Duration : 60 min. **Maximum Marks : 180**
Class : 7th **Subject : SCIENCE**

International Talent Search Examination - 2023-24

अंतर्राष्ट्रीय प्रतिभा खोज परीक्षा - २०२३-२४

Organized by

Savitri Skill Development Institute, Training Partner with
Ministry of Micro Small & Medium Enterprises (MSME), Govt. of India.

TEST BOOKLET

Name : .....

Class : ..... School: .....

Father's Name : ..... Father's Occupation : .....

Mother's Name : ..... Mother's Occupation : .....

Categories : Gen ☐ OBC ☐ SC ☐ ST ☐

Correspondence Address :.....

Date of Birth : ☐☐ ☐☐ ☐☐☐☐

Father's Contact No : ☐☐☐☐☐☐☐☐☐☐

Home/Mother's Contact No. : ☐☐☐☐☐☐☐☐☐☐

WhatsApp No. : ☐☐☐☐☐☐☐☐☐☐

Basic Instructions:

i. Ensure that your personal data has been entered correctly.
ii. Immediately after opening the test booklet verify that all the pages are printed properly and are in order. If there is a problem with your test booklet, immediately inform the invigilator. You will provided with the replacement.
iii. All questions in are compulsory.
iv. For every correct answer you will be awarded with 4 marks and for all incorrect answer 1 mark will be deducted.
v. Directions for answering the questions are given. Read those directions carefully and answer the question by circling the bubble in the OMR Sheet Provided to you. Test booklet/OMR Sheet will be submitted at the end of the examination.
vi. Follow the instructions given by the invigilator. Students found violating the instructions will be disqualified.
vii. Rough work can be done separately or on the Question paper.
viii. Please fill the bubbles in OMR sheet with Blue or Black pen only.
ix. Do not tear the question paper or OMR sheet else you will be disqualified in the examination.

CLASS-7 (SCIENCE)

1. Air moving gently is called:
(A) storm (B) Kal-Baisakhi (C) breeze (D) all of these

2. Which essential part of an electric circuit is used to make or break an electric circuit?
(A) Switch (B) Bulb (C) Plastic cover (D) All of these

3. A storm that develops over the sea is called
(A) typhoons (B) cyclones (C) hurricanes (D) all of these

4. 57°C = _____ K (Fill the correct option in the blank).
(A) 273.15 (B) 330.15 (C) 216.15 (D) 293.15

5. If a current of 0.5 Ampere flows in a circuit, how much charges passes through a point in the circuit in 2 minutes?
(A) 5 coulomb (B) 50 coulomb (C) 60 coulomb (D) 120 coulomb

6. Choose the correct statement(s) from the following:
(I) Unit of emf is volt.
(II) Emf of a cell is its potential difference when current is not drawn from it.
(A) only (I) is correct (B) only (II) is correct (C) both (I) and (II) are correct (D) neither (I) nor (II) are correct.

7. The temperature of a body is 95°F. What will be its temperature in Kelvin?
(A) 368.15 K (B) 308.15 K (C) 95.15 K (D) 300.15 K

8. On which of the following factor(s) resistance of a material depends?
(A) Thickness (B) Length (C) Nature of materials (D) All of these

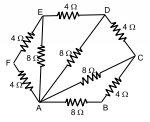
9. When 900 Joule of heat is given to 100 g sample of a metal, its temperature increased by 15°C. If specific heat of metal is p × 100 J $kg^{-1}°C^{-1}$ then find the value of p.
(A) 5 (B) 9 (C) 6 (D) 12

10. A solid ball of mass 3 kg at 10°C is dropped in $\frac{3}{2}$ kg of water at 70°C. The resulting temperature is 50°C. This means that specific heat of solid ball is (assume no heat loss in surroundings)
(A) one fourth of specific heat of water (B) twice of specific heat of water
(C) one half of specific heat of water (D) three times of specific heat of water

11. If a thermometer reads freezing point of water 10° and boiling point of water as 130°, how much this thermometer reads when the actual temperature is 50°C?
(A) 120° (B) 50° (C) 70° (D) 60°

12. Choose the correct statement(s) from the following:
I. Ampere second and coulomb both are the units of electric charge.
II. Ampere is the SI unit of electric current.
III. Voltmeter is used to measure potential difference between two given points in a circuit.
(A) only (I) and (II) are correct. (B) only (II) and (III) are correct.
(C) (I), (II) and (III) are correct (D) only (I) and (III) are correct.

13. In the figure below shows a network of resistances. The effective resistance between points A and B of network is
(A) (16/3) Ω
(B) 16 Ω
(C) 8 Ω
(D) 4 Ω



14. The conventional direction of flow of electric current in the external circuit is from:
(A) lower potential to higher potential (B) higher potential to lower potential
(C) positive terminal to negative terminal of battery (D) both (B) and (C)

15. Which of the following factor(s) determines the weather of a place on any particular day?
(A) Temperature (B) Humidity (C) Air pressure (D) All of these

16. Which of the following is a reversible change?
(A) The burning of wax (B) The melting of wax (C) The curding of milk (D) The cooking of food

17. Growing different types of crops in a piece of land, season after season is called

(A) Monoculture (B) Irrigation (C) Crop rotation (D) Manuring

18. Which of the following is not a mineral acid?
(A) HCl (B) H_2SO_4 (C) HNO_3 (D) CH_3COOH

19. Select the incorrect statement among the following:
(A) Eri silk is used to make shawls and quilts
(B) Selective breeding ensured good quality of wool
(C) Cocoons are chilled to separate the wool
(D) While sorting different textures of sheep's wool are obtained

20. The reaction of ammonium hydroxide and carbonic acid results in the formation of
(A) Ammonium chloride and water
(B) Ammonium carbonate and water
(C) Only ammonium carbonate
(D) Only water

21. Certain amount of water percolate at the rate of 10 mL/min in 50 min. Calculate the amount of water percolated?
(A) 500 mL (B) 50 mL (C) 100 mL (D) 150 mL

22. Which of the following is/are correctly matched.

	Column - I	Column – II
i)	Scouring	Cleaning sheared wool
ii)	Mulberry leaves	Reeling
iii)	Yak	Yield silk fibre
iv)	Cocoon	Food of silk worm

(A) i & ii (B) ii & iv (C) only i (D) only iv

23. What will happen to melting point of ice if some common salt is added?
(A) Melting point increases (B) Melting point decreases (C) No change in melting point (D) None of these

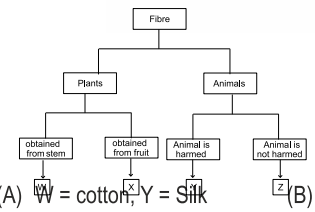
24. Carbonic acid, the primary agent of chemical weathering is produced by
(A) Carbon dioxide dissolving in rainwater
(B) Plant roots
(C) Bacteria that feed on plant and animal remains
(D) All of three

25. 100 mL of water was taken in a measuring cylinder. This water was added dropwise to 50 g of dry soil kept on filter paper in a funnel. When the water just started dripping from the soil in the funnel, the amount of water left in the measuring cylinder was found to be 80 mL. What percentage of water should absorbed by soil?
(A) 20% (B) 40% (C) 50% (D) 60%

26. Which of the following is not a base?
(A) NaOH (B) KOH (C) NH_4OH (D) C_2H_5OH

27. When electricity is passed through water then a change 'V' occurs which led to formation of two gases W & X. On the other hand, when water is heated strongly, then a change 'Y' takes place which leads to formation of a gas 'Z'.
Which of the following is/are correct
(i) V = Physical change, Y = Chemical change
(ii) W = H_2, X = O_2
(iii) V = Chemical change, Z = H_2O vapour
(iv) Y = Physical change, W = H_2O vapour
(A) (i) & (ii) (B) (ii) & (iii) (C) (iii) & (iv) (D) (ii) & (iv)

28. Refer the flow chart & select correct option



(A) W = cotton, Y = Silk (B) W = coir, Y = Silk (C) W = jute, Z = Wool (D) X = jute, Z = Wool

29. Anaerobic bacteria digest animal waste and produce biogas (change - A). The biogas is then burnt as fuel (change - B). The following statements related to these changes .Choose the correct one.
(A) Process-A is a chemical changed
(B) Process-B is a physical change
(C) Both processes A and B are chemical change
(D) None of these processes is a chemical changed

30. Magnesium ribbon is burnt completely. It leaves powder ash 'X'. Powder ash 'X' + Moist red litmus paper → Colour. In above sequence

identify powder ash 'X' and colour.
(A) Magnesium oxide, red (B) Magnesium oxide, blue (C) Magnesium hydroxide, red (D) Magnesium hydroxide, blue

31. Digestion of food starts in:
(A) Stomach (B) Mouth (C) Small intestine (D) Food pipe

32. In plants, tiny pores through which CO_2 is taken in are called:
(A) Stomata (B) Chlorophyll (C) Cell (D) Petals

33. Haemoglobin is present in:
(A) WBC (B) Platelets (C) RBC (D) None of these

34. Identify X & Y with the help of following information given:
X – Stores Bile Juice
Y – Finger like projection to increase surface area for absorption
(A) X – Liver, Y – Pancreas (B) X – Liver, Y – Villi (C) X – Gall bladder, Y – Stomach (D) X – Gall bladder, Y – Villi

35. Which of the following cells gets activated when any foreign bacteria enters into the body?
(A) RBC (B) WBC (C) Platelets (D) All of these

36. Pulses are rich in:
(A) Carbohydrates (B) Proteins (C) Fat (D) Minerals

37. Largest gland in human body is:
(A) Salivery gland (B) Pancreas (C) Liver (D) Gall bladder

38. Urine is stored in:
(A) Kidney (B) Urinary bladder (C) Urethra (D) Ureters

39. Animals are adapted to survive in the conditions in which they live. Animals living in very cold or very hot climate must possess special features to protect themselves against extreme cold or heat. Select the animals found in polar regions.
(A) Reindeers (B) Seals (C) Musk oxen (D) All of these

40. What are the most essential nutrients that a plant needs?
(A) Nitrogen, Ferrous, Manganese (B) Nitrogen, Phosphorus, Potassium
(C) Molybdenum, Boron, Chlorine (D) Zinc, Boron, Potassium

41. Chlorosis is yellowing of the leaves, caused due to the deficiency of ____.
(A) Zinc (B) Potassium (C) Manganese (D) All of the above

42. What is the function of bile in the digestive process?
(A) Breakdown of proteins (B) Emulsification of fats (C) Digestion of carbohydrates (D) Absorption of nutrients

43. Sucrose is converted into glucose & fructose by enzyme:
(A) chymotrypsin (B) invertase (C) pepsin (D) maltase

44. A milky liquid comprising fat droplets, which flows from the lacteals in the small intestine into the lymphatic system during the process of digestion.
Who I'm I?
(A) Chyme (B) Bolus (C) Chyle (D) None of these

45. Growing children need which constituent of food more than the elder persons?
(A) Vitamin (B) Fat (C) Mineral (D) Protein