

RAILWAY RECRUITMENT BOARD

GROUP – C/D MODEL PAPER

Time: 90 mins.

Marks: 100

Direction (1 – 2): In these questions select the alternative which has a relation with given four words.

1. Man, Arm, Preside, Person

- 1) Woman 2) Chair 3) Leader 4) Dominate

2. Pigeon, Revolution, Cage, Leader

- 1) Violence 2) Captivity 3) Coup 4) Follower

3. Arrange the following in a meaningful order.

- A) Rain B) Monsoon C) Rescue D) Floods

- E) Shelter F) Relief

- 1) ABDECF 2) ABCDEF 3) BADCEF 4) DABCFE

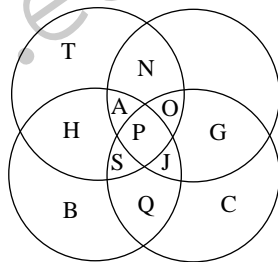
4. During an interview, there were drivers who know how to drive cars, some buses and some only tempo vans. The company authority wished to select persons who know how to drive all the vehicles. How can they select using the letters used in the venn diagram?

1) P

2) O

3) S

4) N



5. In this question, a statement is given followed by four alternative inferences. Select the one which is most appropriate.

Statement:

Many creative persons become artists.

Inference:

- 1) Some artists are creative persons.
 2) A high level of creativity is needed to become an artist.
 3) It is not possible to become an artist without creativity.
 4) A creative person will certainly become an artist.

6. If '+' means division, '-' means multiplication, 'x' means minus, '÷' means addition then $(75 \times 25) 2 + 50 - 10 = ?$

- 1) 16.67 2) 12 3) 977.5 4) 20

Directions (7 – 8): Read the following information to answer these questions.

P – Q means Q is daughter of P

P × Q means P is mother of Q

P + Q means P father of Q

20. The area of the largest circle, that can be drawn inside a rectangle with sides 18 cm, 14 cm is
1) 49 cm^2 2) 154 cm^2 3) 378 cm^2 4) 1078 cm^2
21. If the sides of a triangle are 5 cm, 6 cm and $\sqrt{41}$ cm, then the area of triangle is
1) 20 cm^2 2) $(5 + 4 + \sqrt{41}) \text{ cm}^2$
3) $5 + 4 + \sqrt{41} \text{ cm}^{2/3}$ 4) 10 cm^2
22. $(8 \div 88) \times 8888088$ is equal to
1) 808008 2) 808088 3) 808080 4) 8008008
23. If $A : B = 2 : 3$ and $B : C = 4 : 5$, then $A : B : C$ is
1) $2 : 12 : 5$ 2) $8 : 12 : 15$ 3) $12 : 8 : 15$ 4) $15 : 12 : 8$
24. A clock strikes once at 1 o' clock twice at 2 o' clock, thrice at 3 o' clock and so, on. How many times will it strikes in 24 hours?
1) 78 2) 136 3) 156 4) 196
25. In India, the Chief Justice of a high court is appointed by the
1) Chief Minister of the concerned state
2) Governor of the concerned state
3) Chief Justice of India
4) President of India
26. Who among the following are likely to benefit from inflation in a country?
1) Creditors 2) Debtors 3) Salaried people 4) Wage earners
27. Which of the following statements is true?
1) The Vice-President is elected for a period of six years
2) For election as Vice-President a person should be the member of Rajya Sabha.
3) Electoral college for the election of Vice-President is different from that of the President.
4) Council of Ministers is responsible to the President.
28. Mule is the hybrid of
1) Male donkey and female horse.
2) Male horse and a female donkey.
3) Male horse and female zebra
4) Female horse and male zebra.
29. Lunar eclipse occurs when
1) earth is between the sun and the moon
2) moon is between the sun and the earth
3) sun is between the moon and the earth
4) earth is at right angle to the direction of the sun and the moon
30. How many minutes for each degree of longitude does the local time of any place vary from the greenwich time?
1) 4 2) 6 3) 2 4) 8

31. The basic characteristic of oligopoly is
- 1) a few sellers, a few buyers
 - 2) a few sellers, many buyers
 - 3) many sellers, one buyer
 - 4) a few sellers, one buyer
32. The head quarters of International Labour Organization is located at
- 1) Geneva
 - 2) Vienna
 - 3) Zurich
 - 4) Paris
33. In sports, the term 'Third eye' is connected with
- 1) Archery
 - 2) Cricket
 - 3) Shooting
 - 4) Billiards
34. Electrification in rural areas can be done better and at cheaper rates through
- 1) coal power
 - 2) bio gas
 - 3) nuclear energy
 - 4) solar energy
35. The Upanishads deal with
- 1) social behaviour of man
 - 2) religion of the hindus
 - 3) ancient hindu laws
 - 4) all of these
36. Dadasaheb Phalke award is given to an achiever in the field of
- 1) Cinema
 - 2) Literature
 - 3) Art
 - 4) Journalism
37. The behaviour of a perfect gas, undergoing any change in the variables which control physical properties is governed by
- 1) pressure exerted by the gas
 - 2) volume occupied by the gas
 - 3) temperature of the gas
 - 4) all of these
38. The amount of heat required to raise the temperature of 1 kg of water through 1°C is called as
- 1) specific heat at constant volume
 - 2) specific heat at constant pressure
 - 3) kilo calorie
 - 4) none of these
39. When gas is cooled at constant pressure
- 1) Its temperature increases but volume decreases.
 - 2) Its volume increases but temperature decreases
 - 3) both temperature and volume increase
 - 4) both temperature and volume decrease
40. The actual vacuum in a condenser is equal to
- 1) barometric pressure + actual pressure
 - 2) barometric pressure – actual pressure
 - 3) gauge pressure + atmospheric pressure
 - 4) gauge pressure – atmospheric pressure
41. Parsons turbine is
- 1) a simple impulse turbine
 - 2) a simple reaction turbine
 - 3) an impulse – reaction turbine
 - 4) none of these
42. Which method can be used for absolute measurement of resistances?
- 1) Ohm's law method
 - 2) Wheat stone bridge method
 - 3) Rayleigh's method
 - 4) Lorentz method

43. Which of the following can have positive or negative change?
1) Electron 2) Iron 3) Hole 4) Neutron
44. Metals approach scopes conductivity condition
1) near absolute zero temperature
2) near critical temperature
3) at a triple point
4) under conditions of high temperature and pressure.
45. Which of the following relations is incorrect
1) Power factor = $\frac{\text{real power}}{\text{apparent power}}$
2) Power factor = $\frac{\text{kW}}{\text{kVA}}$
3) Power factor = $\frac{\text{Resistance}}{\text{Impedance}}$
4) Power factor = $\frac{\text{conductance}}{\text{susceptance}}$
46. What did Madam Curie discover?
1) Radio activity 2) Wireless 3) Aeroplane 4) Radium
47. Which of the following two metals are mixed in manufacturing stainless steel?
1) Zinc, Chromium 2) Nickel, Chromium
3) Chromium, Iron 4) Nickel, Iron
48. Which gas is evolved during photo synthesis in plants?
1) Carbon Di oxide 2) Oxygen 3) Nitrogen 4) Hydrogen
49. Why is ozone layer important to mankind?
1) It creates a protective covering against Ultraviolet rays
2) It remains the temperature of earth
3) It release Oxygen in the atmosphere
4) It release Carbon Dioxide in the atmosphere
50. The temperature at which the volume of a gas becomes zero is called as
1) absolute temperature 2) absolute zero temperature
3) absolute scale of temperature 4) none of these
51. For the reversibility of a cycle, these should be
1) loss of energy 2) no loss of energy
3) gain of energy 4) no gain of energy
52. The amount of heat generated by per kg is known as
1) heat energy 2) calorific value
3) lower calorific value 4) higher calorific value

53. A four stroke cycle petrol engine requires four strokes of the piston to complete
- 1) one cycle of operation
 - 2) two cycles of operation
 - 3) four cycles of operation
 - 4) eight cycles of operation
54. The advantage of economiser is
- 1) it increase the efficiency of the boiler plant
 - 2) it reduces the range of temperature between different parts of the boiler
 - 3) it makes for more rapid evaporation
 - 4) all of these
55. The joint in which the number of rivets decreases as we proceed from inner most row to the out most row, is known as
- 1) chain riveted joint
 - 2) zig zag joint
 - 3) diamond riveted joint
 - 4) double riveted butt joint
56. In case a hinged support the reaction
- 1) Acts in a direction perpendicular to the plane on which hinge is supported
 - 2) may be in any direction depending upon the load
 - 3) reactions are perpendicular to the plane of bottom surface of the structure.
 - 4) none of these
57. Bitumen is a
- 1) natural organic substance
 - 2) synthetic organic substance
 - 3) semi-synthetic organic substance
 - 4) none of these
58. The electron emission method used in vacuum tube is
- 1) thermionic emission
 - 2) low electric field emission
 - 3) high electric field emission
 - 4) none of these
59. Open circuit test on transformers is conducted to measure
- 1) core loss
 - 2) friction loss
 - 3) copper loss
 - 4) none of these
60. An open fuse has a resistance of
- 1) zero
 - 2) infinity
 - 3) about 100 ohms at room temperature
 - 4) at least 1000 ohms
61. Electrical resistance and heating elements are made from
- 1) brass
 - 2) copper
 - 3) nichrome
 - 4) gun metal
62. The energy is emitted from a body in tiny packets and not as continuous stream. This statement is based on
- 1) Plank's quantum theory
 - 2) Bohr's theory
 - 3) Balmer theory
 - 4) Photo electric field effect
63. Radiation can be detected by
- 1) ammeter
 - 2) voltmeter
 - 3) electrometer
 - 4) oscillator

64. The point through which the whole weight of the body acts irrespective of its position is known as
1) moment of inertia
2) center of gravity
3) center of percussion
4) none of these
65. A machine having an efficiency less than 50 % is known as
1) reversible machine
2) non-reversible machine
3) either 1 or 2
4) Ideal machine
66. If the gravitational acceleration at any place is doubles, then the weight of body will be
1) $\frac{g}{2}$
2) g
3) $\sqrt{2}g$
4) 2g
67. The unit of acceleration is
1) kg
2) m/sec
3) m/sec²
4) rad/sec²
68. A rubber ball is dropped from a height of $2\sqrt{a}$. If there is no loss of velocity after rebounding, the ball will rise to a height of
1) 1 m
2) 2 m
3) 3 m
4) 4 m
69. One watt is equal to
1) 0.1 Joule/sec
2) 1 Joule/sec
3) 10 Joule/sec
4) 100 Joule/sec
70. When the spring of a watch is wound, it will possess
1) strain energy
2) kinetic energy
3) heat energy
4) electrical energy
71. A beam which is fixed at one end and free at the other is called
1) simple supported beam
2) fixed beam
3) overhanging beam
4) cantilever beam
72. According to first law of thermo dynamics
1) total internal energy of a system during a process remains constant
2) total energy of a system remains constant
3) work done by a system is equal to the heat transferred by the system.
4) Internal energy, enthalpy and entropy during a process remain constant.
73. The transfer of heat from one place to another may take place by
1) conduction
2) conversion
3) radiation
4) any of these
74. The density of fluid varies with the
1) change of temperature
2) change of pressure
3) change of temperature and pressure
4) none of these
75. Piezometer is used to measure
1) atmospheric pressure
2) very low pressure
3) very high pressure
4) difference in pressure between two points

90. Who has been conferred the 26th PC Chandra Puraskaar?
1) Waheeda Rehman 2) Amitabh Bachchan
3) Rishi Kapoor 4) Asha Bhosle
91. Which F₁ driver won the Azerbaijan Grand Prix?
1) Lewis Hamilton 2) Valtteri Bottas
3) Sebastian Vettel 4) Sergio perez
92. President Ram Nath Kovind attended the 620th pragatosav of Satguru Kabir in which state?
1) Rajasthan 2) Madhya pradesh
3) Haryana 4) Maharastra
93. Which railway station going to be third in India to get 'airport-like' facilities by 2020?
1) Jhansi 2) Patiala 3) Surat 4) Kolhapur
94. India is going to have national database on disasters, by
1) 2021 2) 2019 3) 2022 4) 2020
95. How many medals did India win at the 56th Belgrade international boxing tournament held in Serbia?
1) 10 2) 13 3) 15 4) 6
96. Who has been appointed as interim judge to the civil court of New York city?
1) Pankaj Mittal 2) Deepa Ambedkar
3) Rita Barman 4) Monika Rao
97. Geologist have discovered world's second oldest rock in which state in India?
1) Andhra Pradesh 2) Odisha 3) Karnataka 4) Uttarkhand
98. Which state's chief minister has launched Rythu Bandhu scheme (farmer's investment support scheme)?
1) Kerala 2) Tamilnadu 3) Karnataka 4) Telangana
99. Which of the following has launched a group messaging app named 'squirrel'?
1) Yahoo 2) Bing 3) Rediff 4) Outlook
100. Which bridge built on river Brahmaputhra has become India's longest rail-cum-road bridge?
1) Narayana bridge 2) Bogibeel bridge
3) Sarai ghat bridge 4) Kolia Bhomora bridge

KEY

1-2; 2-4; 3-3; 4-1; 5-1; 6-1; 7-1; 8-1; 9-1; 10-2; 11-2; 12-4; 13-3; 14-1; 15-4; 16-2; 17-2; 18-1; 19-2; 20-2; 21-4; 22-1; 23-2; 24-3; 25-4; 26-2; 27-3; 28-1; 29-1; 30-1; 31-2; 32-1; 33-2; 34-4; 35-4; 36-1; 37-4; 38-3; 39-4; 40-2; 41-3; 42-1; 43-1; 44-2; 45-4; 46-4; 47-3; 48-2; 49-1; 50-2; 51-2; 52-2; 53-1; 54-4; 55-3; 56-1; 57-3; 58-1; 59-1; 60-2; 61-3; 62-1; 63-3; 64-2; 65-2; 66-4; 67-3; 68-4; 69-2; 70-1; 71-4; 72-3; 73-4; 74-3; 75-4; 76-4; 77-3; 78-2; 79-3; 80-2; 81-2; 82-4; 83-3; 84-1; 85-1; 86-4; 87-3; 88-1; 89-2; 90-4; 91-1; 92-2; 93-3; 94-4; 95-1; 96-2; 97-2; 98-4; 99-1; 100-2.

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