INSTRUCTIONS TO CANDIDATES

1. The Question Paper will be given in the form of a Question Booklet. There will be four versions of Question Booklets with Question Booklet Alpha Code viz. A, B, C & D.

2. The Question Booklet Alpha Code will be printed on the top left margin of the facing sheet of the Question Booklet.

3. The Question Booklet Alpha Code allotted to you will be noted in your seating position in the Examination Hall.

4. If you get a Question Booklet where the alpha code does not match to the allotted alpha code in the seating position, please draw the attention of the Invigilator IMMEDIATELY.

5. The Question Booklet Serial Number is printed on the top right margin of the facing sheet. If your Question Booklet is un-numbered, please get it replaced by new Question Booklet with same alpha code.

6. The Question Booklet will be sealed at the middle of the right margin. Candidate should not open the Question Booklet, until the indication is given to start answering.

7. Immediately after the commencement of the examination, the candidate should check that the Question Booklet supplied to him/her contains all the 100 questions in serial order. The Question Booklet does not have unprinted or torn or missing pages and if so he/she should bring it to the notice of the Invigilator and get it replaced by a complete booklet with same alpha code. This is most important.

8. A blank sheet of paper is attached to the Question Booklet. This may be used for rough work.

9. **Please read carefully all the instructions on the reverse of the Answer Sheet before marking your answers.**

10. Each question is provided with four choices (A), (B), (C) and (D) having one correct answer. Choose the correct answer and darken the bubble corresponding to the question number using Blue or Black Ball Point Pen in the OMR Answer Sheet.

11. **Each correct answer carries 1 mark and for each wrong answer 1/3 mark will be deducted. No negative mark for unattended questions.**

12. No candidate will be allowed to leave the examination hall till the end of the session and without handing over his/her Answer Sheet to the Invigilator. Candidates should ensure that the Invigilator has verified all the entries in the Register Number Coding Sheet and that the Invigilator has affixed his/her signature in the space provided.

13. Strict compliance of instructions is essential. Any malpractice or attempt to commit any kind of malpractice in the Examination will result in the disqualification of the candidate.
1. Among how many children may 96 apples and 240 oranges be equally divided?
   A) 56   B) 48   C) 120   D) 480

2. If 30 men working 8 hrs. a day can do a piece of work in 16 days, in how many days will
   24 men working 5 hrs. a day do the same piece of work.
   A) 32   B) 30   C) 48   D) 84

3. A sum of money doubles itself in 5 years at a simple interest. Then what is the rate of
   interest?
   A) 10%   B) 50%   C) 12%   D) 20%

4. Man spends 89% of his monthly income. If he saves Rs. 2,244 per month, what is his
   monthly income?
   A) 20,400   B) 22,440   C) 24,000   D) 18,156

5. Two trains of lengths 210 meters and 130 meters respectively are running in opposite
   directions on parallel tracks. If their speeds are 32 km/hr and 36 km/hr respectively, in
   what time will they cross each other?
   A) 0.005 sec.   B) 18 sec.   C) 5 min.   D) 30 sec.

6. A tank can be filled by one tap in 2 hrs. and by another in 3 hrs. How long will it take if
   both taps are opened together?
   A) \(\frac{5}{6}\) hrs.   B) \(\frac{6}{5}\) hrs.   C) \(\frac{1}{5}\) hrs.   D) 2.5 hrs.

7. Find the area of the road of width 2 meters around a square field whose side is
   10 meters.
   A) 144 m²   B) 64 m²   C) 100 m²   D) 96 m²

8. Today is March 7th. The day of the week is Monday. This is a leap year. What will be
   the day of the week on this day after 3 years?
   A) Wednesday   B) Thursday   C) Friday   D) Saturday

9. How after the hands of a clock are in a straight line in twelve hours?
   A) 12   B) 10   C) 11   D) 22

10. Age of a father is six times the age of his son. After 20 years, father’s age will be twice
    the son’s age at that time. What is the present age of the son?
    A) 5   B) 6   C) 15   D) 2

11. \(3^3 \times 3\sqrt{3} \div 3^{5/2} = 3^{a+b}\) then \(a = ?\)
    A) 3   B) 4   C) 1   D) 2
12. Read the conclusions and decide which of the given conclusion logically follows from the two given statements, disregarding commonly known facts.

**Statements**:
No girl students can play. Some girl-students are dancers.

**Conclusions**:
1. Boy students can play.
2. Some dancers can play.
   A) Either 1 or 2 follows
   B) Both 1 and 2
   C) Neither 1 nor 2
   D) Only 1

13. If 13 stands for HE and 32 stands for SHE. What stands for THEY ?
   A) 58
   B) 45
   C) 43
   D) 34

14. Complete the sequence 125, 216, 343, . . .
   A) 434
   B) 433
   C) 512
   D) 524

15. Which word does not belong with the others ?
   Meter, Inch, Ounce, Yard
   A) Meter
   B) Yard
   C) Inch
   D) Ounce

16. There is a relationship between two terms on the left side of sign (: :). The same relationship exists between the two terms on the right of the sign (: :) of which one is missing? Find the missing one.
   A) PRRU
   B) PSSV
   C) PQQU
   D) PQRS

17. Alex is son of Sam. Sam is husband of Susan. Susan is daughter-in-law of Annie and John is son of Annie. Then what is the relationship of Alex with John ?
   A) Cousin
   B) Nephew
   C) Brother
   D) Grandson

18. If \((a + b)^2 = 10\) and \((a - b)^2 = 4\) then what is \(a^2 + b^2\) ?
   A) 6
   B) 3
   C) 14
   D) 7

19. Man is to Boy as Tree is to
   A) Leaf
   B) Seed
   C) Sapling
   D) Branch

20. A boy starts from his home. After walking 10 km towards north he turns right and walks for 5 km. Again he turns right and walks for 15 km. In which direction is he from his home?
   A) South-East
   B) South-West
   C) North-East
   D) North-West
21. The nucleus of atom consists of
   A) electrons and neutrons  B) electrons and protons
   C) protons and neutrons  D) all of the above

22. The number of moles of solute present in 1 kg of solvent is called its
   A) molality  B) molarity  C) normality  D) formality

23. Aqua regia is
   A) 1 : 3 con. HNO₃ and con. HCl  B) 1 : 2 con. HNO₃ and con. HCl
   C) 3 : 1 con. HNO₃ and con. HCl  D) 2 : 1 con. HNO₃ and con. HCl

24. In the lac-operon system beta galactosidase is coded by
   A) a gene  B) bi gene  C) x gene  D) z gene

25. Which period of menstrual cycle is called risky period of conception?
   A) 3rd to 7th day  B) 7th to 13th day  C) 10th to 17th day  D) 15th to 25th day

26. Which of the following is not a vestigial structure in homo sapiens?
   A) 3rd molar  B) epiglottis
   C) plica semilunaris  D) pyramidalis muscles

27. The unit of focal power of lense is
   A) Watt  B) Horse power  C) Diop tre  D) Candella

28. The best material for solar cell among the following is
   A) Ge  B) CdSe  C) GaAF  D) CdS

29. The class of fungi known as Imperfect fungi
   A) ascomycetes  B) phycocyanin
   C) duteromycetes  D) basidiomycetes

30. Identify the substage of meiosis, in which crossing over is occurring
   A) leptotene  B) zygotene
   C) pachytene  D) diplotene
31. Who is the present Director General of UNESCO?
   A) Margaret Chan  B) Irina Bokova  C) Jim Young Kim  D) Jens Stolten Berg

32. Which country will host the under 17 Football World Cup of 2017?
   A) Brazil  B) Sri Lanka  C) India  D) New Zealand

33. September 16 is observed as
   A) International Day for the Preservation of Ozone
   B) International Day of Democracy
   C) International Day of Peace
   D) International Day of Charity

34. Mahabaleswar sail got “Saraswathi Samman” in 2016 for his book
   A) Hawthan  B) The Golden House
   C) Brothers  D) Age of Anger

35. The Sardar Sarovar Dam which is inaugurated recently is in ___________ Indian State.
   A) Karnataka  B) Goa  C) Gujarat  D) Rajastan

36. Name the present Defence Minister of India
    A) Dr. Harsh Vardhan  B) Sushma Swaraj
    C) Uma Bharathi  D) Nirmala Sitharaman

37. Who is the Vice-Chairman of ‘NITI AYOG’?
    A) Dr. Vinod Paul  B) Dr. Rajiv Kumar  C) Rajiv Bonsal  D) Prasoor Joshi

38. The 9th edition of BRICS Summit is held at
    A) Thimpu  B) Karachi  C) Delhi  D) Xiamen

39. Who among the following is a winner of Nobel Prize for medicine of 2017?
    A) Michael Rosbash  B) Hassan Rouhahi
    C) Peter Thomson  D) Paul Kagame

40. Name the recently Elected President of Singapore who is also the First Female President of Singapore.
    A) Angelena Merkel  B) Eman Abdul Atti
    C) Halimah Yacob  D) Ruth Katherina Martha Plau
41. Who was the Registrar General and Census Commissioner of India for 2011 Census?
   A) C.Chandramauli   B) T.N. Sheshan
   C) C. Sukumar Sen   D) Vinod Mehta

42. Which river was known as the sorrow of Bengal?
   A) Hooghly   B) Padma
   C) Jalangi   D) Damodar

43. Which is the first State in India to set up a ‘Happiness Department’?
   A) Uttar Pradesh   B) Madhya Pradesh
   C) Haryana   D) West Bengal

44. In which State the famous Ajanta Caves are located?
   A) Madhya Pradesh   B) Rajasthan
   C) Maharashtra   D) Gujarat

45. Who is the CEO of NITI Aayog?
   A) V.K. Saraswat   B) Amitabh Kanth
   C) Ramesh Chand   D) Vivek Debroy

46. Who was the First Viceroy of British India?
   A) Lord Rippon   B) Lord Dalhousie
   C) Lord Canning   D) Lord Curzon

47. Name the Prime Minister who announced the Communal Award in August 1932.
   A) Harold Macmillian   B) Winston Churchill
   C) Clement Attlee   D) Ramsay Mac Donald
48. Who remained as President of Indian National Congress from 1940 to 1945?
   A) Maulana Abdul Kalam Azad  B) Dr. Rajendra Prasad
   C) J.B.Kripalani  D) Subhash Chandra Bose

49. Who gave the slogan ‘go back to the Vedas’?
   A) Raja Ram Mohan Roy
   B) Swami Vivekananda
   C) Swami Dayananda Saraswathi
   D) Mrs. Annie Basant

50. Who was the author of ‘Tuhfat-ul-Muwah-hidin’ (Gift to Monotheists)?
   A) Sir Syed Ahammed Khan  B) Raja Ram Mohan Roy
   C) Swami Vivekananda  D) Maulana Abdul Kalam Azad

51. On the banks of which river, Kalady, the birth place of Sankaracharya is situated?
   A) Bharatappuzha  B) Periyar
   C) Pamba  D) Korappuzha

52. Which is the First National Park in Kerala?
   A) Iravikulam  B) Silent Valley
   C) Mathikettan  D) Periyar

53. Which District in Kerala shares its borders with both Karnataka and Tamil Nadu?
   A) Palakkad  B) Kannur
   C) Kozhikode  D) Wayanad

54. Which is the smallest District in Kerala?
   A) Kasaragod  B) Pathanamthitta
   C) Alappuzha  D) Eranakulam
55. Which was the earliest European fort to be built in India?
   A) Fort William  
   B) Fort St. George  
   C) Fort Angelo  
   D) Fort Manuel

56. Who said “Whatever may be the religion, it is enough if man becomes good”?
   A) Sri Narayana Guru  
   B) V.T. Bhattatirippad  
   C) Ayyankali  
   D) K. Kelappan

57. Who was the founder of ‘Yoga Kshema Sabha’?
   A) Vagbhatananda  
   B) Brahmananda Sivayogi  
   C) V.T. Bhattatirippad  
   D) Ayya Guru

58. Who was the first lower caste’s representative in Travancore Legislative Assembly?
   A) Sri Narayana Guru  
   B) Ayyankali  
   C) A.Ayyappan  
   D) Dr. Palpu

59. Which event was hailed by Gandhiji as a ‘Miracle of modern times’?
   A) Vaikkom Satyagraha  
   B) Aruvippuram Pratishta  
   C) Guruvayur Satyagraha  
   D) Temple Entry Proclamation

60. Who was the editor of ‘Mitavadi’ published from Calicut?
   A) C. Krishnan  
   B) T.K. Madhavan  
   C) K. Kelappan  
   D) Ramakrishna Pillai
61. “This preamble embodies what is the desire of every member of the House that this Constitution should have its root, its authority, its sovereignty from the people”. Who said this on the floor of Constituent Assembly in 1949?
   A) Jawaharlal Nehru  B) Dr. Rajendra Prasad
   C) Dr. B.R. Ambedkar  D) Rajagopalachari

62. In which case the Supreme Court of India introduced the concept of “Basic Structure of the Constitution”?
   A) Kesavananda Bharati V State of Kerala
   B) Minervamill V Union of India
   C) Karimbil Kunhi Konan V State of Kerala
   D) Golaknath V State of Punjab

63. The Union Legislature in India consists of
   A) Rajya Sabha and Lok Sabha
   B) Rajya Sabha, Lok Sabha and Council of Ministers
   C) Rajya Sabha, Lok Sabha and Vice President
   D) Rajya Sabha, Lok Sabha and the President

64. As per Article 148 of the Indian Constitution the financial watch dog of the Parliament in matters of exercising vigilance over the expenditure of public money sanctioned is
   A) Chairman, Public Accounts Committee
   B) Comptroller and Auditor General
   C) Chairman, Finance Commission
   D) Union Finance Minister

65. Who called the Indian Constitution as “Lawyers Paradise”?
   A) Prof. Granville Austin
   B) Prof. Albert Venn Dicey
   C) Sir Ivor Jennings
   D) Dr. K.M. Munshi
66. Who described Directive Principles of State Policy as a “manifesto of aims and aspirations”?
   A) Prof. K.C. Wheare
   B) Prof. K.T. Shah
   C) B.N. Rau
   D) K.M. Panikar

67. Which Article of the Indian Constitution grants immunity to all laws included in IX Schedule?
   A) Article 30A
   B) Article 31B
   C) Article 43B
   D) Article 31D

68. “Governor has no function to which he is required to exercise either his discretion or his individual judgement. According to the principles of the Constitution, he is required to follow the advice of his Ministry in all matters . . . . then it seems to me that the question whether he is elected or appointed is a wholly immaterial one” who said this?
   A) K.M. Munshi
   B) Shri. Alladi Krishnaswami Ayyar
   C) Shri. Gopalswami Ayyangar
   D) Dr. B.R. Ambedkar

69. Which one of the following body is not a Constitutional one?
   A) National Human Right Commission
   B) Union Public Service Commission
   C) Finance Commission
   D) Election Commission

70. Who is the Chairman of Human Rights Commission of India?
   A) Justice Kurian Joseph
   B) Justice Cyriac Joseph
   C) Justice K.G. Balakrishnan
   D) Justice H.L. Dattu
71. This is my book, _____ is on the table.
   A) yours       B) your’s       C) your       D) yours’

72. Some people do not like _____ milk.
   A) an          B) a           C) the        D) no article

73. Select the antonym for the italicised word in the sentence.
   The proposal got the concurrence from the UGC within a short period.
   A) opposition  B) disapproval
   C) denunciation D) discourage

74. Choose the correct one word for the phrase given below:
   Play games of chance for money, especially for high stakes
   A) gamble       B) casino       C) variegate   D) usury

75. How many newspapers do you subscribe _____?
   A) to          B) for          C) with       D) in

76. We all look forward to _____ a picnic in the park.
   A) have        B) have had     C) having     D) be having

77. She seldom phones me, ____?
   A) isn’t she?   B) does she?    C) is she?     D) doesn’t she?

78. Rani is the ________ of all the girls in the school.
   A) taller       B) tall        C) tallest     D) more tall

79. Sheena ________ visit her uncle when he was here.
   A) will         B) ought to     C) can        D) used to

80. Choose the correct sentence.
   A) The one thing about tolerating artists is disturbed while working.
   B) The one thing that artists can’t tolerate is being disturbed while at work.
   C) Tolerating artists while working is a disturbing thing.
   D) The one thing that artists don’t tolerate is being disturbed while working.
81. Sthreesakthi is the web portal of
   A) Vanitha Commission         B) Abhayam
   C) Kudumbasree               D) National Commission for Women

82. Educational qualification to be eligible for Pradhan Manthri Rozgar Yojana is
   A) Matriculation or ITI      B) Graduation in Technology
   C) Any degree               D) 8th standard

83. Which of the following Schemes are amalgamated in Sampoorna Grameen Rozgar Yojana?
   A) IRDP + TRYSEM              B) SGSY + SJSRY
   C) EAS + JGSY                D) None of these

84. Which of the following come under the community structure for the rural side under the
    Kudumbasree Scheme?
   A) Neighbourhood groups      B) Area Development Societies
   C) Community                D) All the above

85. The Scheme of Swavalamban related to
   A) Women Security            B) Unorganized Sector
   C) Food Security             D) Child Development

86. HRIDAY (Heritage City Development and Augmentation Yojana) was launched on
   A) 21 January 2015           B) 24 May 2016
   C) 22 January 2015           D) 25 September 2001

87. Beti Bachao Beti Padhao Scheme was launched by Indian Government in
   A) 2016                    B) 2015        C) 2014        D) 2000

88. What was the annual requirement of food grains for Antyodaya families?
   A) 30 lakh tones            B) 35 lakh tones
   C) 40 lakh tones            D) 45 lakh tones

89. The main objective of the Mahila Samrithi Yojana was to empower the
    A) Urban Women              B) Rural Women
    C) Tribal Women             D) Uneducated

90. The main goal of the Swatch Bharath Abhiyan is to clean India by
    A) 2020                    B) 2022
    C) 2019                    D) 2018
91. Which of the following is not an operating system?
   A) Microsoft Windows  B) Linux
   C) Gimp  D) DOS

92. Who among the following is the founder of World Wide Web Consortium?
   A) Alan Turing  B) Larry Page
   C) Bill Gates  D) Tim Berners-Lee

93. 1,024 Megabytes is equivalent to
   A) 1 Gigabyte  B) 1 Terabyte
   C) 1 Kilobyte  D) 1 Petabyte

94. Who among the following founded The Free Software Foundation?
   A) Richard Stallman  B) Linus Torvalds
   C) Dennis Ritchie  D) Donald E Knuth

95. Which one of the following is the fastest memory inside a computer?
   A) Cache memory  B) RAM
   C) Secondary memory  D) Register memory

96. Which of the following is not an input device of a computer system?
   A) Keyboard  B) Mouse
   C) Printer  D) Microphone

97. Which among the following is the agency designated to respond to incidents related to computer security in India as part of the Information Technology (Amendment) Act, 2008?
   A) CERT-In  B) NCB  C) NIA  D) CBI

98. Which of the following is used as a language for designing web pages?
   A) HTTP  B) HTML  C) SSL  D) SMTP

99. In binary number system, decimal number 16 is represented as ____
   A) 01011  B) 01111  C) 11111  D) 10000

100. The parent company of Google founded in 2015 by the owners of Google is
    A) Amazon  B) Alphabet Inc.
    C) Netflix  D) SAP