Class: X
Date: 26/11/2022

Marks:100
Time: 2 hrs

GENERAL INSTRUCTIONS:

Read the instructions carefully before answering
1. Please fill up your Roll No. and class in the box provided on the OMR sheet.
2. This question booklet contains 50 questions and 5 Tie Breaker questions. All questions including 'Tie Breaker Questions' are mandatory. Tie Breaker questions will be evaluated only in case of a Tie.
3. Each question carries 2 marks.
4. Each question has 4 answer choices a,b,c,d.
5. For each question, select the best/correct option and darken the bubble completely against the corresponding question in the OMR sheet provided.
6. Use a blue/black ball point pen to darken the bubble.
7. Darken only one bubble against each question.
8. There will be no negative marking.

Choose the correct answer from the options given.

1. A large number of people _____ to buy cars.
    a) want   b) wants   c) are wanting   d) is wanting

2. Select the antonym of '**boisterous**'.
    a) lively   b) exuberant   c) restrained   d) active

3. "I am famished. Do you have anything in store?"
    Which word can be used instead of '**famished**' in this sentence ?
    a) Glut   b) jaded   c) satiated   d) starved

4. I've got a promotion at work, but all John did was make a joke about it. He has a real
    _____
    a) chip on his shoulder   b) fly off the handle
    c) bent out of shape   d) drop in the ocean

5. 'All the world's a stage, and all the men and women merely players.' Identify the poetic device in the given line.
    a) Enjambment   b) Simile   c) Personification   d) Metaphor

6. Neither of the two boys _____ scored well.

    a) have   b) has   c) has been   d) are

7. "I was sleeping when Julie called" Sam said. (Change into indirect speech)
    a) Sam said that he was sleeping when Julie called.
    b) Sam said that he has been sleeping when Julie had called.
    c) Sam said that he had been sleeping when Julie had called.
    d) Sam said that he will have been sleeping when Julie had called.

8. An AP consists of 97terms. If its 49th term is 'm', then sum of all the terms of this AP is
   a) 49m   b) 97m   c) 146m   d) 152m

9. The value of $\sqrt{6 + \sqrt{6 + \sqrt{6 + \ldots\ldots}}}$ is

   a) 4   b) 3   c) -2   d) 3.5

10. Two numbers 'a' and 'b' are selected successively without replacement in that order from the integers 1 to 10. The probability that $\frac{a}{b}$ is an integer, is
    a) $\frac{17}{45}$ b) $\frac{1}{5}$ c) $\frac{17}{90}$ d) $\frac{8}{45}$

11. Two poles are 'a' metres apart and the height of one is double of the other. If from the middle point of the line joining their feet an observer finds the angular elevations of their tops to be complementary, then the height of the smaller pole is
    a) $\frac{a}{\sqrt{2}}$ m   b) 2a m   c) $\frac{a}{2\sqrt{2}}$ m   d) $\sqrt{2}$ a m

12. If $1 + sin^2 \propto = 3 \, sin \propto cos \, cos \propto$, then the values of $cot \propto$ are
    a) 1, 2   b) -1, 1   c) 0, 1   d) -1, -1

13. If $\triangle ABC \sim \triangle DEF$ such that DE=3 cm, EF=2 cm, DF=2.5 cm, BC=4 cm, then perimeter of $\triangle ABC$ is ---

    a)18 cm   b)20 cm   c)12 cm   d)15 cm

14. If radii of two concentric circles are 4 cm and 5 cm, then the length of each chord of one circle which is tangent to the other circle is -----------

    a) 3 cm   b) 6 cm   c) 9 cm   d)1 cm

15. The largest number which divides 70 and 125, leaving remainders 5 and 8 respectively is

    a) 875   b) 65   c) 13   d) 1750

16. If 2 and ½ are the zeroes of px^2+5x+r then

    a) P = 2, r = -2   (b) P = r = 2   (c) P = r =1   (d) P = r = -2

17. What would happen to the person if cerebellum of his brain is damaged?

    a) He will lose his memory power
    b) He will not be able to swallow food properly
    c) He will be unable to coordinate and stand properly
    d) He will lose his powers of vision and hearing

18. The chemical formula of Plaster of Paris is

    a) Calcium Sulphate [$CaSO_4$]   b) Calcium Sulphate Hemihydrate [$CaSO_4 \, ½H_2O$]

    c) Barium Sulphate [$BaSO_4$]   d) None of these

19. The strength of a magnetic field of magnet increases when

   a) The number of magnetic lines of forces passing through a given area increases
   b) Strength of the pole increases
   c) Distance between the magnetic pole increases
   d) Both (1) and (2)

20. Two wires of the same material have the same length but their radii are the ratio of 5:3. They are combined in series, where the resistance of the thicker wire is 12Ω. What will be the total resistance of the combination?

   a) 40Ω　　　b) 12Ω　　　c) 32Ω　　　d) 20Ω

21. Which among the given acid does not give hydrogen gas on reacting with a metal

   (except Mn and Mg) ?
   a) H_2SO_4　　　b) HNO_3　　　c) HCL　　　d) H_2CO_3

22. Which among the following is not the function of testes at puberty?
   (i) Formation of germ cells　　　(ii) Secretion of testosterone
   (iii) Development of placenta　　　(iv) Secretion of estrogen

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

23. When white light enters a glass prism from air, the angle of deviation is minimum for

   a) blue light　　　b) yellow light　　　c) violet light　　　d) red light

24. A student puts one big iron nail each in four test tubes containing solutions of zinc sulphate, aluminium sulphate, copper sulphate and iron sulphate. A reddish brown coating was observed only on the surface of iron nail which was put in the solution of

   a) zinc sulphate　　　b) iron sulphate　　　c) copper sulphate　　　d) aluminium sulphate

25. In the excretory system of human beings, some substances in the initial filtrate such as glucose, amino acids, salts and water are selectively reabsorbed in
   a) Urethra　　　b) Nephron　　　c) Ureter　　　d) Urinary bladder

26. Who initiated the Bhoodan -Gramdan movement in India?

   a) Shri Rama Chandra Reddy　b) Vinoba Bhave　c) Mahatma Gandhi　d) Jawahar Lal Nehru

27. Laws concerning family matters such as marriage, divorce, adoption etc. are known as _____

   a) Family laws　　　b) Constitutional Laws　　　c) Criminal Laws　　　d) Civil Laws

28. The Chipko Movement to protect the forest cover was started by _____

   a) Sunderlal Bahuguna　　　　　　　b) Dr Anil Agarwal of CSE
   c) DrAruna Roy of Kisan Mazdur Vikas　　　d) Medha Patkar

29. Which of the following agreements gave reserved seats to the 'Depressed classes' in provincial and central legislative councils?

   a) Lucknow Pact　　　b) Gandhi Irwin Pact　　　c) Poona Pact　　　d) Mumbai pact

30. Kerala has low Infant Mortality Rate because:
    a) it has good climatic condition
    b) it has adequate infrastructure
    c) it has adequate provision of basic health and educational facilities
    d) it has poor net attendance ratio

31. The finest ore of iron with 70% iron content is
    a) Magnetite   b) Hematite   c) Limonite   d) Siderite

32. Which was the first newspaper to be published in 1780?
    a) Amrit Bazar Patrika   b) The Calcutta Chronicle
    c) Bengal Gazette   d) Calcutta Gazette

33. Banks provide a higher rate of interest on which of the following accounts?
    a) Savings Account   b) Current Account
    c) Fixed deposit for long period   d) Fixed deposit for very short period

34. The famous Italian Revolutionary Giuseppe Mazzini was born in _____ in 1807.

    a) Turin   b) Rome   c) Genoa   d) Atlanta

35. Pick out the state which enjoys special powers under Article 371 of the Constitution of India.
    a) Rajasthan   b) Nagaland   c) Himachal Pradesh   d)Jharkhand

36. Which of the following topic received the 2022 Nobel Prize in Physics ?
    a) Understanding of complex systems b) Entangled photons
    c) Black hole formation   d) Evolution of the universe

37. Which country's national football team is nicknamed- "The Three Lions"?
    a) Argentina   b) Italy   c) Germany   d) England

38. The 'Azadi ka Amrit Mahotsav' celebrations were flagged off from which venue?

    a) Statue of Unity b) Sabarmati Ashram   c) Raj Ghat   d) Shakti Sthal

39. Which state of India is known as the 'Silicon state'?
    a)Uttarakhand   b) Uttar Pradesh   c) Jharkhand   d)Karnataka

40. A is B's sister. C is B's mother. D is C's father. E is D's mother. Then, how is A related to D?

    a) Grandmother   b) Grand mother   c) Daughter   d) Granddaughter

41. The sum of present ages of a father and his son is 60 years. 6 years ago, the father's age was five times the age of the son. After six year, son's age will be
    a) 20 years b) 12 years c) 14 years d) 18 years

42. 42. Deepak has Rs. 480 in the denominations of one rupee notes, five rupee notes and 10 rupee notes. The number of each denomination is equal. What is the total number of notes he has?
    a) 45 b) 90 c) 60 d) 75

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43. If there was Monday on Jan 1, 1992, then which day was there on Jan 1, 1993?
   a) Monday b) Wednesday c) Thursday d) Friday

44. The angle between the minute hand and the hour hand of a clock when the time is 8:30
   a) 80 Degrees b) 75 Degrees c) 60 Degrees d) 105 Degrees

45. In India drug abuse is a serious issue because

   a) Law of drugs is not strictly prohibited
   b) Young people consider drug abuse a source of enjoyment and entertainment
   c) Drug abuse will affect the health of an individual
   d) Education system is not sensitizing harmful effect of drug abuse

46. Statement: Children should be prevented completely from watching Television.
   Choose the correct argument from the arguments given below.
   a) We get vital information regarding education through television
   b) It hampers the study of children
   c) Young children are misguided by certain programmes featuring sex and violence
   d) This is the only way to educate masses

47. Statement: Should all the annual examinations up to Std V be abolished.
   Arguments:
   (I) Yes. The young students should not be burdened with such examinations which hampers their natural growth.
   (II) No. The students will not study seriously as they will get automatic promotion to the next class and this will affect them in future.
   a) Only Argument 1 is strong.
   b) Only Argument II is strong
   c) Both I and II are strong
   d) Neither I nor II is strong

48. Statement: Seven days without exercise makes one weak.
   Interpretations: i. All healthy people do exercise daily
                    ii. Only exercise makes you healthy
   a) Only i follows
   b) Only ii follows
   c) Both i and ii follows
   d) Neither i nor ii follows

49. Statement: According to 2001 census the male literacy rate is 75.26% and female literacy rate is 53.67%. According to 2011 census, female literacy rate is 65.46%, where the male literacy rate is 82.14%
   Interpretations:
   I. Even though there is an improvement in the percentage of literacy, still female literacy lays behind male literacy.
   II. By 2011, the female literacy rate becomes better than the male literacy rate in 2001.
   a) Only i follows
   b) Only ii follows
   c) Both i and ii follows
   d) Neither i nor ii follows

50. Statements: All windows are doors

   No door is wall

   Conclusions: I. No window is wall

   II. No wall is door

   a) If only conclusion 1 follows
   b) If only conclusion II follows
   c) If either I or II follows
   d) Neither I nor II follows

TIE - BREAKER

51. Unwilling to admit that they had been in error, the researchers tried to_____their case with more data, obtained from dubious sources.
   a) absolve   b) dispute   c) ascertain   d) buttress

52. If the sum of two numbers is 1215 and their HCF is 81, then the possible number of pairs of such numbers is:
   a) 2   b) 3   c) 4   d) 5

53. Two elements X and Y react together to give a compound with a high melting point. The compound is soluble in water. The elements X and Y are more likely to be

   a) Carbon and Hydrogen   b) Lead and Iodine
   c) Potassium and Chlorine   d) Carbon and Sulphur

54. Who set up the 'Oudh Kisan Sabha'?
   a) Alluri Sitaram Raju
   b) Jawahar Lal Nehru and Baba Ramchandra
   c) Jawaharlal Nehru and Shaukat Ali
   d) Mahatma Gandhi

55. Which day is known as World Pneumonia Day?
   a) December 21   b) March 7   c) September 3   d) November 12

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