Library Assistant_2024 Library Asstt.

LAFS/2024

DO NOT OPEN THIS BOOKLET UNTIL YOU ARE ASKED TO DO SO.

2024

TEST BOOKLET

TEST BOOKLET SERIES

A

Time allowed : $1\frac{1}{2}$ hours

Full marks : 100

Answer *all* the questions.

Questions are of equal value.

2413873

Serial No. .....

Roll No.:

Signature of the Candidate:

INSTRUCTIONS

Candidates should read the following instructions carefully before answering the questions:

1. This booklet consists of 16 pages including this front page, containing 100 questions. **Verify the Page Nos. and Test Booklet series on each page and bring at once to the Invigilator's notice any discrepancy.**
2. Answers will have to be given in the Special Answer-Sheet supplied for the purpose.
3. Before you proceed to mark in the Answer-Sheet in response to various items in the Test Booklet, you have to fill in some particulars in the Answer-Sheet as per instructions sent to you in the Admit Card. ***Do not fold the Answer-Sheet as this will result in error in your marks.***
4. All questions are of multiple-choice answer-type. You will find ***four*** probable answers **(A)**, **(B)**, **(C)** and **(D)** against each question. Find out which of the four answers appears to be **correct or the best.** Now darken the circle corresponding to the letter of the selected answer in the Answer-Sheet with **Black Ball Point Pen** as per instructions printed on the reverse of the Admit Card and in the Answer-Sheet.
5. One and only one circle is to be fully blackened for answer. Any spot in any other circle (multiple circle) or in wrong circle will be considered as wrong answer.
6. ***There will be negative marking for wrong answer. 0·25 mark will be deducted for each wrong answer.***
7. ***There are blank pages at the end of this Booklet for Rough Work.***
8. ***The Special Answer-Sheet should be handed over to the Invigilator before leaving the Examination Hall. You are permitted to take away the used Test Booklet after completion of the examination.***

1. If cost price of an article is $\frac{3}{2}$ of its selling price, the profit or loss per cent is
   (A) 33·33% loss
   (B) 50% profit
   (C) 50% loss
   (D) 33·33% profit

2. Which of the following is an alloy?
   (A) Gold
   (B) Zinc
   (C) Tin
   (D) Bronze

3. In a division sum, the divisor is 10 times the quotient and 5 times the remainder. If the remainder is 24, the dividend is
   (A) 1440
   (B) 1464
   (C) 2892
   (D) 1892

4. The main constituent of biogas is
   (A) CO
   (B) CH_4
   (C) CFC
   (D) O_2

5. International Youth Day is
   (A) 12th August
   (B) 13th August
   (C) 16th August
   (D) 23rd August

6. Present ages of A and B are 50 years and 18 years respectively. In how many years will A be twice as old as B?
   (A) 14 years
   (B) 15 years
   (C) 16 years
   (D) 18 years

7. There are 3 glasses of equal volume filled with juice. The ratio of water and syrup in the 3 juices are 5:1, 5:3 and 5:7 respectively. If the juices are poured into a big container, what will be the ratio of water and syrup in it?
   (A) 2:3
   (B) 5:3
   (C) 7:3
   (D) 8:3

8. Which devices is used to converting the high voltage AC to low voltage AC?
   (A) Rectifier
   (B) Transformer
   (C) Generator
   (D) Voltmeter

9. What will be the colour of the resulting solution when excess aqueous ammonia is added to an aqueous solution of copper sulphate?
   (A) Yellow
   (B) Green
   (C) Deep blue
   (D) Brown

10. In the first step of fixation of Nitrogen, which of the following compound is formed as a result of lightning?
   (A) NO_2
   (B) NO_3
   (C) N_2O_5
   (D) HNO_3

11. In the extraction of aluminium by the process of electrolysis, the fused mixture used contains which of the following along with cryolite and fluorspar?

(A) Anhydrous aluminium chloride
(B) Aluminium hydroxide
(C) Aluminium sulphate
(D) Pure alumina

12. Which of the following has the highest wavelength?

(A) X-ray
(B) γ-ray
(C) Infrared ray
(D) Ultraviolet ray

13. Boiling point of water is

(A) 100 K
(B) 273 K
(C) 373 K
(D) 0 K

14. Which is the β-ray emitted from a radioactive element?

(A) A stream of electrons
(B) A stream of protons
(C) A stream of neutrons
(D) A stream of photons

15. A and B invest in a business in the ratio 3:2. If 5% of the total profit goes to charity and A's share is ₹ 855, the total profit is

(A) ₹ 1425
(B) ₹ 1500
(C) ₹ 1537
(D) ₹ 1576

16. $5\frac{1}{3} - 3\frac{2}{3} \div 1\frac{1}{3} \div ? + 3\frac{1}{5} \div 1\frac{1}{5} = 7$

(A) $1\frac{1}{2}$
(B) $2\frac{1}{3}$
(C) $3\frac{1}{4}$
(D) $2\frac{3}{4}$

17. Frequency of direct current is

(A) 50 Hz
(B) 100 Hz
(C) Zero
(D) Infinity

18. Which of the following is a saturated hydrocarbon?

(A) C_3H_6
(B) C_2H_4
(C) C_2H_2
(D) C_2H_6

19. Choose the one that best expresses the meaning of the underlined idiom/phrase.

Please do not get on my nerves, I am already <u>in a crisis</u>.

(A) disappointment
(B) irritate
(C) disturb
(D) leave me alone

20. In the following items some parts of the sentence have been jumbled up. Choose the proper sequence:

She introduced me <u>at the party</u> (P) <u>I had met</u> (Q) <u>to a man</u> (R) <u>the previous night.</u> (S)

(A) RPQS
(B) RQPS
(C) SPRQ
(D) PQRS

21. Which of the following has the highest ability to conduct electricity?

(A) Pure water
(B) Aqueous solution of sugar
(C) Aqueous solution of hydrogen chloride
(D) Aqueous solution of acetic acid

22. A non ideal gas behaves like an ideal gas at

(A) high pressure and high temperature.
(B) high pressure and low temperature.
(C) low pressure and high temperature.
(D) low pressure and low temperature.

23. Choose the correct form of the verb 'to sink':

The child's voice _____ to a whisper in fear.

(A) sunk
(B) sink
(C) sank
(D) sinked

24. Which of the following is the formula for bauxite, ore of Aluminium?

(A) Al_2O_3
(B) $Al_2O_3 . H_2O$
(C) $Al_2O_3 . 2H_2O$
(D) Na_3AlF_6

25. Which of the following is used to dry moist ammonia?

(A) Concentrated H_2SO_4
(B) P_2O_5
(C) CaO
(D) $CaCl_2$

26. The presence of this gas is confirmed by using Nessler's Reagent—

(A) NH_3
(B) H_2S
(C) HCl
(D) NO_2

27. When α, β, γ radiation passes through a gas their Ionizing Power in decreasing order—

(A) γ, β, α
(B) α, β, γ
(C) β, α, γ
(D) β, γ, α

28. 1 Volt =

(A) $1\frac{\text{Joule}}{\text{Coulomb}}$
(B) $1\frac{\text{Coulomb}}{\text{Joule}}$
(C) 1 Joule – Coulomb
(D) $1\frac{\text{Joule}}{\text{Coulomb}^2}$

29. Seismograph is used for measuring

(A) humidity
(B) flow of water
(C) depth of sea
(D) earthquake shock

30. In which country the Zulu folk dance can be seen?

(A) South Africa
(B) North Korea
(C) Mexico
(D) Iran

31. Which of the following is the alkyl group containing two carbon atoms?
(A) Methyl
(B) Ethyl
(C) Propyl
(D) Isopropyl

32. For the atom produced by β-particle emission from a radioactive atom
(A) mass number increases
(B) atomic number increases
(C) mass number decreases
(D) atomic number decreases

33. The first metal used by man was
(A) Copper
(B) Iron
(C) Bronze
(D) Gold

34. Which of the following is an alcohol?
(A) CH_3OCH_3
(B) CH_3CHO
(C) CH_3COOH
(D) CH_3CH_2OH

35. The electronic configuration of Na and Chlorine atom in the compound NaCl is
(A) Na — 2, 8, 8 : Cl — 2, 8
(B) Na — 2, 8, 7 : Cl — 2, 8, 1
(C) Na — 2, 8, 1 : Cl — 2, 8, 7
(D) Na — 2, 8 : Cl — 2, 8, 8

36. Join the following sentences into a single sentence:
I helped him with money. This proved my love for him.
(A) I proved my love for him by helping him with money.
(B) I helped him with money to prove my love for him.
(C) I helped him with money which proved my love for him.
(D) I helped him with money that proved my love for him.

37. The 'Swachh Bharat Mission' was launched in
(A) 2014
(B) 2016
(C) 2013
(D) 2015

38. Which acid can be detected by ring test?
(A) Nitrate
(B) Chloride
(C) Sulphate
(D) Sulphide

39. Which of the following is a weak electrolyte in aqueous solution?
(A) CH_3COOH
(B) NaOH
(C) H_2SO_4
(D) NaCl

40. The compound interest on a sum for 2 years is ₹ 832 and the simple interest on the same sum at the same rate for the same period is ₹ 800. What is the rate of interest?
(A) 6%
(B) 8%
(C) 10%
(D) 12%

41. A boy has a few coins of denominations 50 paise, 25 paise and 10 paise in the ratio 1:2:3. If the total amount of the coins is ₹ 6·50, the number of 10 paise coins is

(A) 5
(B) 10
(C) 15
(D) 20

42. Choose the opposite word of the underlined word:

His was a very <u>secure</u> childhood.

(A) unsecure
(B) insecure
(C) nonsecure
(D) imsecure

43. Arrange the fractions in ascending order:

$\frac{4}{15}, \frac{5}{17}, \frac{10}{33}$ and $\frac{8}{27}$.

(A) $\frac{4}{15}, \frac{5}{17}, \frac{10}{33}, \frac{8}{27}$
(B) $\frac{5}{17}, \frac{10}{33}, \frac{8}{27}, \frac{4}{15}$
(C) $\frac{4}{15}, \frac{5}{17}, \frac{8}{27}, \frac{10}{33}$
(D) $\frac{10}{33}, \frac{8}{27}, \frac{5}{17}, \frac{4}{15}$

44. Which colour has maximum wavelength?

(A) Red
(B) Green
(C) Blue
(D) Yellow

45. If 20% of A = B and 40% of B = C, then 60% of (A + B) is

(A) 300% of C
(B) 600% of C
(C) 750% of C
(D) 900% of C

46. Split the following sentence into two simple sentences:

He thought that he could win the race.

(A) He could win the race. He thought so.
(B) He can win the race. He thought so.
(C) He could win the race. He thought it.
(D) He thought it. He could win the race.

47. Rewrite the sentence using the verb in brackets with a suitable preposition to replace the underlined words:

She <u>happened to find</u> (Stumble) the missing necklace while she was looking for something else.

(A) Stumbled at
(B) Stumbled across
(C) Stumbled in
(D) Stumbled below

48. Choose the most appropriate alternative from amongst those supplied to explain the portions underlined below:

<u>'Every could has a silver lining'</u> was his word.

(A) pessimistic
(B) optimistic
(C) sadistic
(D) sarcastic

49. The north pole of a magnet is falling on a Metallic ring. The direction of Induced Current, if looked from upside in the ring will be

(A) Clockwise
(B) Anti Clockwise
(C) Clockwise or anticlockwise depending on metal of the ring
(D) No Induced Current

50. The splitting of a nucleus into smaller nuclei is

(A) Fusion
(B) Fission
(C) Half life
(D) Gamma radiation

51. The unit of radioactivity is

(A) Electron-Volt
(B) MeV
(C) Juliet
(D) Curie

52. Multimeter is used to measure

(A) Voltage
(B) Current
(C) Resistance
(D) All of the above

53. Which is a correct match?

(A) Kalhana – Allahabad Prasasti
(B) Kautilya – Raghuvansam
(C) Megasthenis – Indica
(D) Badrayana – Kamasutra

54. In which of the following alloys zinc is present?

(A) Bell metal
(B) Brass
(C) Bronze
(D) Duralumin

55. What rate per cent is 1 minute 12 seconds to an hour?

(A) 1%
(B) 2%
(C) 3%
(D) 4%

56. The correct order of penetrating power of α-, β-, γ- rays are

(A) $\gamma > \alpha > \beta$
(B) $\beta > \gamma > \alpha$
(C) $\alpha > \beta > \gamma$
(D) $\gamma > \beta > \alpha$

57. What is dry ice?

(A) Solid Carbon dioxide
(B) Nitrogen dioxide
(C) Sulphur dioxide
(D) Carbon dioxide

58. Steel is an alloy of

(A) Carbon + Tin
(B) Carbon + Iron
(C) Iron + Zinc
(D) Iron + Copper

59. Complete the series:

1, 4, 27, 256, 3125, 46656, ?

(A) 117649
(B) 279936
(C) 705894
(D) 823543

60. Acceleration due to gravity at the center of the earth is

(A) Zero
(B) Infinity
(C) 9·8 m/s^2
(D) 9·8 cm/s^2

61. Correct the underlined error choosing the appropriate alternative.

Here comes someone run.

(A) ran
(B) would run
(C) should run
(D) running

62. The ratio of the present ages of two brothers is 1:2 and 5 years back, the ratio was 1:3, what will be the ratio of their ages after 5 years?

(A) 1:4
(B) 2:3
(C) 3:5
(D) 5:6

63. Which of the following gas helps in the depletion of ozone in the ozone layer?

(A) N_2
(B) Ar
(C) CFC
(D) He

64. Internal resistance of an Ideal Voltmeter is

(A) Zero
(B) Infinity
(C) 100 Ohm
(D) 1 Ohm

65. 'Rajtarangini', a book on Ancient Indian history, was written about

(A) Kashmir
(B) Ujjaini
(C) Nepal
(D) Magadh

66. A shopkeeper marks the price of an article at ₹ 80. What will be the selling price, if he allows two successive discounts at 5% each?

(A) ₹ 70·2
(B) ₹ 72·2
(C) ₹ 72
(D) ₹ 70

67. A sum of money at simple interest amounts to ₹ 815 in 3 years and to ₹ 854 in 4 years. The sum is

(A) ₹ 650
(B) ₹ 690
(C) ₹ 698
(D) ₹ 700

68. How many molecules of CO_2 will be produced when 1 mole of C reacts completely with one mole of O_2?

(A) 6.022×10^{23}
(B) 6.223×10^{23}
(C) 6.022×10^{22}
(D) 6.022×10^{24}

69. The name of Garry Kasparov is associated with

(A) Chess
(B) Kabadi
(C) Hockey
(D) Football

70. One-third of the constructional work of a bridge was finished in 24 days. Then to finish the rest of work in 16 days, 64 more men were appointed. Determine the number of men who were appointed initially.

(A) 28
(B) 30
(C) 32
(D) 34

71. Who was the author-director of the drama 'Nabanna'?

(A) Sambhu Mitra
(B) Utpal Dutta
(C) Girish Chandra Ghosh
(D) Bijon Bhattacharyya

72. Resistance of a material is inversely proportional to

(A) length
(B) depending on the material
(C) cross sectional area
(D) cannot be said

73. A hole of diameter d is cut in a Metal sheet, if the sheet is heated

(A) d will increase
(B) d will decrease
(C) d remains same.
(D) None of the above

74. Garba is a folk dance of

(A) Gujarat
(B) Rajasthan
(C) Maharashtra
(D) Kerala

75. 'GST' is introduced by the Indian Government through an Constitutional Amendment. Which is the number of that amendment?

(A) 107
(B) 119
(C) 122.
(D) 121

76. Who among the following was a Snooker Champion?

(A) Pankaj Advani
(B) Upul Tharanga
(C) Gopal Basu
(D) K.D. Yadav

77. Density of Ice _____.

(A) less than water
(B) greater than water
(C) same as water
(D) cannot be said

78. Who was the 'Political Guru' of Gandhiji?

(A) Lokmanya Tilak
(B) Dadabhai Naoroji
(C) M.G. Ranade
(D) G.K. Gokhale

79. In a camp, 95 men had provisions for 200 days. After 5 days, 30 men left the camp. For how many days will the remaining food last now?

(A) 180
(B) 285
(C) 240
(D) 300

80. Acceleration is inversely proportional to

(A) Force
(B) Mass
(C) Velocity
(D) Distance

81. How many grams of O_2 will be required to make CO_2 by burning 12g of C completely? (C = 12, O = 16)

(A) 32 g
(B) 12 g
(C) 16 g
(D) 44 g

82. The Koyna hydro-electric power project is located in

(A) Madhya Pradesh
(B) Rajasthan
(C) Maharashtra
(D) None of the above

83. Rewrite the following sentence changing the underlined word as an adjective without changing the meaning:

He was moaning <u>feebly</u>.

(A) He was moaning with feebleness.
(B) He was moaning with a feeble manner.
(C) He was moaning in a feeble manner.
(D) He was moaning out of a feeble manner.

84. At STP, 2.24L is occupied by [C = 12, O = 16, S = 32]

(A) 4.4 g CO_2
(B) 0.64 g SO_2
(C) 28 g CO
(D) 16 g O_2

85. Solid state of which of the following compound is composed of ions?

(A) Sodium chloride
(B) Hydrogen chloride
(C) Naphthalene
(D) Glucose

86. A hawker bought some guavas at 9 for ₹ 4 and sold them at the rate of ₹ 7 per dozen. What is the percentage of profit or loss?

(A) Profit 31·25%
(B) Loss 31·25%
(C) Profit 28·25%
(D) Loss 28·25%

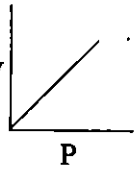
87. If the vapour density of a gas is 32, which among the following is its molecular weight?

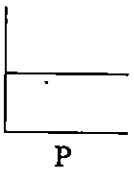
(A) 8
(B) 16
(C) 32
(D) 64

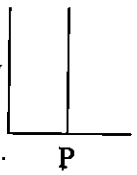
88. What is the value of PV for 4g of H_2 gas at STP? (H = 1)

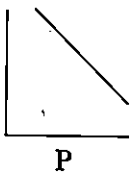
(A) RT
(B) 2RT
(C) 4RT
(D) 0.5RT

89. According to Boyle's law, which one is PV–P graph?

(A) 

(B) 

(C) 

(D) 

90. 'Discovery of India' was written by
(A) Jawaharlal Nehru
(B) V.S. Naipaul
(C) Nirad C. Chaudhuri
(D) E.S. Foster

91. Which of the following numbers is greatest?
(A) $\frac{11}{16}$
(B) $\frac{13}{18}$
(C) $\frac{13}{16}$
(D) $\frac{11}{17}$

92. Power of a convex lens of focal length 40cm is
(A) 1 D
(B) 2·5 D
(C) 1·5 D
(D) 2 D

93. Velocity of Sound in Vacuum is
(A) 330 m/s
(B) Zero
(C) Infinity
(D) 3×10^8 m/s

94. In the formation of CaO, how many electrons are transferred from Ca atom to O atom? (Atomic number of Oxygen and Calcium are 8 and 20 respectively.)
(A) 0
(B) 1
(C) 2
(D) 3

95. Harappa is on the
(A) left bank of Ravi.
(B) left bank of Indus.
(C) right bank of Indus.
(D) right bank of Ravi.

96. How many elements are there in the fourth period of a long periodic table?
(A) 8
(B) 32
(C) 16
(D) 18

97. Fundamental duties have been incorporated in the Indian Constitution by which amendment?

(A) 42nd
(B) 39th
(C) 43rd
(D) 46th

98. A and B started a business with initial investments in the ratio 14:15 and their annual profits were in the ratio 7:6. If A invested the money for 10 months, for how many months did B invest his money?

(A) 6
(B) 7
(C) 8
(D) 9

99. m_e, m_p, m_n are the masses of electron, proton, neutron respectively. Which is true?

(A) $m_e = m_p$
(B) $m_e = m_n$
(C) $m_p = m_n$
(D) None of the above

100. Vitamin A is richly found in

(A) Carrot
(B) Tomato
(C) Potato
(D) Lemon