Morning Session

Held on 23-11-2014

Railway Recruitment Cell - Secunderabad
Group - D Examination

DO NOT REMOVE THIS SHEET / इस शीट को न फाड़ें

Duration : (1½ Hours / 90 Minutes)
समय : (1½ घंटे / 90 मिनट)

No. of Pages / पृष्ठों की संख्या : 88

Roll No. :
अनुक्रमांक :

Date of Examination :
परीक्षा तिथि :

**Candidate's Name / **परीक्षार्थी का नाम**

**Candidate's Signature / **परीक्षार्थी का हस्ताक्षर

**As given in application form / **जैसा आवेदन पत्र में भरा हो

The candidate will first open only the Yellow seal and read the complete set of instructions carefully.

परीक्षार्थी पहले केवल पीली सील खोलें और सभी निर्देशों को ध्यान से पढ़ें।

The question paper is made up of the following sections as tabulated below:

निम्न तालिका में दर्शाये अनुसार, इस प्रश्न पत्र को निर्दिष्टतापूर्वक भागों में विभाजित किया गया है:

<table>
<thead>
<tr>
<th>Section/भाग</th>
<th>Language/भाषा</th>
<th>No. of Questions/प्रश्नों की संख्या</th>
<th>Pages/पृष्ठों</th>
</tr>
</thead>
<tbody>
<tr>
<td>Section - I</td>
<td>English</td>
<td>100</td>
<td>8 to 19</td>
</tr>
<tr>
<td>Section - II</td>
<td>Hindi/हिंदी</td>
<td>100</td>
<td>20 to 32</td>
</tr>
<tr>
<td>Section - III</td>
<td>Urdu/उर्दू</td>
<td>100</td>
<td>33 to 46</td>
</tr>
<tr>
<td>Section - IV</td>
<td>Telugu/తెలుగు</td>
<td>100</td>
<td>47 to 60</td>
</tr>
<tr>
<td>Section - V</td>
<td>Kannada/ಕನ್ನಡ</td>
<td>100</td>
<td>61 to 73</td>
</tr>
<tr>
<td>Section - VI</td>
<td>Marathi/मराठी</td>
<td>100</td>
<td>74 to 86</td>
</tr>
</tbody>
</table>

Write the following 'Paragraph' at the specified place in the OMR Answer-Sheet in your own handwriting.

निर्दिष्ट खाली को अपनी हस्तलिखि में ओ.एम.आर. उत्तर-पत्र में दिये गये स्थान में लिखें।

Paragraph: You do not come across success just by hoping for it. To achieve true success, you need the strength of mind and body to struggle and work hard to reach your fullest potential. You need the right attitude, self-discipline and the ability to put your goal before your own needs, if you are really driven towards reaching success.

www.rrbrailwayrecruitment.in
1. Enzymes are:
   (A) vitamins (B) carboxylic acids (C) proteins (D) bases

2. Who is the First Citizen of the city?
   (A) Commissioner of City Police (B) Commissioner of City Corporation
   (C) Judge of City Civil Court (D) Mayor of the city

3. \[ \left( \frac{4}{8} + \frac{24}{16} \right) \times \left[ \frac{3}{5} + \frac{15}{25} \right] \times \left[ \frac{30}{10} \right] = \]
   (A) Zero (B) 1
   (C) \( \frac{1}{3} \) (D) None of the above

4. Which of the following religions is the last to appear on the scene of India?
   (A) Hinduism (B) Islam (C) Buddhism (D) Sikhism

5. Which of the following has high retentivity?
   (A) Cu (B) Cr (C) Al (D) Steel

6. How many Anglo-Indian members can the President nominate to the Lok Sabha?
   (A) Two (B) Three (C) Five (D) Ten

7. The instrument used to measure potential difference between two points is called:
   (A) Galvanometer (B) Voltmeter (C) Ammeter (D) Sherometer

8. Full form of POET is:
   (A) Passenger Operated Enquiry Terminal
   (B) Public Operated Enquiry Terminal
   (C) Passenger Opted Enquiry Terminal
   (D) None of the above
9. \( 63 \times 121 \times 14 \div 100 = \)
   (A) 1067.22  (B) 1167.22  (C) 1267.22  (D) 1367.22

10. The study of pollen grains is:
    (A) Ornithology  (B) Zoology  (C) Geology  (D) Polynology

11. The highest body that approves Five Year Plans in India is:
    (A) Planning Commission  (B) National Development Council
       (C) Inter-State Council  (D) Union Cabinet

12. Triple bond exists in:
    (A) methane  (B) ethane  (C) butene  (D) acetylene

13. A shopkeeper marks an article 20% above the cost price but allows 20% discount. How much he loses on the article for which he charges ₹ 120?
    (A) ₹ 5  (B) ₹ 50  (C) ₹ 25  (D) ₹ 20

14. Steel is more elastic than rubber because:
    (A) Its density is high  (B) It is a metal
       (C) Ratio of stress to strain is more  (D) Ratio of stress to strain is less

15. Full form of SMS is:
    (A) Simple Messaging System  (B) Short Messaging Service
       (C) Short Messaging System  (D) None of the above

16. The brightest colour emitted by the sun is:
    (A) Violet  (B) Yellow - Green  (C) Green - Blue  (D) Red

17. Veliconda Hills, which is a part of Eastern Ghats, is situated in?
    (A) Odisha  (B) Tamil Nadu
       (C) Karnataka  (D) Andhra Pradesh
18. An example of semi-conductor is:
   (A) aluminium  (B) silicon  (C) plastic  (D) copper

19. Gamma rays are:
   (A) High energy electrons  (B) Low energy electrons
   (C) High energy protons  (D) High energy electro magnetic waves

20. ‘Gulliver’s Travels’ was written by:
   (A) Jonathan Swift  (B) James Fraser  (C) John Gunther  (D) Sir Walter Scott

21. When does a body experience a centrifugal force?
   (A) When body moves in a circular path
   (B) When body moves in a linear path
   (C) When body is in vibration
   (D) When body is in motion

22. The outer membrane that covers the brain is:
   (A) Myelin Sheath  (B) Dura mater
   (C) Arachnoid membrane  (D) Pia mater

23. Glass is:
   (A) Crystalline solid  (B) Super cooled liquid
   (C) Liquid crystal  (D) None of the above

24. Which of the following gives the shape of orbit?
   (A) Principal quantum number  (B) Azimuthal quantum number
   (C) Magnetic quantum number  (D) Spin quantum number

25. Which cells are destroyed in AIDS?
   (A) Monocytes  (B) Neutrophils  (C) Lymphocytes  (D) R.B.C.

26. Mangrove vegetation in India is most extensively found in:
   (A) Malabar coast  (B) Sunderbans
   (C) Both (A) and (B)  (D) The Rann of Kutch
27. Cosmic noise is caused by:
   (A) Lightning discharges  (B) Solar eruptions
   (C) Distant stars   (D) Industrial discharges
   (C) is correct.

28. When milk turns sour, one of the products formed in the milk is:
   (A) Tartaric acid  (B) Lactic acid  (C) Citric acid  (D) Gluconic acid
   (B) is correct.

29. What is the symbol of chemical element ‘Zinc’?
   (A) Zc  (B) Zn  (C) Zi  (D) Z
   (B) is correct.

30. Full form of NMDC is:
   (A) National Mines Development Corporation
   (B) National Mineral Development Corporation
   (C) National Material Development Corporation
   (D) None of the above
   (B) is correct.

31. Maitri, the second scientific station, is located at:
   (A) Himalayas  (B) Antarctica  (C) Arctic Circle  (D) Alps Mountains
   (B) is correct.

32. Who of the following was the first woman ruler of Medieval India?
   (A) Razia Sultana  (B) Chand Bibi  (C) Durgavati  (D) Noorjahan
   (A) is correct.

33. Which of the following is not an ore of copper?
   (A) Cuprite  (B) Malachite  (C) Chalchocite  (D) None of the above
   (B) is correct.

34. Which following Articles in the Constitution deals with the village panchayats?
   (A) Article 30  (B) Article 40  (C) Article 43  (D) Article 45
   (B) is correct.

35. When two gases are mixed, the entropy:
   (A) remains constant  (B) decreases  (C) increases  (D) becomes zero
   (C) is correct.
36. For the first time, which sports event was included in the programme of 2012 London Olympics?
   (A) Men's Boxing  (B) Men's Karate
   (C) Women's Karate  (D) Women's Boxing

37. Resistance of conductor depends on:
   (A) the material  (B) its length  (C) its cross section  (D) all of these

38. Raghbir Singh Memorial Cup is associated with:
   (A) Hockey  (B) Kabaddi  (C) Football  (D) Horse racing

39. Red rot of sugarcane is caused by:
   (A) Bacteria  (B) Fungus  (C) Virus  (D) Nematode

40. Limas, a species of camel family, are found in:
   (A) Africa  (B) Australia  (C) South America  (D) North America

41. The scientific principal behind a laser was first put forward by:
   (A) Towers  (B) Plank  (C) Einstien  (D) Maxwell

42. \[9000001 - 3999909 - 1990992 + 991900 + 6999008 =\]
   (A) 10000008  (B) 11900008  (C) 11000008  (D) 11100008

43. Which of the following is the duration of the Seventh Five Year Plan?
   (A) 1974 - 1979  (B) 1985 - 1990  (C) 1992 - 1997  (D) 1997 - 2002

44. Full form of LTO is:
   (A) Low Term Operations  (B) Limited Term Operations
   (C) Long Term Operations  (D) None of the above

45. The size of population in lower age group is large in countries where:
   (A) Birth rate is high  (B) Birth rate is low
   (C) Death rate is high  (D) Death rate is low
6. Who is the present RBI Governor?
   (A) D. Subba Rao  (B) Y.B. Reddy
   (C) Arun Ramanathan  (D) Raghuram Rajan

7. A boatman goes 2 km against the current of stream in 40 minutes and returns to the same spot in 30 minutes. What is his rate of rowing in still water?
   (A) 2.5 km/hr  (B) 3.0 km/hr
   (C) 3.5 km/hr  (D) None of the above

8. \[ \frac{11}{4} \times \frac{5}{4} \times \frac{7}{3} \times \frac{1}{2} = \]
   (A) 1035  (B) 1034  (C) 1033  (D) 1032

9. Mc Dowell Cup is associated with:
   (A) Cricket  (B) Kabaddi  (C) Basketball  (D) Football

10. The soil formed by wind dust in and around hot deserts is called:
   (A) silty soil  (B) loamy soil  (C) sandy soil  (D) loess soil

What is the main purpose of white blood corpuscles?
   (A) To carry nutrients  (B) To combat infection
   (C) To carry oxygen  (D) To give strength

P and Q can do one work in 40 days. \( P \) alone can do \( \frac{1}{5} \) of work in 10 days. In how many days \( Q \) alone can complete that work?
   (A) 100 days  (B) 50 days
   (C) 200 days  (D) None of the above

Two trains 121 metres and 165 metres in length respectively are running in opposite directions, one at the rate of 80 kms and the other at the rate of 64 kms an hour. In what time they will be completely clear of each other from the moment they meet?
   (A) 7 seconds  (B) 8.12 seconds  (C) 7.25 seconds  (D) 7.15 seconds
54. Aam Admi Bima Yojana is an insurance scheme for rural landless households introduced by:
(A) LIC       (B) UTI       (C) ICICI   (D) None of these

55. 1024, ____ 64, 16, 4.
(A) 254       (B) 236       (C) 256   (D) 244

56. The purpose of Inclusion of Directive Principle of State Policy in Indian constitution is to establish:
(A) Political democracy       (B) Social democracy
(C) Gandhian democracy        (D) Social and Economic democracy

57. Headquarters of World Bank is at:
(A) Washington D.C.         (B) New York
(C) Manila                (D) Geneva

58. A and B invested in a business in the ratio of 3:2. If 2% of total profit goes to the charity and A's share is ₹7,056 in the remaining amount, then the total profit is:
(A) ₹13,000       (B) ₹12,000
(C) ₹11,000       (D) None of the above

59. \((4774 \div 14) + (4608 \div 18) - (4745 \div 13)\) =
(A) 231       (B) 232       (C) 233   (D) 234

60. Panchayati Raj was first introduced in India in October 1959 in:
(A) Rajasthan       (B) Tamil Nadu
(C) Kerala        (D) Andhra Pradesh

61. Where did Mahavira attain Nirvana?
(A) Pavapuri       (B) Vaishali
(C) Kumdalgram   (D) Kapilvastu

62. \(201220.1202 + 2012.0002 + 21112.3565 - 99.9 - 0.112002 - 224244.164898 =\)
(A) 0.1       (B) 0.2       (C) 0.3   (D) 0.4
63. Pulses are good source of:
   (A) Carbohydrates   (B) Proteins
   (C) Fats           (D) Fats and carbohydrates

64. In eye donation, which of the following parts of donor's eye is utilised?
   (A) Iris   (B) Lens   (C) Cornea   (D) Retina

65. When light is refracted, which of the following does not change?
   (A) Frequency   (B) Wavelength   (C) Amplitude   (D) Velocity

66. The Mughal Empire extended upto Tamil Territory in South under the reign of:
   (A) Akbar   (B) Aurangzeb   (C) Jahangir   (D) Shahjahan

67. More photo synthetic activity occurs in ______ part of the leaf.
   (A) lower   (B) middle   (C) upper   (D) none of the above

68. Fluoride damages:
   (A) Teeth   (B) Eyes   (C) Tongue   (D) Ears

69. The vitamin lost when rice is washed repeatedly is:
   (A) B₁   (B) B₂   (C) B₆   (D) B₁₂

70. Which of the following is an in-situ tiger reserve in India?
   (A) Dudhwa   (B) Gulf of Myanmar   (C) Western Ghats   (D) Agasthya Malai

71. ______ are used in Telemetry.
   (A) Infrared spectrum   (B) Microwaves
   (C) Visible spectrum   (D) Ultraviolet spectrum

72. Heart attack is caused by the blocking of:
   (A) Pulmonary artery   (B) Coronary artery
   (C) Coronary vein   (D) Pulmonary vein
73. \[ 500.5 \times 10.1 \times 0.25 \times 0.1 = \]
(A) 5000.0125 (B) 5000.00125 (C) 5000.125 (D) 126.262625

74. The ratio of present ages of two persons is 3 : 2 and 10 years back the ratio was 2 : 1. What will be the ratio of their ages after 5 years?
(A) 4 : 3 (B) 7 : 5 (C) 5 : 2 (D) None of the above

75. Which of the following is an example of covalent compound?
(A) Diamond (B) Sodium Chloride (C) Iodine (D) Ice

76. The process of changing oils into fats by passing hydrogen gas is called:
(A) Saponification (B) Oxidation (C) Carbonation (D) Hydrogenation

77. Which of the following whales can be easily trained because of its intelligence?
(A) Porpoise (B) Sperm whale (C) Blue whale (D) Orcinus

78. The silver coating on the glass surfaces of a thermos bottle reduces the energy that is transferred by:
(A) Friction (B) Convection (C) Radiation (D) Conduction

79. \[ (3.74 \div 1.7) + (3.48 \div 1.2) - (3.52 \div 1.1) = \]
(A) 1.6 (B) 1.7 (C) 1.8 (D) 1.9

80. The fibre, least prone to catch fire is:
(A) Nylon (B) Polyester (C) Cotton (D) Terylene
81. The most reactive metals are:
   (A) Alkali metals    (B) Inner transition metals
   (C) Transition metals (D) Alkaline earth metals

82. With reference to educational degree, what does Ph.D stands for?
   (A) Doctor of Philosophy    (B) Diploma in Philosophy
   (C) Degree in Philosophy    (D) None of the above

83. Which of the following is an example for diatomic molecule?
   (A) CO₂     (B) HCN     (C) BeF₂     (D) Br₂

84. Stainless steel was invented by:
   (A) Harry Brearley  (B) Haffman  (C) William Harvey (D) Henry Swan

85. A person deposited ₹ 8,000 in a bank which amounted to ₹ 9,200 after 3 years at simple interest. Had the interest been 2% more, around how much he would have got?
   (A) ₹ 9,680  (B) ₹ 9,860  (C) ₹ 9,380  (D) ₹ 9,800

86. ₹ 8,800 is divided among A, B, C so that A receives \(\frac{3}{8}\) as much as B and C together receive. Then, what is the share of A?
   (A) ₹ 1,200  (B) ₹ 2,400  (C) ₹ 2,500  (D) ₹ 1,300

87. In which state is the Rajiv Gandhi National Institute of Youth Development located?
   (A) Tamil Nadu  (B) Karnataka
   (C) Himachal Pradesh  (D) Uttarakhand

88. Which one of the following is not a football tournament?
   (A) I-league  (B) Irani Trophy  (C) Bardoloi Trophy  (D) Durand Cup
89. \[ \frac{5}{5} + \frac{1}{2} + \frac{3}{6} + \frac{4}{2} + \frac{4}{3} + \frac{1}{4} + \frac{3}{3} = \]

(A) \(21\frac{60}{7}\)  
(B) \(20\frac{60}{7}\)  
(C) \(21\frac{7}{60}\)  
(D) \(20\frac{7}{60}\)

90. Cracking is a process which belongs to:

(A) Soap manufacture  
(B) Petrol manufacture  
(C) Glass manufacture  
(D) Cosmetic manufacture

91. Which of the following is an indigenously built light combat aircraft of India?

(A) Akash  
(B) Vikrant  
(C) Tejas  
(D) Arjun

92. The Central Information Commission was established in:

(A) 2000  
(B) 2002  
(C) 2005  
(D) 2006

93. Who is the author of the book “India A Million Mutinies Now”?

(A) V.S. Naipaul  
(B) Mulk Raj Anand  
(C) Nirad C. Chaudhuri  
(D) Amitav Ghosh

94. The average weight of 19 students is 15 kg. By the admission of a new student the average weight is reduced to 14.8 kg. The weight of new student is:

(A) 10.6 kg  
(B) 10.8 kg  
(C) 11 kg  
(D) 14.9 kg

95. What is the atomic number of chemical element ‘Barium’?

(A) 53  
(B) 54  
(C) 55  
(D) 56

96. The time for which a body remains in the air is called ________.

(A) Time of ascent  
(B) Time of descent  
(C) Time of flight  
(D) Free time

97. Which of the following is a non-electrolyte?

(A) Acetic acid  
(B) Sodium chloride  
(C) Glucose  
(D) Sodium Hydroxide
98. Which of the following human organs is less susceptible to harmful radiation?
(A) Eyes  (B) Heart  (C) Brain  (D) Lungs

99. 13 chambered heart occurs in:
(A) Leech  (B) Earthworm  (C) Snail  (D) Cockroach

100. A man purchased six dozens eggs for ₹ 360. Later he found that 12 eggs were rotten. He sold the remaining eggs at the rate of 5 for ₹ 35. Find the percentage of profit.
(A) 60%  (B) 16%  (C) $16\frac{4}{6}\%$  (D) None of the above

- o O o -

Prepared by
Ch. Krishna Prasad,
D. Anantha Ramakrishna,
Dr. B. Naresh,
Sreedhar's CCE, Hyderabad.