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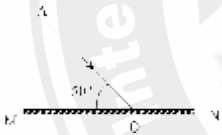
Home/Mother's Contact No. : ☐☐☐☐☐☐☐☐☐☐

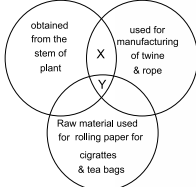WhatsApp No. : ☐☐☐☐☐☐☐☐☐☐

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-6 (SCIENCE)

1. What is the SI unit of length?
   (A) Metre (B) Centimetre (C) Kilometre (D) All of these

2. Which of the following is a natural source of light?
   (A) Electric bulb (B) Stars (C) Light emitting diode (D) None of these

3. Colour of shadow of blue colour object is
   (A) blue (B) black (C) white (D) none of these

4. Pinhole camera formed ____ and _____ image.
   (A) virtual, erect (B) virtual, inverted (C) real, erect (D) real, inverted

5. Which motion can be seen in the second pendulum?
   (A) Circular (B) Periodic (C) Oscillatory (D) Both (B) and (C)

6. Displacement covered by a body in unit time is known as _____.
   (A) velocity (B) speed (C) distance (D) none of these

7. $(10)-1$ cm = _____ metre

   (A) 100 (B) $\frac{1}{100}$ (C) 1000 (D) $\frac{1}{1000}$

8. Image formed by plane mirror is
   (A) inverted but laterally inverted
   (C) erect but laterally inverted
   (B) inverted but not laterally inverted
   (D) erect but not laterally inverted

9. Find the average speed of an object which covers first 80 km with speed of 20 km/h and rest 20 km with speed of 10 km/h.

   (A) $\frac{25}{3}$ km/h (B) 25 km/h (C) $\frac{50}{3}$ km/h (D) 50 km/h

10. In the given figure, A O is the incident ray on a reflecting surface MN. Find the angle of incidence

    (A) 40°
    (B) 140°
    (C) 55°
    (D) 100°

11. An object covered distance from A to B with 30 m/s and B to A with 20 m/s. Its average speed is equal to
    (A) 25 m/s (B) 24 m/s (C) 27 m/s (D) 20 m/s

12. Which of the following are non-luminous bodies?
    (I) Planet (ii) Moon (iii) Sun (iv) A bulb
    (A) (i) Only (B) (ii), (iii) and (iv) (C) (i) and (ii) (D) (iii) and (iv)

13. In a car race on straight road, car A takes a time 't' less than car B at the finish and passes finishing point with a speed 'v' more than that of car B. Both the cars start from rest and travel with constant acceleration a1 and a2 respectively, then v is equal to

    (A) $\left(\frac{a_1+a_2}{2}\right)t$ (B) $\sqrt{2a_1a_2}\,t$ (C) $\left(\frac{2a_1a_2}{a_1+a_2}\right)t$ (D) $\sqrt{a_1a_2}\,t$

14. An object covers $\frac{1}{4}$ of circular path. What will be the ratio of the distance and displacement of the object?

    (A) $2\sqrt{2}\pi$ (B) $\frac{\pi}{2\sqrt{2}}$ (C) $\frac{2\pi}{\sqrt{2}}$ (D) None of these

15. A person is in room whose ceiling and two adjacent walls are mirror. How many images are formed?
    (A) 7 (B) 3 (C) 4 (D) 8

16. Identify the material which is malleable and ductile?
    (A) Stone (B) Coal (C) Iron (D) Wood

17. Which group of fibres contain only plant fibres?
    (A) cotton, jute, silk (B) Cotton, jute, flax (C) silk, nylon, wool (D) wool, terylene, rayon

18. Winnowing cannot be done without_____.
   (A) Soil   (B) Water   (C) Wind   (D) Oxygen

19. $C_2H_6 + \dfrac{7}{2}O_2 \longrightarrow 2CO_2 + 3H_2O$

   Which of the following statements are true regarding the above chemical reaction?
   (A) C2H6 is the only reactant in the reaction   (B) CO2 is the only product in the reaction
   (C) C2H6 and O2 are the reactants   (D) None of these

20. Identify the INCORRECT statetement :
   (A) Textile chemistry deals with the study of clothing materials.
   (B) Technically thread is known as yarn.
   (C) Orlon is a synthetic fibre.
   (D) The suitable conditions for cultivation of cotton are black soil and cold climate.

21. Paper is a _____ material whereas copper is a _____ material.
   (A) malleable, ductile   (B) combustible, ductile   (C) inflammable, combustible   (D) combustible, soluble

22. Synthetic fibres have many advantages. One disadvantage of synthetic fibre is that
   (A) they are durable and easier to maintain   (B) they dry up fast and do not form wrinkles
   (C) they are not attacked by moths   (D) they do not absorb water and sweat

23. Select the incorrect statement
   (A) the solution in which no more amount of solute can be dissolved on raising the temperature is called super saturated solution
   (B) the process of filtration can be used to separate the solid components from liquids
   (C) the process of distillation used to separate solid-solid mixture
   (D) all of the above are correct

24. Lengthwise yarn in a woven cloth are called
   (A) warp   (B) weft   (C) knit   (D) none of these

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

|	Column – I	Column – II
(i)	Separation of cotton fibres from its seeds	Spinning
(ii)	Compression of raw cotton fibres into bundles	Bailing
(iii)	Making yarn from fibres	Ginning
(iv)	Retting out gummy skin of jute stem to separate fibres	Retting

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

26.

   (A) X = jute, Y = flax   (B) X = jute, Y = cotton   (C) X = cotton, Y = jute   (D) X = coir, Y = cotton

27. Expansion gaps are left in the railway tracks because these gaps accommodate the expansion of rails during hot weather without damaging the tracks. This process is an application of
   (i) Physical change   (ii) Expansion of metals on heating
   (iii) Contraction of metals on cooling   (iv) Chemical change
   (A) i & ii   (B) i, ii & iii   (C) ii, iii & iv   (D) ii & iv

28. Sedimentation and decantation is a method of separation suitable for
   (A) Solid in solid homogeneous mixture   (B) Liquid in liquid homogeneous mixture
   (C) Solid in liquid heterogenous mixture   (D) Solid in solid hetergeneous mixture

29. Amount of solute A, B, C & D is in 1500 g of Water at 25°C, 50oC and 75°c in their saturated solutions are given below:

	25°C	50°C	75°C
A	235 g	280 g	240 g
B	180 g	190 g	220 g
C	160 g	170 g	180 g
D	175 g	220 g	200 g

Arrange the following solutes in their increasing order of their amount of solutes that crystallizes out by cooling from 75 degree celsius to 25 degree celsius.

(A) ABDC   (B) ACDB   (C) CABD   (D) ACBD

30. Mixture of chalk powder, sugar and water can be separated by which of the following respective steps:
(A) filtration, evaporation   (B) distillation, filtration
(C) separating funnel, evaporation   (D) magnetic separation, evaporation

31. The ball and socket joint is present in:
(A) ankle   (B) skull   (C) knees   (D) shoulder

32. Another name of vertebral column is _____.
(A) Ribcage   (B) Backbone   (C) Cartilage   (D) Carpal

33. Which of the following(s) is/are true about water?
(A) Maintaining body temperature   (B) Help in absorbing nutrient from food
(C) Get rid-off waste through urine & sweat   (D) All of these

34. Which of the animal moves with just one large, disc shaped muscular foot?
(A) Earthworm   (B) Cockroach   (C) Snail   (D) Tortoise

35. The skeleton of cockroach is known as _____.
(A) Muscles   (B) Endoskeleton   (C) Cartilage   (D) Exoskeleton

36. Which of the following plant part is involved in absorption of water and minerals?
(A) Roots   (B) Stem   (C) Leaves   (D) Petiole

37. Pellagra is caused due to deficiency of _____.
(A) Vitamin A   (B) Vitamin B_{12} (C) Vitamin B_3 (D) Vitamin D

38. Overeating of food leads to _____.
(A) Obesity   (B) Deficiency disease   (C) Anemia   (D) Allergy

39. Figure contains two types of leaves and two types of roots. Recognise the correct pair with respect to leaf venations & root system.
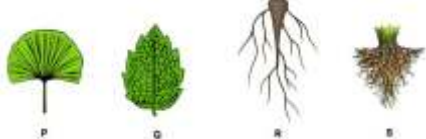
(A) P, R   (B) P, S   (C) Q, S   (D) None of these

40. Carrot, turnip & sweet potato are:
(A) Roots   (B) Stems   (C) Flowers   (D) Leaf

41. When soyabean is used for making rotis, it provides more ____ to the body.
(A) carbohydrates   (B) high in saturated fats   (C) proteins   (D) salt

42. When few drops of a solution are placed on corn, it turned the corn blue-black. What could be the solution?
(A) Vegetable oil   (B) Iodine solution   (C) Benedict's solution   (D) Nitrate solution

43. Which of the following given below is an imperfect joint?
(A) Ball & socket joint   (B) Suture   (C) Elbow joint   (D) Pubic symphysis

44. This fruit is a rich source of lycopene, contains 92% water by weight and pH of its pulp varies between 5 to 7. This fruit is likely to be:
(A) Lime   (B) Banana   (C) Apple   (D) Watermelon

45. Match Column-I with Column-II and select the correct option from the codes given below.

	Column-I		Column-II
(A)	Sternum	(i)	14
(B)	Ribs	(ii)	1
(C)	Hip bones	(iii)	24
(D)	Facial bones	(iv)	3

Match the correct option?
(A) A → (iv); B → (iii);C → (ii); D → (I);   (B) A → (i); B → (iii); C → (ii);D → (iv);
(C) A → (ii); B → (iii);C → (iv);D → (I);   (D) A → (ii); B → (I); C → (iii); D → (iv);