# SAHODAYA SCHOOL COMPLEX KANNUR
## TALENT SEARCH EXAMINATION 2022-23

Time : 120 minutes                                                    Marks :100

*General Instructions:*

- Answer all questions
- Choose the most suitable answer and mark in the OMR Sheet.
- Each question carries one mark

1. The antonym of the word 'abolish'

   (a) abuse            (b) establish            (c) progress            (d) stop

2. Which of the following process involves chemical reactions?

   (a) Storing of Oxygen gas under pressure in a gas cylinder.

   (b) Liquefaction of air

   (c) Keeping petrol in a China dish in the open

   (d) Heating copper wire in pressure of air at high temperature

3. The least number that is divisible by all the numbers from 1 to 10 (both inclusive) is

   (a) 10            (b) 100            (c) 504            (d) 2520

4. Common Wealth Games 2022 was held in

   (a) Sydney            (b) Moscow            (c) Birmingham            (d) Johannesburg

5. Choose the correct phrasal verb to complete the following sentence

   The Employees _____ the strike.

   (a) Called off            (b) take off            (c) turn off            (d) call in

6. Which among the following diseases is not sexually transmitted?

   (a) Syphillis            (b) Hepatitis            (c) HIV-AIDS            (d) Gonorrhoea

7. If two positive integrers p and q can be expressed as $p=ab^2$; and $q=a^3b$; a,b being prime numbers, then LCM (p, q) is

   (a) ab            (b) $a^2b^2$            (c) $a^3b^2$            (d) $a^3b^3$

8. Demonetisation refers to

   (a) Introducing a new currency in the economy

   (b) Conversion of cash assets to gold

   (c) Expressing the value of one currencey in terms of another

   (d) Withdrawal of a currency unit from use as legal tender.

9. Choose the correct synonym for the underlined word.

   They were to surrender immediately or face total annihilation

   (a) destruction       (b) extinction       (c) tremendous       (d) suffering

10. A child is standing in front of a magic mirror. She finds the image of her head bigger, the middle portion of her body of the same size and that of the legs smaller. The following is the order of combinations for the magic mirror from the top.

    (a) Plain , Convex and Concave       (b) Convex, Concave and Plane

    (c) Concave, Plane and Convex       (d) Convex, Plane and Concave

11. If $\alpha$ and $\beta$ are the zeroes of the polynomial $ax^2 + bx + c$, then the value of $\alpha^2 + \beta^2$ is

    (a) $\dfrac{b^2 - ca}{a^2}$       (b) $\dfrac{b^2 - 2ca}{a^2}$       (c) $\dfrac{b^2 + ca}{a^2}$       (d) $\dfrac{b^2 + 2ca}{a^2}$

12. The 7$^{th}$ schedule of Indian Constitution deals with

    (a) Official languages of India

    (b) States and Union territories of India

    (c) Emergency provisions

    (d) Division of power between centre and states

13. Pick out the correct article

    He is _____ European

    (a) an       (b) no article       (c) the       (d) a

14. Which of the following are combination reactions?

    (i) $2KClO_3 \longrightarrow 2KCl + 3O_2$       (ii) $4Al + 3O_2 \longrightarrow 2Al_2O_3$

    (iii) $MgO + H_2O \longrightarrow Mg(OH)_2$       (iv) $Zn + FeSo_4 \longrightarrow Zn(SO_4) + Fe$

    (a) (i) & (iii)       (b) (iii) & (iv)       (c) (ii) & (iii)       (d) (ii) & (iv)

15. The pair of line as equations $\frac{3x}{2} + \frac{5y}{3} = 7$ and 9x+10y=14 is

    (a) Consistent                          (b) Inconsistent

    (c) Consistent with one solution         (d) Consistent with many solutions

16. The author of ' Unhappy India'

    (a) Lala Lajpat Rai              (b) Dr. Rajendra Prasad

    (c) Jawaharlal Nehru            (d) Subash Chandra Bose

17. Choose the sentence that changes the voice of the given sentence

    Solve the questions

    (a) The questions are solved         (b) Let the questions be solved

    (c) Let them solve the questions      (d) The questions can be solved

18. Myopia may arise due to

    (a) Excessive curvature of the eye lens

    (b) Elongation of the eye ball

    (c) Both (a) and (b)

    (d) Short converging power

19. If the pairs of equations x Sin $\theta$ +y Cos $\theta$ =1 and x + y = $\sqrt{2}$ has infinitely many solutions, then the value of $\theta$ is

    (a) $30^0$         (b) $45^0$         (c) $60^0$         (d) $90^0$

20. Who is known as 'milk man of India'

    (a) M.S. Swaminathan    (b) Dr. Varghese Kurien    (c) J.C Bose      (d) E. Sreedharan

21. Choose the noun form to complete the given sentence

    I am proud to pledge_____to the flag and to my country

    (a) allege         (b) allegation         (c) allegiance         (d) alleged

22. Rate of heart beat and breathing movements of human body is controlled by

    (a) Medulla Oblongata    (b) Cerebrum         (c) Diencephalon      (d) Vermis

23. If $\alpha$ and $\beta$ are the zeros of the polynomial $4x^2+ 3x+7$, the value of $\frac{1}{\alpha}+\frac{1}{\beta}$ is

    (a) $\frac{-1}{2}$         (b) $\frac{-5}{2}$         (c) $\frac{-3}{7}$         (d) $\frac{3}{7}$

24. Name the Central Government Policy that give four years employment for youth in Indian Army

    (a) Jan Dhan         (b) NREGA         (c) Agnipath         (d) NFWP

25. Choose the correctly spelt word

    (a) acqaintence      (b) Acquantance      (c) Acquaintance      (d) Acquentence

26. Which of the following salts does not contain water of crystalisation

    (a) Blue Vitriol      (b) Baking Soda      (c) Washing Soda      (d) Gypsum

27. If one of the zeros of the quadratic polynomial $(K-1) x^2 + Kx+1$ is -3, then the value of K is

    (a) 4/3      (b) -4/3      (c) 2/3      (d) -2/3

28. Srilanka became independent in the year_____

    (a) 1947      (b) 1948      (c) 1950      (d) 1956

29. Pick out the correct meaning of the idiom "crying over spilt milk'

    (a) Spill the milk when got angry      (b) To spill the milk on the floor and cry

    (c) Wasting time regretting about something that has already happened

    (d) Crying as the milk got spoiled

30. Which of the following phenomenon occur when a small amount of acid is added to water?

    (i) Ionisation      (ii) Dilution      (iii) Neutralisation      (iv) Salt formation

    (a) (i) & (ii)      (b) (i) & (iii)      (c) (iii) &(iv)      (d) (ii) & (iv)

31. The difference between two numbers is 26 and the larger number exceeds thrice of the smaller number by four. The numbers are

    (a) 39,13      (b) 12, 38      (c) 37, 11      (d) 36, 10

32. Who is the new chairman of Jio Infocomm?

    (a) Neeraj Chopra      (b) Sachin Tendulkar      (c) Aakash Ambani      (d) Mukesh Ambani

33. Choose the correct preposition

    I was stunned_____her graceful perfomance.

    (a) with      (b) of      (c) by      (d) at

34. Which of the following statements is correct regarding the propagation of light of different colours of ` white light in air?

    (a) Red light moves fastest      (b) Blue light moves faster than green light

    (c) All the colours of the white light move with the same speed

    (d) Yellow light moves with the mean speed as that of the red and the violet light

35. A pole 6m high casts a shadow $2\sqrt{3}$ m long on the ground, then the sun's elevation is

    (a) $60^0$      (b) $45^0$      (c) $30^0$      (d) $90^0$

36. National Flag Day is Celebrated in India on

   (a) July 18    (b) July 22    (c) July 24    (d) June 25

37. Choose the sentence that changes the voice of the following sentence

   The door is being knocked

   (a) Someone is knocking the door    (b) Someone is being knocked the door

   (c) The door is knocked by someone    (d) Someone knocked the door

38. The electronic configuration of three elements is given below

   X - 2, 8

   Y - 2, 8,7

   Z - 2, 8, 2

   Which of the follwing is correct

   (a) X is a metal    (b) Z is a non-metal

   (c) Y is a non - metal and Z is a metal

   (d) Z is a non- metal and Y is a metal

39. If the equation $(a^2 + b^2) x^2 - 2 (ac + bd) x + c^2 + a^2 = 0$ has equal roots, then

   (a) $ad = bc$    (b) $ab = cd$    (c) $ad = \sqrt{bc}$    (d) $ad = \sqrt{cd}$

40. The Govt. of which country has launched an ' Innovation challenge Fund' in India

   (a) United Kingdom    (b) Brazil    (c) Australia    (d) Germany

41. Choose the correct form of the verbs given in the brackets to complete the sentence.

   When I reached the house I_____that thieves_____into it. (find, break)

   (a) Find, broken    (b) Found, broke

   (c) Founded, broken    (d) Found, had broken

42. The breakdown of large fat globules in to small globules is achieved by the secretion 'A' From gland B'. Identify A& B.

   (a) A is lipase and B is Pancreas

   (b) A is pepsin and B is Salivary gland

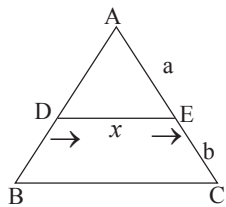   (c) A is bile and B is liver

   (d) A is amylase and B is liver

43. If $\sin\theta = x$ and $\sec\theta = y$, then the value of $\cot\theta$ is

    (a) xy       (b) 2xy       (c) 1/xy       (d) x+y

44. Who was the founder of Arya Samaj

    (a) Swami Vivekananda    (b) Swami Dayananda Saraswathi

    (c) Raja Ram Mohan Roy (d) Sree Narayana Guru

45. Pick out the correct option to complete the sentence in Reported speech

    Sophia said "I watched this movie last week"

    Sophia said that_____

    (a) She had watched that movie the previous week

    (b) She has watched this movie the previous week

    (c) She has been watching this movie the pervious week

    (d) She watched that movie the previous week.

46. Which of the following is the correct order of activity of metals

    a) Al> Zn> Cu> Ag      b) Zn>Al>Cu> Fe >Ag

    c) Al> Zn>Cu> Fe>Ag    d) Ag>Zn>Al>Cu>Fe

47. ABC is a triangle, right angled at C and $AC = \sqrt{3}$ BC, then $\angle ABC =$

    (a) $30^0$       (b) $60^0$       (c) $90^0$       (d) $0^0$

48. 'Prime Minister Awaaz Yojana' is a scheme dedicated to

    (a) The upliftment of minority communities       (b) Provide house facilities

    (c) Education of differently-abled children       (d) Welfare of farmers

49. Find the incorrectly spelt word

    (a) embarassed       (b) questionnaire

    (c) Immediately       (d) mischeivus

50. A student traces the path of a ray through a glass prism for four different values of angle of incidence. On analysing the diagrams he is likely to conclude that the emergent ray

    (a) Is always parallel to the incident ray

    (b) Is always perpendicular to the incident ray

    (c) Is always parallel to the refracted ray

    (d) Always bends at an angle to the direction of incident ray

51. If the $10^{th}$ term of AP is O, then find the ratio of the $27^{th}$ term and the $15^{th}$ term of the AP

    (a) 1:1               (b) 17:5               (c) 1:3               (d) 3:1

52. Where is Sathish Dhawan Space Centre located?

    (a) Thumba          (b) Vishaghapatanam     (c) Sriharikota       (d) Telangana

53. Synonym of impede is_____

    (a) Hinder             (b) Reverse             (c) Impose           (d) With

54. Identify the correct sequence of reproductive stages in the flowering plants?

    (a) Gamete $\longrightarrow$ Zygote $\longrightarrow$ Embryo $\longrightarrow$ Seedling

    (b) Zygote $\longrightarrow$ Gamete $\longrightarrow$ Embryo $\longrightarrow$ Seedling

    (c) Seedling $\longrightarrow$ Gamete $\longrightarrow$ Zygote $\longrightarrow$ Embryo

    (d) Gamete $\longrightarrow$ Seedling $\longrightarrow$ Zygote $\longrightarrow$ Embryo

55. A man has some hens and cows. If the number of heads be 48 and the number of feet equals 140, the number of hens will be

    (a) 18               (b) 26               (c) 32              (d) 40

56. Who is the Father of Indian Cinema

    (a) Sathyajith Ray      (b) G. Aravindan

    (c) Dada Saheb Phalke   (d) Shivaji Ganesan

57. To whose court did Kalidasa, the famous poet belong

    (a) Ashoka             (b) Bimbisara

    (c) Chandragupta II     (d) Krishnadevaraya

58. The policeman asked the victim of the theft, "what did you_____" ?

    (a) Loose             (b) Lose               (c) Loss             (d) Lost

59. The strenghth of a magnetic field inside a long current carrying straight solenoid is

    (a) more at the ends than at the cube       (b) minimum in the middle

    (c) same at all points              (d) found to increase from one end to the other

60. A kite is flying at an angle of elevation of $60^0$, the kite is tied with a string of 60m. Find the height of the kite.

    (a) 30 m            (b) 40 m            (c) $30\sqrt{3}$          (d) $40\sqrt{3}$

61  How many spokes are there in our National Flag

(a) 26                 (b) 54                 (c) 28                 (d) 24

62  Where is Ghana National Park located?

(a) Gujrat             (b) Kerala             (c) West Bengal       (d) Rajasthan

63  Each student_____to submit their work.

(a) have               (b) is

(c) has                (d) are

64  Arrange into proper sequence

A                   B                      C

crowded             Railway platform       Last Sunday

D                   E                      F

The                 Was                    Unusually

(a) ABDCEF             (b) BAFDCE

(c) CBADEF             (d) BDEFAC

65  The power of the lens is -40D, its focal length is

(a) 4m                 (b) -40m               (c) -0.25 m           (d) -0.025m

66  The value of x such that

(a) $2 \, Cosec^2 \, 30^0 + xSin^2 \, 60^0 - 3/4 \, tan^2 \, 30^0 = 10$ is

(a) 1                  (b) 2                  (c) 3                 (d) 5

67  Juma Masjid of Delhi was built by

(a) Humayun            (b) Akbar              (c) Jahangir          (d) Shajahan

68  Alia, Praveen, Rohith, Xavier, Sonia and Zoya are sitting in a row. Zoya and Sonia are in the Centre. Alia and Praveen are at the very ends. To the left of Alia, Rohith is seated. Who is on Zoya's left side?

(a) Alia               (b) Praveen            (c) Sonia             (d) Rohith

69  What is the poetic device used in the given lines?

It seemed that the sky was going to cry the entire night

(a) Simile             (b) Metaphor

(c) Personification    (d) Oxymoron

70  What is the reference of measuring distances in case of a lens

(a) Infinity           (b) Pole               (c) At 2F             (d) At 2F

71 In a certain code, MONKEY is written as XDJMNL. How is TIGER written in that code?

(a) SHFDQ      (b) HFDSQ      (c) RSAFD      (d) QDFHS

72 In $\triangle ABC$, $\angle BAC = 90^0$, $AD \perp BC$. Then which of the following is true

(a) $BD.\,CD = BC^2$          (b) $AB.AC = BC^2$

(c) $BD.CD = AD^2$          (d) $AB.AC = AD^2$

73 To which game is ' Duleep Trophy ' associated

(a) Hockey          (b) Table tennis

(c) Cricket          (d) Badminton

74 If I get the visa, I_____travel to the United States in January.

(a) Might      (b) Will      (c) Would      (d) Could

75 In a cross, a tall tea plant (TT) was pollinated with a short tea plant (tt). What will be the ratio of tall plants to short plants in the F2 generations

(a) 1:2      (b) 1:1      (c) 3:1      (d) 1:3

76 In $\triangle$ ABC, DE // BC. If $BD = x$, AB=2x, $CE = x-2$ and $AC = 2x+3$. Then the value of $x =$_____

(a) X=9cm      (b) 3cm      (c) x=5cm      (d) x=1cm

77 African Swine Fever is a contagious viral disease that affects

(a) Humans          (b) Pigs

(c) Tiger          (d) Both (a) and (b)

78 The author of ' Midnight's Children'

(a) Leo Tolstoy          (b) Charles Dicken

(c) Salman Rushdie          (d) Kamaladas

79 Which of the two pens is_____

(a) good      (b) more good      (c) better      (d) best

80 When the universal indicator solution is added to three unknown colourless solutions P,Q & R, they change to blue, violet and orange respectively. The increasing order of the pH value of these solutions is

(a) Q>R>P      (b) R>P>Q      (c) Q>P>R      (d) P>Q>R

81  In the following fig. DE II BC. Which of the following is true

(a) $x = \dfrac{a+b}{ay}$
(b) $y = \dfrac{ax}{a+b}$
(c) $x = \dfrac{ay}{a+b}$
(d) x/y=a/b



82  The Head quarters of World Bank
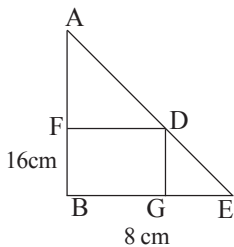
(a) New York
(b) Geneva
(c) Hague

(d) Washington DC

83  When was Gandhi- Irwin Pact signed?

(a) 1931
(b) 1930
(c) 1932
(d) 1929

84  A flight of birds_____always a beautiful sight

(a) are
(b) have
(c) is
(d) were

85  Select the correct options

Our friends have not been here_____long

(a) from
(b) for
(c) since
(d) with

86  Sides AB and BE of a right triangle, right angled at B are of lengths 16 cm and 8 cm respectively. The length of the side of the largest square FDGB that can be inscribed in the triangle ABE is

(a) $\dfrac{32\ cm}{2}$
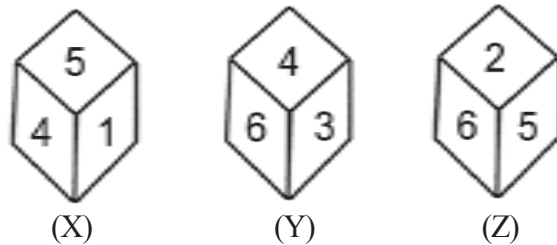(b) $\dfrac{16\ cm}{3}$
(c) $\dfrac{8\ cm}{3}$
(d) 4/3 cm



87.  When Sodium hydrogen Carbonate is added to acid, a gas is evolved, which of the following state ments are true about the gas evolved

(i) It turns lime water milky
(ii) It extinguishes a burning splinter

(iii) It dissolves in a solution of Sodium hydroxide
(iv) It has a pungent smell

(a) (i) & (ii)
(b) (i). (ii) & (iii)
(c) (i) & (iii)
(d) (i), (iii), and (iv)

88  If 3 is the least prime factor of number 'a' and 7 is the least prome factor of number'b', then least prime factor of (a+b) is

(a) 2                    (b) 3                    (c) 5                    (d) 10

89  Given below are three diagrams of the same cube. Detremine, the number at the bottom in figure X



(X)              (Y)              (Z)

(a) 3                    (b) 2                    (c) 5                    (d) 10

90  The teacher said, "The sun rises in the east"

(a) The teacher said that the sun rose in the east

(b) The teacher said that the sun had risen in the east

(c) The teacher said that sun rises in the east

(d) The teacher said that the sun risen in the east

91. During respiration exchange of gases take place in

(a) Trachea and larynx      (b) Alveoli of lungs

(c) Alveoli and throat      (d) throat and larynx

92  Which is the smallest Panchayat in Kerala?

(a) Valapattanam          (b) Peringamala          (c) Kunnathur          (d) None of these

93  What would be the last term of an arithmetic progression with 10 terms whose second term is -23 and the third term is -35

(a) -119                  (b) 119                  (c) -650                  (d) 350

94  A boy got injured while playing and after some time bleeding was stopped by blood clot formation. Which component in blood helped for this purpose?

(a) Haemoglobin          (b) RBC          (c) Platelets          (d) WBC

95  Pointing to a photograph of girl, Amala said "she is the daughter of the only daughter of my mother . How is Amala related to that girl?

(a) Aunt                  (b) Grandmother          (c) Cousin          (d) Mother

96    In which year was NREGA implemented?

(a) 2004                    (b) 2005                    (c) 2006                    (d) 2000

97    Shakunthala Devi is popularly known as

(a) Missile Lady                        (b) Human computer

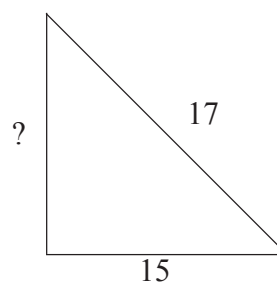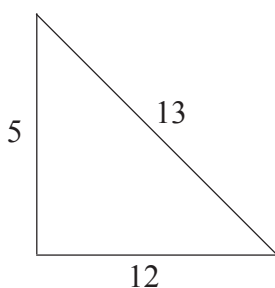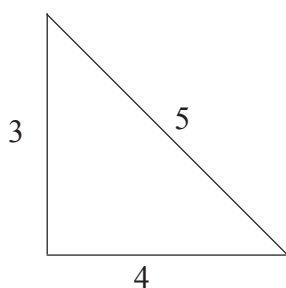(c) Nightingale of India                (d) None of tthese

98.   If n$^{th}$ term of an AP is (2n+1) Then the sum of first n terms of the AP is

(a) n(n-2)                  (b) n(n+2)                  (c) n (n+1)                  (d) n (n-1)

99.   Sheela walked 10m towards the north. Then she turned right and walks 15m. Then she turns right and walks 17.5 m. Then she turns left and walks 7.5 m. Finally she turns left and walks 7.5 m. In which direction and how many meters is she from the starting position

(a) 7.5 m West              (b) 15 m East              (c) 15 m West              (d) 22.5 m East

100.  Which number will replace the question mark in the following?



(a) 2                       (b) 6                       (c) 8                       (d) 64