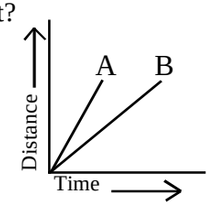
1. Which of the following groups of plants consist of insectivorous plants only?
   (A) Drosera, Coral root, Venus fly trap
   (B) Cuscata, Venus fly-trap, Nepenthes
   (C) Pitcher plant, Coral root, Venus fly-trap
   (D) Nepenthes, Drosera, Pitcher plant
2. In lichen
   (A) the algal partner manufactures food and is supplied to fungal partner.
   (B) the fungal partner manufactures food and is supplied to algal partner.
   (C) the algal partner provides protection to fungi.
   (D) none of the above
3. The starch solution turns iodine solution into
   (A) black (B) yellow
   (C) blue (D) red
4. Assertion: Abomasum is considered to be the true stomach in ruminants.
   Reason: Abomasum produces gastric juice.
   (A) Both assertion and reason are true. Reason is the correct explanation of assertion.
   (B) Both assertion and reason are true. Reason is not the correct explanation of assertion.
   (C) Assertion is true and reason is false.
   (D) Both assertion and reason are false.
5. The Llama belongs to the
   (A) goat family (B) sheep family
   (C) camel family (D) yak family
6. In biochip the sheep is injected with a special hormone and the fleece can be peeled off
   (A) after one week (B) after two weeks
   (C) after two and half weeks
   (D) after three weeks
7. Rampur bulshhair, an indian breed of sheep is found in
   (A) Rajasthan
   (B) Uttar Pradesh, Himachal Pradesh
   (C) Rajasthan,haryana ,Punjab
   (D) Jammu and Kashmir
8. The chemical name of Epsom salt is
   (A) magnesium carbonate
   (B) magnesium sulphate
   (C) Sodium hydrogen carbonate
   (D) potassium hydroxide
9. Antacid contains
   (A) acidic compounds
   (B) basic compounds
   (C) neutral compounds
   (D) both A and B
10. The chemical formula of alum is
    (A) $K_2SO_4Al_2(SO_4)_3$ .22 H_2O
    (B) $K_2SO_4Al_2(SO_4)_3$ .24 H_2O
    (C) $K_2SO_4Al_3(SO_4)_2$ .24 H_2O
    (D) $K_2(SO_4)_3Al_2(SO_4)_3$. 22 H_2O
11. In about 200ml of water two teaspoonful of copper sulphate is added with a few drops of dilute sulphuric acid. In this solution, an iron nail is dropped accidentally then the colour of the solution
    (A) becomes red
    (B) becomes violet
    (C) becomes green
    (D) remains unchanged
12. The compound formed when carbon dioxide is passed through lime water is
    (A) $Ca(OH)_2$ (B) $CaCO_3$
    (C) CaO (D) $Ca(HCO_3)_2$
13. Which of the following cannot affect the soil of a region?
    (A) Wind (B) Light
    (C) Temperature (D) none of the above

(A) Copper sulphate<common salt < ammonium chloride<sugar
(B) common salt<copper sulphate < ammonium chloride<sugar
(C)ammonium chloride<common salt < copper sulphate<sugar
(D) ammonium chloride<coppersulphate < common salt <sugar

38. Quinine is used in the treatment of
    (A) typhoid (B) cancer
    (C) diabetes (D) malaria
39. Which of the following can form real image?
    i)Concave mirror ii) convex mirror
    iii) concave lens iv) convex lens
    (A) i &ii (B) ii & iii
    (C) iii &iv (D) i & iv
40. What is the reason for the formation of spectrum when the sunlight passes through the prism?
    (A) White light is a mixture of seven colours.
    (B) Coloured light reflects af different angles in a glass medium.
    (C) The prism add colour to the white sunlight.
    (D) Because light travels at high speed.
41. An object is placed in front of a plane mirror at a distance of $2a^2$. Then the distance between the object and the image is
    (A) $2a^2$ (B) $3a^2$
    (C) $4a^2$ (D) $4a^4$
42. When a nail of 10 cm height is placed in front of a convex mirror, an image of height 2cm is formed. Which of the following size of the image is possible when the object is brought nearer to the mirror?
    (A) 4cm (B) 11cm
    (C) 12cm (D)14 cm
43. An electric bulb gives us light due to
    (A) heating effect of electric current
    (B) magnetic effect of current
    (C) chemical effect of current
    (D) none of the above
44. How can an electromagnet be made stronger?
    (A) By winding the coil around a steel core
    (B) By decreasing the number of turns of wire on the coil
    (C) By using a battery in the circuit
    (D) By increasing the strength of current passing through the circuit
45. 1 year is equal to
    (A) 3.15 x 10^{18}nano sec
    (B) 3.15 x 10^{16} nano sec
    (C) 3.15 x10^{14}nano sec
    (D) 3.15 x10^{9}nano sec
46. The amplitude of a simple pendulum is 15cm and its time period is 0.9second. If the amplitude of the simple pendulum is 20cm , the time period of the pendulum will be
    (A) 0.8 second (B) 0.9 second
    (C) 1.0second (D) 1.1 second
47. Distance time graphs of two vehicles are shown in the figure.Which of the following is the correct statement?



    (A) A is faster than B
    (B) B is faster than A
    (C) Both A and B have the same speed
    (D) B is two times faster than A
48. Which of the following changes caused by heat is irreversible ?
    (A) change in size and temperature
    (B) change in state
    (C) change in colour
    (D) change in substance

14. Choose the correct statement.
    (A) The percolation rate of a soil is directly proportional to the time taken.
    (B) The percolation rate of a soil is inversely proportional to the time taken.
    (C) The percolation rate of a soil is equal to the time taken.
    (D) The percolation rates of all types of soil are the same.
15. The Siberian cranes migrate
    (A) from cold to warm areas
    (B) from warm to cold areas
    (C) from cold to cold areas
    (D) both A and B
16. Assertion: Animals living in polar regions have developed many structural and functional modifications
    Reason: The temperature in this region goes down upto -37^{0}C in winter.
    (A) Both assertion and reason are true. Reason is the correct explanation of assertion.
    (B) Both assertion and reason are true. Reason is not the correct explanation of assertion.
    (C) Assertion is true and reason is false.
    (D) Both assertion and reason are false.
17. Kangaroo rat is active only in the
    (A) morning (B) evening
    (C) night (D) Both A and B
18. High speed wind always accompanies
    (A) increased air pressure
    (B) reduced air pressure
    (C) increasing and reducimg air pressure
    (D) none of the above.
19. A boy sees the wind spinning in anticlockwise while a girl sees the wind spinning in clockwise direction. The boy and the girl are respectively from
    (A) northern hemisphere and southern hemisphere
    (B) southern hemisphere and northern hemisphere
    (C) southern hemisphere
    (D) northern hemisphere
20. The whirling speed of Tornado may reach even
    (A) 300km/hr (B) 500km/hr
    (C) 800km/hr (D) 1000km/hr
21. An adult person breathes 153 times in 9 minutes . His breathing rate is
    (A) lower than the normal breathing rate.
    (B) higher than the normal breathing rate
    (C) the same with that of a normal adult
    (D) very much higher than the normal breathing rate.
22. The ratio of the percentage of carbon dioxide in the inhaled air to that in the exhaled air is
    (A) 1:21 (B) 1:70
    (C) 1:110 (D) 1:50
23. Assertion: The germinating seeds give out heat.
    Reason: The germinating seeds take in heat.
    (A) Both assertion and reason are true. Reason is the correct explanation of assertion.
    (B) Both assertion and reason are true. Reason is not the correct explanation of assertion.
    (C) Assertion is true and reason is false.
    (D) Both assertion and reason are false.
24. Red blood cells are circular biconcave discs of
    (A) 4-5 μm in radius
    (B) 3-4 μm in radius
    (C) 3-7 μ m in radius
    (D) 6-8 μ m in radius

25. Which of the following substance is carried by blood?
    (A) Oxygen (B) Carbon Dioxide
    (C) Both A and B (D) none of the above
26. Which of the following blood is said to be haemolymph ?
    (A) blood of earthworm
    (B) blood of cockroach
    (C) human blood
    (D) blood of snake
27. The percentage of urea in urine is
    (A) 3.5% (B) 3.5-5%
    (C) 2-2.5% (D) 4-6%
28. The ureters open into the
    (A) Kidneys (B) Urethra
    (C) Urinary bladder (D) sphincter
29. Glycosuria is usually seen in
    (A) cancer patient (B)diabetic patient
    (C) diarrhoea patient (D) ulcer patient
30. Fragmentation can be seen in
    (A) yeast (B) fucus
    (C) amoeba (D) paramecium
31. Match column A and column B.

ColumnA	ColumnB
i) papaya	a)unisexual flower
ii) petunia	b) bisexual flower
iii) rose	
iv)cucumber	

    (A) i ii iii iv (B) i ii iii iv
    a a b b a b a b
    (C) i ii iii iv (D) i ii iii iv
    a b b b a b b a
32. In cross pollination
    (A) Pollen grains are transferred from the stigma of one flower to the anther of another flower of the same species.
    (B) Pollen grains are transferred from the anther of one flower to the stigma of another flower of different plant of the same species.
    (C) Pollen grains are transferred from the anther of one flower to the stigma of another flower of different plant of different species.
    (D) pollen grains are transferred from the anther of the flower to the stigma of the same flower.
33. The male gamete is released
    (A) before the pollen tube reaches the ovule
    (B) once the pollen tube reaches the ovule
    (C) when the pollen tube reaches half the path between the stigma and the ovule
    (D) when the pollen tube reaches one third of the path between the stigma and the ovule.
34. The working principle of electric motor is
    (A) the interaction between a magnet and another magnet
    (B) the interaction between the electric current itself
    (C) the interaction between electric current and electrical energy
    (D) the interaction between magnet and electric current.
35. Water is called a universal solvent because
    (A) it is available everywhere.
    (B) its quantity is very large as compared with other solvent
    (C) it dissolves a wide variety of substanses
    (D) it can be mixed with any liquid.
36. When a cold drink bottle is opened, the dissolved gas is released making the drink fizz. The gas is
    (A) Oxygen (B) carbon dioxide
    (C) nitrogen (D) Hydrogen
37. Choose the correct sequence in the increasing order of solubilities of the substances at 25^{0}C.

49. Jackson took a sample of soil from his garden and mixed with water. When he dipped a blue litmus paper in the mixture, it turned red. By adding which of the following to the soil in his garden will he get a better plant growth?
    (A) Hydrochloric acid
    (B) Slaked lime
    (C) Water
    (D) salt
50. Which of the following statements is true about convection?
    (A) In solids, heat is transferred only by convection.
    (B) Convection can occur in cold liquids only.
    (C) Convection does not require medium for transmission.
    (D) Heat flows from the hot end to the cold end.

25thMVII
(SCIENCE)

Time Allowed 1 hour | Maximum Marks : 100

Read the following instructions carefully before you begin to answer the questions.

1. This booklet contains 50 questions in all.
2. All questions are compulsory and each question carries 2 marks.
3. Before you start to answer the questions you must check up this booklet and ensure that it contains all the pages 5 (Five) and see that no page is missing or repeated. If you find any defect in this Booklet, you must replace it immediately.
4. There will **NOT** be any negative marking for wrong answers.
5. You are required to fill the information on the answer sheet which you will get in the examination hall by **H.B. pencil or BALL point pen.**
6. **Answer Sheet** and **Question Paper** will be supplied in examination hall. After the test is over, you should hand over the answer sheet to the invigilator before leaving the room.
7. You should write your **Name, Roll No.,** carefully on the space provided in the answer sheet. Otherwise you will be awarded **ZERO** mark.
8. If you wish to change your answer, **ERASE** completely the darkened circle by using an **ERASER** and then blacken the new circle. If not erased completely, smudges will be left on the erased circle and the question will be read as having two answer and will be ignored for giving any credit.
9. Answer the questions as quickly and as carefully as you can. Some questions may be difficult and others easy. Do not spend too much time on any question.
10. You are not allowed to leave the examination hall until you are advised to do so by the invigilator.