RAILWAY RECRUITMENT BOARD
ALLAHABAD
ASSISTANT LOCO PILOT
(PREVIOUS PAPER 2010)
BASED ON MEMORY

Time: 2 $\frac{1}{2}$ Hours **Max.Marks: 50**

Directions (1 - 8): In each of the following sentences, four words have been printed in BOLD which are numbered as 1, 2, 3 and 4. One of these words may be mis-spelt or inappropriate in the context of the sentence. Find out the wrongly-spelt or inappropriate word. The number of that word is the answer. If all the words are correctly spelt and are appropriate, the answer is (4) i.e. All correct.

1. Napoleon is universally (1) / acknowledged/(2)/ to have been one of the great (3)/ of generals. All correct. (4)

2. He have(1)/ risen to eminence (2)/ from poverty(3)/ and abscurity. All correct (4).

3. The king allowed (1)/ no cows to be slaughtered (2)/ in his territory (3)/ All correct. (4).

4. She is anxious (1)/ to releave (2) them of their sufferings (3)/ All correct (4)

5. His finished (1)/ manners (2)/ produced a very favourable impression (3). All correct. (4).

6. Education is the best (1)/ pressing(2)/ need of our (3)/ country. All correct (4)

7. The policemens (1)/ running with all is speed, was scarcely (2)/ able to overtake (3)/ the thief. All correct (4).

8. Enchanted (1)/ with the whole seen (2)/ I lingered on my voyage. (3) All correct (4).

Directions (9-13): Fill in the blanks with the appropriate word. Choosing it from the options given.

9. I found it difficult to cope- Mathematics at the advanced level.

1) wit 2) of 3) for 4) up

10. It is natural in every man to wish.... distinction

1) of 2) with 3) for 4) up

11. The goat subsists... the coarsest of food

1) on 2) for 3) in 4) to

12. It was formerly supposed that malaria was due... poisonous exhalations.

1) of 2) with 3) for 4) to

13. The celebrated grammarian Patanjali was a contemporary... Pushyamitra Sunga.

1) for 2) with 3) of 4) to

Directions (14-16): Critically examine the statement given in bold and answer the questions.

14. Un easy lies that the head that wears the crown.

What does this mean?

1) The crown worn by the king does not mean that he is a happy man.
2) The king wears a crown of gold and gems but his responsibilities make him restless and unhappy.
3) People who are rich and powerful are generally restless and worried.
4) Those who are in high positions and wealthy are mostly restless because of their responsibilities like kings.

15. The circumstances of birth are irrelevant. What you do with gift of life determines what you are.

Which statement best explains this?

1) One may be born rich or poor. But how he lives speaks of his real self.
2) Misfortunes come even if we are born rich. But success in life depends on our own efforts to live a good life.
3) Birth alone does not contribute to success in life. Life is precious and is a free gift of God. We should make it worth living.
4) Great qualities are given by God as gifts. We should make good use of them to achieve success in life.

16. Your mind is like a parachute : It works when it is open.

What does the statement imply?

1) Parachutes are meant for saving lives and you have to open them to do that.
2) Open – mindedness is what is essential. We should share with others our joys, sorrows, fears and hopes to make life meaningful.
3) We should never close our minds to others. When we share, we become happier and contented.
4) Our minds are like parachutes, closed. We must open them to share happiness.

Directions (17-20): Replace the bold portion by choosing the phrase from the given alternatives that best keeps the meaning of the original sentence.

17. The researcher has to mull over his idea for several days.

1) To organise his idea for a number of days.

2) To remember his ideas for several days.

3) to scrutinise his ideas for many days.

4) to ponder over his ideas for several days.

18. The function would has been enjoyable. *If all extraneous activities has been dropped from the programme.*

1) If all the irrelevant activities had been dropped from the programme.

2) If all the excessive activities had been dropped from the programme.

3) If all over extended activities had been dropped from the programme.

4) If the exceptional activities had been dropped from the programme.

19. The professor wants him *to improve the coherence of his term paper.*

1) to increase the distinctiveness of his term paper

2) to improve the consistency of his term paper

3) to improve the rationality of his term paper

4) to enhance the quality of his term paper

20. Researches warn of the *impending extinction of many species of plants and animals.*

1) imminent extinction of many species of plants and animals.

2) irrefutable extinction of several species of plants and animals.

3) absolute extinction of species of plants and animals.

4.formidable extinctions of many species of plants and animals.

Directions (21-24): Each of these questions has a sentence that has been scrambled and the scrambled parts have been marked A, B, C, D and E. Find the correct of the parts to reconstruct the sentence.

21. A. in different regions of that federation.

B. that was Yugoslavia

C. the fundamental cause has been the very large difference in the quality of life.

D. although the dismemberment of the federation.

E. is seen more as the result of an ethnic conflict.

1) D, B, E, C, A. 2) C, E, B, D, A 3) B, C, E, D, A 4) A, B, D, E, C

22. A. but there is some merit in it

B. as distinct from consumption

C. the bifurcation of plan and non-plan funds

D. insofar as it focuses attention on development expenses.

E. in the budget is artificial

1) D, C, A, B, E 2) C, D, B, E, A

3) C, E, A, B, D 4) D, E, A, C, B

23. A. Like the industrialised countries

B. As if they are to be suffered as relics of a backward past.

C. We have specially drawn attention to the nonmotorised transport modes

D. Till replaced by faster petroleum fuelled transport.

1) D, E, A, C, B 2) C, D, E, B, A

3) C, D, A, D, E 4) C, D, B, E, A

24. A. he was highly sensitive and resentful

B. towards the country or to those

C. when there was even implied discourtesy

D. while he was extremely gentle and tolerant

E. he held in honour

1) A, C, D, B, E 2) D, A, C, B, E

3) E, A, D, C, B 4) D, C, B, E, A

Directions (25-26): In these questions, select the alternative which has a relation with the four given words.

25. Man, Arm, Preside, Person

1) woman 2) chair 3) leader 4) dominate

26. Pigeon, revolution, cage, Leader

1) violence 2) captivity 3) coup 4) follower

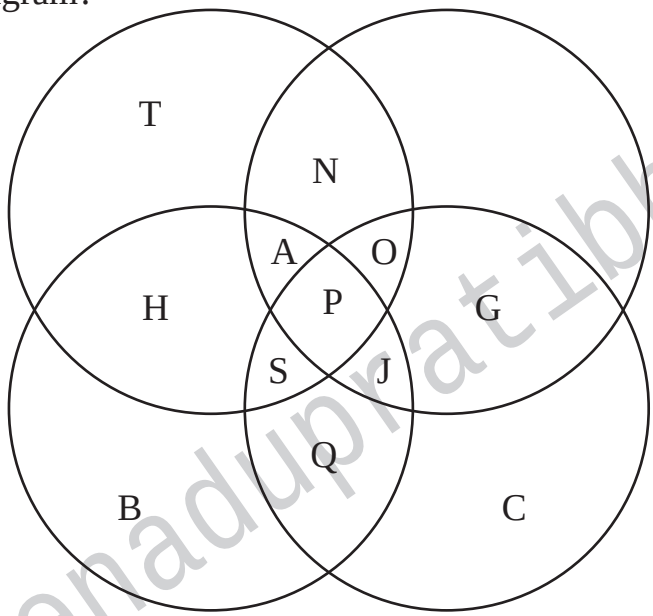
27. Arrange the following in a meaningful order.

A. Rain B. Monsoon C. Rescue

D. Floods E. Shelter F. Relief

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

28. During an interview, there were drivers who knew how to drive cars, some buses and some only tempo vans. The company authority wished to select persons who knew 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

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

Statement:

Many creative persons become artists

Inferences:

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

30. If '+' means 'division'. – means 'multiplication, '×' means minus ÷ means 'addition' then(75 × 25) 2 +50 – 10 = ?

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

Directions (31-32): 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' is father of 'Q'

31. Which of the following would definitely indicate that C is daughter of B?

1) A – B × C 2) B + C × A 3) B + C 4) None of these

32. If S ×M + N – T, then which of the following is not true?

1) T is wife of M 2) S is grandmother of N

3) T is mother-in-law of T 4) N is grandson of S

33. There are deers and peacocks in a zoo. By counting heads they are 80. The number of their legs is 200. How many peacocks are there?

1) 60 2) 20 3) 50 4) 30

34. Sarita is standing facing north, She walks 10 km straight, turns left and walks another 10 km and turns right and walks 5 km and finally turns left and walks 15 km to reach a park. Which direction is she facing now?

1) East 2) West 3) North 4) South

35. Find out the missing number on the basis of a particular trend.

8 17 33

12 5 29

10 13 ?

1) 23 2) 33 3) 9 4) 43

36. If in a certain code MISTAKE is written as 4356127. How would STEAM be written in that code

1) 50713 2) 57614 3) 56741 4) 56714

37. A shopkeeper purchases 12 balloons for Rs.10 and sells them at 10 balloons for Rs.12 Thus he earns a profit for:

1) 35% 2) 36% 3) 75% 4) 50%

38. If the radius of a circle is increased by 50%, then the area of the circle is increased by

1) 125% 2) 100% 3) 75% 4) 50%

39. A alone can complete a work in 16 days and B alone in 12 days. Starting with A, they work on alternate days. The total work will be completed in

1) 12 days 2) 13 days 3) $13\frac{5}{7}$ days 4) $13\frac{3}{4}$ days

40. A number divided by 68 gives the quotient 269 and remainder zero. If the same number is divided by 67, the remainder is

1) 0 2) 1 3) 2 4) 3

41. $\left(\frac{1}{2}\right)^{-\frac{1}{2}}$ is equal to

1) $\frac{1}{\sqrt{2}}$ 2) $\sqrt{2}$ 3) $2\sqrt{2}$ 4) $\frac{1}{2\sqrt{2}}$

42. If the length and the breadth of a rectangle are in the ratio 3 : 2 with its perimeter as 20 cm, then the area of the rectangle will be:

1) 24 cm^2 2) 48 cm^2 3) 72cm^2 4) 96 cm^2

43. In a hotel, 60% has vegetarian lunch while 30% had non-vegetarian lunch and 15% had both types of lunch, If 96 people were present, how many did not eat either type of lunch?

1) 20 2) 24 3) 26 4) 28

44. The area of the largest circle, that can be drawn inside a rectangle with sides 18cm by14 cm, is

1) 49cm^2 2) 154cm^2 3) 378cm 4) 1078cm^2

45. If the sides of a triangle are 5 cm, 4 cm and $\sqrt{41}$ cm, then the area then he take the area of triangle is

1) 20cm^2 2) $(5 + 4 + \sqrt{41})cm^2$

3) $\frac{5 + 4 + \sqrt{41}}{3}$ $cm^{2}/_{3}$ 4) 10 cm^2

46. $(8 \div 88) \times 8888088$ is equal to

1) 808008 2) 808088 3) 808080 4) 8008008

47. 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

48. A clock strikes once at 1 O' clock twice at 2 O'clock thrice 3 O' clock and so, on. How many times will it strikes in 24 hours?

1) 78 2) 136 3) 156 4) 196

49. 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

50. Who among the following are likely to benefit from inflation in a country?

1) Creditors 2) Debtors 3) Salaried people 4) Wage earners

51. 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

52. 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

53. Lunar Eclipse occurs when

1) Earth is between the Suns and the Moon.

2) Moon is between the Sun and the Moon

3) Sun is between the Moon and the Earth

4) Earth is at right angle to the direction of the Sun and the Moon

54. 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

55. The basic characteristic of Oligopology 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

56. The headquarters of International Lab our Organization is located at

1) Geneva 2) Vienna 3) Zurich 4) Paris

57. In sports, the term THIRD EYE is connected with

1) Archery 2) Cricket 3) Shooting 4) Billiards

58. Electrification in rural areas can be done better and at cheaper rates through

1) coal power 2) biogas 3) nuclear energy 4) solar energy

59. The upanishads deal with

1) social behaviour of man 2) religion of the Hindus

3) ancient Hindu laws 4) All of these

60. Dada Saheb Phalke Award is given to an achiever in the field of

1) Cinema 2) Literature 3) Art 4) Journalism

61. 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

62. The amount of heat required to raise the temperature of 1 kg of water through 1° C is called

1) Specific heat at constant volume 2) Specific heat at constant pressure

3) Kilocalorie 4) None of these

63. 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

64. 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

65. Parson's turbine is

1) a simple impulse turbine 2) a simple reaction turbine

3) an impulse – reaction turbine 4) None of these

66. 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

67. Which of the following can have positive or negative charge?

1) Electron 2) Iron 3) Hole 4) Neutron

68. Metals approach super conductivity condition

1) near absolute zero temperature 2) near critical temperature

3) at triple point 4) under conditions of high temperature and pressure

69. 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 = $\frac{\text{Conductance}}{\text{Susceptance}}$

70. What did Madame Curie discover?

1) Radioactivity 2) Wireless 3) Aeroplane 4) Radium

71. Which of the two metals are mixed in manufacturing stainless steel?

1) Zinc, Chromium
2) Nickel, Chromium
3) Chromium, Iron
4) Nickel, Iron

72. Which gas is evolved during photosynthesis in plants?

1) Carbon dioxide
2) Oxygen
3) Nitrogen
4) Hidrogen

73. 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 Corban Dioxide in the atmosphere

74. The temperature at which the volume of a gas becomes zero is called

1) absolute temperature
2) absolute zero temperature
3) absolute scale of temperature
4) None of these

75. For the reversibility of a cycle, there should be

1) loss of energy
2) no loss of energy
3) gain of energy
4) no gain of energy

76. The amount of heat generated/kg is known as

1) heat energy
2) calorific value
3) lower calorific value
4) higher calorific value

77. A four stroke cycle petrol engine requires for 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

78. The advantage(s) of an economiser is/are

1) it increases 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

79. The joint in which the number of rivets decreases as we proceed from innermost row to the outermost row, is known as

1) chain riveted joint
2) zia zag joint
3) diamond riveted joint
4) double riveted butt joint

80. 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 bed

3) reactions are perpendicular to the plane of bottom surface of the structure.

4) None of these

81. Bitumen is a

1) natural organic substance 2) synthetic organic substance

3) semi-synthetic organic substance 4) None of these

82. 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

83. Open circuit test on transformers is conducted to measure

1) core loss 2) friction loss 3) copper loss 4) None of these

84. As open fuse has a resistance of

1) Zero 2) infinity

3) about 100 ohms at room temperature 4) at least 1000 ohms

85. Electrical resistance and heating elements are made from:

1) brass 2) copper 3) nichorme 4) gun metal

86. The energy is emitted from a body in tiny packets and not as a continuous stream. This statement is based on:

1) Plank's quantum 2) Bohr's theory

3) Balmer theory 4) Photoelectric effect

87. Radiation can be detected by

1) ammeter 2) voltmeter 3) electrometer 4) oscillator

88. The point, though which the whole weight of the body acts irrespective of its position is known as

1) moment of inertia 2) centre of gravity

3) centre of percussion 4) None of these

89. A machine having an efficiency less than 50% is known as

1) reversible machine 2) non-reversible machine

3) neither (1) or (2) 4) ideal machine

90. If the gravitational acceleration at any place is doubled, then the weight of body will be

1) $\frac{q}{2}$ 2) g 3) 2g 4) 2g

91. The unit of acceleration is

1) kgm 2) m/sec 3) m/sec^2 4) rad/sec^2

92. A rubber ball is dropped from a height of 2m. If there is no loss of velocity after rebounding, the ball will rise to a height of

1) 1m 2) 2m 3) 3m 4) 4m

93. One watt is equal to

1) 0.1 joule/sec 2) 1 joule/sec 3) 10 joule/sec 4) 100 joule/sec

94. When the spring of a watch is wound, it will possess

1) strain energy 2) kinetic energy 3) heat energy 4) electrical energy

95. 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

96. According to first law of thermodynamics

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

97. The transfer of heat from one place to another may take place by

1) conduction 2) convection 3) radiation 4) any of these

98. The density of fluid varies with the

1) change of temperature 2) change of pressure

3) change of temperature and pressure both 4) None of these

99. Piezometer is used to measure

1) atmospheric pressure 2) very low pressure

3) very high pressure 4) difference in pressure between two points

100. The weight of an object would be minimum when it is placed at

1) north place 2) south place

3) equator 4) centre of the earth

101. The gravitational force of attraction between the sun and earth is balanced by

1) centrifugal force 2) centripetal force

3) law of conservation of mass 4) gravitational force

102. The rate of change of momentum is proportional to

1) torque impressed 2) force impressed

3) time during which the force is applied 4) change in velocities

103. The energy possessed by a horse running on level road is

1) work energy 2) heat energy

3) kinetic energy 4) potential energy

104. The value of acceleration due to gravity for earth is

1) greater at poles than at equator 2) greater at equator than at the pole

3) same at both places 4) constant everywhere

105. Within classic limit, the ratio of lateral strain to the linear strain is known as

1) modulus of rigidity 2) bulk modulus

3) modulus of elasticity 4) poisson's ratio

106. Power factor of an inductive circular can be improved by connecting a capacitor to it in

1) series 2) parallel

3) either series or parallel 4) depends on the value of capacitor

107. For the same load, if the power factor of load is reduced, it will draw.

1) more current 2) less current

3) same current but less power 4) less current more power

108. Mica is used in an electric iron because it is a

1) bad conductor of heat 2) good conductor of heat

3) good conductor of electricity 4) bad conductor of electricity

109. Name like LOTUS, JAVA, ORACLE refer to which area of activity

1) Telecommunication 2) Missile technology

3) Computer hardware 4) None of these

110. Which one of the following is an anti-tank missile?

1) Agni 2) Nag 3) Prithvi 4) Trishul

111. At what temperature do both Centigrade and Fahrenheit thermometers show the same reading?

1) –20° 2) –40° 3) 42° 4) 0°

112. A sudden fall in barometer reading indicates that the weather will be

1) turbulent 2) rainy 3) cool 4) None of these

113. Plants take nitrogen in the form of

1) nitrogen 2) nitrous oxide 3) nitrates 4) nitrogen oxide

114. India's contribution to mathematics includes

A. Number system B. Zero C. Decimal system

1) A and B 2) A 3) B and C 4) A, B and C

115. Which gland in human body maintains body temperature?

1) Pitutary 2) Thyroid 3) Adrenal 4) Hypothalamus

116. The chemical behaviour of an atom is determined by its

1) Atomic mass. 2) Atomic weight 3) Atomic number 4) None of these

117. If the length and cross sectional area of a wire are doubled, its resistance will

1) remain unchanged 2) become twice

3) reduce to one half 4) increase four times

118. The line joining the north and south poles of a magnet is called

1) Magnetic axis 2) Magnetic Meridian

3) Magnetic field 4) None of these

119. An electric charge in uniform motion produces

1) an electric field only 2) a magnetic field only

3) both electric and magnetic field 4) None of these

120. The velocity of α rays is

1) 3×10^6 m/s 2) 9×10^8 m/s 3) 10^8 m/s 4) None of these

ANSWERS

1-3; 2- 1; 3- 1; 4- 2; 5- 4; 6- 1; 7- 1; 8- 2; 9- 1; 10- 3; 11- 1; 12- 4; 13- 3; 14- 4; 15- 2;16-2;17- 4; 18- 1; 19- 2; 20- 1; 21- 1; 22- 3; 23- 4; 24- 2; 25- 2; 26- 4; 27- 3; 28- 1; 29- 1; 30- 1; 31- 1; 32- 1; 33- 1; 34- 2; 35- 2; 36- 4; 37- 3; 38- 1; 39- 4; 40- 2; 41- 2; 42- 1; 43- 2; 44- 2; 45- 4; 46- 1; 47- 2; 48- 3; 49- 4; 50- 2; 51- 3; 52- 2; 53- 1; 54- 1; 55- 2; 56- 1; 57- 3; 58- 4; 59- 4; 60- 1; 61- 4; 62- 3; 63- 4; 64- 2; 65- 3; 66- 1; 67- 1; 68- 2; 69- 4; 70- 4; 71- 3; 72- 2; 73- 1; 74- 2; 75- 2; 76- 2; 77- 1; 78- 4; 79- 3; 80- 1; 81- 3; 82- 1; 83- 1; 84- 2; 85- 3; 86- 1; 87- 3; 88- 2; 89- 2; 90- 4; 91- 3; 92- 4; 93- 2; 94- 1; 95- 4; 96- 3; 97- 4; 98- 3; 99- 4; 100- 4; 101- 2; 102- 2; 103- 3; 104- 1; 105- 4; 106- 1; 107- 1; 108- 1; 109- 4; 110- 2; 111- 2; 112- 1; 113- 1; 114- 4; 115- 4; 116- 3; 117- 1; 118- 1; 119- 3; 120- 1.