhata
 (4) None of these
86. To conserve the eatables we use
 (1) Benzoic acid
 (2) Sodium chloride
 (3) Sodium carbonate
 (4) None of these
87. The least polluting fuel is
 (1) Hydrogen (2) Diesel
 (3) Kerosene (4) Coal
88. Malaria spreads by
 (1) Culex mosquito
 (2) Anopheles mosquito
 (3) Water borne mosquito
 (4) None of these
89. Heart disease is caused by increase in
 (1) Glucose
 (2) Cholesterol
 (3) Heparin
 (4) Haemoglobin
90. Which vitamin helps in clotting of blood ?
 (1) Vitamin B
 (2) Vitamin B₂
 (3) Vitamin K
 (4) Vitamin D
91. The chief source of energy is
 (1) Vitamin
 (2) Minerals
 (3) Carbohydrate
 (4) Water
92. A shopkeeper bought goods for Rs. 2025. He sold $\frac{1}{5}$ th of it at 20% profit and the remaining at the profit of 5%, the profit per cent on the whole is
 (1) 6 % (2) 7 %
 (3) 6.5 % (4) 8 %
93. A group consists of 25 men and 20 women. The average weight of men is 48 kg and that of women is 30 kg. The average weight of the group is
 (1) 35 kg (2) 39 kg
 (3) 40 kg (4) 45 kg
94. A sum is divided among 120 men and some women in the ratio 15 : 21. If each man gets Rs. 5 and each woman gets Rs. 4, the number of women is
 (1) 220 (2) 200
 (3) 190 (4) 210
95. The chief centre of learning during Lord Buddha era was
 (1) Nalanda
 (2) Delhi
 (3) Varanasi
 (4) Bodhi Gaya
96. Mustard is grown in
 (1) Kharif season
 (2) Rabi season
 (3) Jayad season
 (4) Whole year
97. In case the posts of President and Vice-President lie vacant, who officiates as the President?
 (1) Speaker of the Lok Sabha
 (2) Chief Justice of India
 (3) Attorney General of India
 (4) Chairman of Rajya Sabha
98. Magnetic needle directs to
 (1) East (2) Sky
 (3) North (4) West
99. Two men can complete a work in 9 days. How many men will be required to complete twice the work in 12 days ?
 (1) 2 (2) 3
 (3) 11 (4) 4
100. Lord Buddha got emancipation (Mahaparinirvana) at
 (1) Kushinagar
 (2) Lumbini
 (3) Bodhi Gaya
 (4) Kapilvastu