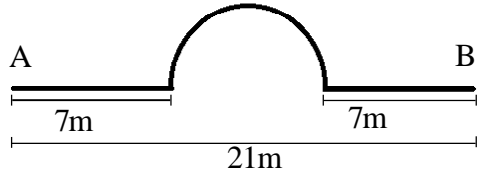


1. The sun rises from the east because the earth rotates from
 - (A) east to west.
 - (B) west to east.
 - (C) south to north.
 - (D) north to south.
2. Why is the LPG mixed with ethyl mercaptan?
 - (A) to help in the liquifaction of gas
 - (B) to decrease the volume of LPG
 - (C) to decrease the temperature of LPG
 - (D) to know the leakage of gas
3. What is the major factor which initiates migration?
 - (A) poaching
 - (B) diseases and parasites
 - (C) environmental pollution
 - (D) inter specific and intra specific struggle for food, territory, nest sites.
4. Hoolock gibbon and wild buffalo belong respectively to
 - (A) Endangered species and vulnerable species
 - (B) Vulnerable species and endangered species.
 - (C) vulnerable species and rare species
 - (D) Endangered species and rare species
5. The audible range of dogs is
 - (A) 40Hz to 60kHz
 - (B) 40Hz to 60,000kHz
 - (C) 40Hz to 70kHz
 - (D) 20Hz to 20,000Hz
6. In solutions, the electric current is conducted by ions because
 - (A) electrons can't move in solutions.
 - (B) the number of ions is very much greater than the number of electrons.
 - (C) free electrons are not available.
 - (D) free electrons stick to the ions.
7. How long is the sidereal month?
 - (A) 23.5 days
 - (B) 27.3 days
 - (C) 29.5 days
 - (D) 30 days
8. Choose the correct statement(s).
 - (A) Sliding friction is smaller than static friction.
 - (B) Sliding friction is greater than static friction.
 - (C) Sliding friction is equal to static friction.
 - (D) Both B and C
9. The weight of air in a column of height of the atmosphere and area 10cm x 10cm is as large as
 - (A) 10 kg
 - (B) 100 kg
 - (C) 1000 kg
 - (D) 500 kg
10. The function of fire extinguisher is to
 - (A) cut off the supply of air
 - (B) bring down the temperature of fuel.
 - (C) A or B
 - (D) (A or B) or (A and B)
11. Which hormone helps the body to fight stress?
 - (A) Hormone released from pituitary.
 - (B) Hormone released from pancrease.
 - (C) Hormone released from adrenal.
 - (D) Hormone released from thyroid.

33. Rayon is a
 - (A) 2
 - (B) 3
 - (C) 4
 - (D) 5
 - (A) fully synthetic fibre.
 - (B) fully natural fibre.
 - (C) A or B
 - (D) neither A nor B
34. 

A body moves from A to B in the given figure in five seconds. The difference between the velocity and the speed of the body is

 - (A) 0.5 m/s
 - (B) 0.8 m/s
 - (C) 0 m/s
 - (D) 5 m/s
35. If a particle of air undergoes 72,000 longitudinal vibrations in two minutes then the frequency of the wave is
 - (A) 36,000Hz
 - (B) 6000Hz
 - (C) 600Hz
 - (D) 720Hz
36. Which of the following can exert bouyant force?
 - i) solid ii) liquid iii) gas
 - (A) i and ii
 - (B) ii and iii
 - (C) i and iii
 - (D) i, ii and iii
37. The amount of heat produced when 1kg of a fuel of methane is completely burnt is
 - (A) 45000000 joules
 - (B) 55000 joules
 - (C) 50000 joules
 - (D) 50000000 joules
38. The order of electrical conductivities of four metals is given as: silver > copper > gold > aluminium. If bismuth is to be placed in the order, where is the position of bismuth?
 - (A) to the right of aluminium.
 - (B) to the left of silver.
 - (C) between copper and gold.
 - (D) between gold and aluminium.
39. Match column A and column B

Column A	Column B
a) citrus canker	i) fungus
b) rust of wheat	ii) bacteria
c) anthrax	iii) virus
d) measles	
(A) a b c d	(B) a b c d
i ii iii iii	iii i ii ii
(C) a b c d	(D) a b c d
ii i ii iii	i iii ii i
40. Cell sap is found in
 - (A) mitochondria
 - (B) chloroplast
 - (C) vacuole
 - (D) ribosome
41. Choose the ornamental fishes.
 - i) *Glyptothorax* ii) *Ctenopharyngodon idella* iii) *Hypophthalmichthyes molitrix* iv) *Acantopsis* v) *Hypophthalmichthyes nobilis*.
 - (A) i and iv
 - (B) iii and v
 - (C) ii, iii and v
 - (D) i, ii and iv
42. What are the nuclear particles?
 - i) electrons ii) protons iii) neutrons
 - (A) i and ii
 - (B) ii and iii
 - (C) i and iii
 - (D) i, ii and iii
43. The size of an earthquake depends on

22. Streptomycin, Anabaena, Nostoc, Tetracycline, Azotobacter, Erythromycin, Oscillatoria. The number of antibiotics is
(A) 2 (B) 3
(C) 4 (D) 5
23. The point of the origin of earthquake is called
(A) focus (B) epicenter
(C) zone (D) origin.
24. Where did the Bhopal Gas Tragedy occur?
(A) Maharashtra
(B) Uttar Pradesh
(C) Karnataka
(D) Madhya Pradesh
25. The Red Data Book was founded by
(A) UNEP (B) IUCN
(C) WWF (D) A and B
26. Entamoeba histolytica is a (i) parasite in the (ii) of human beings.
(A) (i) viral and (ii) stomach
(B) (i) protozoan and (ii) large intestine
(C) (i) bacterial and (ii) small intestine
(D) (i) fungal and (ii) large intestine
27. The force exerted on a surface which is in the form of an equilateral triangle of side 'a' m is 9.169N. Find the pressure exerted on the surface. (take $\sqrt{3} = 1.73$)
(A) $\frac{19.5}{a^2} N/m^2$ (B) $\frac{20.6}{a^2} N/m^2$
(C) $\frac{21.2}{a^2} N/m^2$ (D) $\frac{23}{a^2} N/m^2$
28. What determines the size of a cell?
(A) the function of the cell
(B) the size of the body of the animal or plant
(C) A and B (D) neither A nor B
29. Which planet has the least density?
(A) Mercury (B) Venus
(C) Mars (D) Saturn
30. What causes the depletion of ozone layer?
(A) Release of CO₂ in the atmosphere
(B) Release of SO₂ in the atmosphere
(C) Release of SPM in the atmosphere
(D) Release of CFC in the atmosphere
31. A male gamete fertilises an egg. What is the probability that the fertilised egg develops into a baby boy?
(A) 25% (B) 50%
(C) 75% (D) 100%
32. i) The LPG produces poisonous gas on combustion.
ii) The LPG is a colourless and odourless gas.
iii) The chemical name of butane is C₄H₁₀.
iv) Liquid petroleum gas was discovered in 1914.
v) High temperature and low pressure transformed the dead organisms into petroleum and natural gas.
vi) Coal is a better fuel than coke. How many statements are correct?

12. The hardest natural occurring substance is a
(A) metal (B) non metal
(C) metalloid
(D) good conductor of electricity
13. How many kinds of animals were involved in the original form of the Wildlife (Protection) Act, 1972?
(A) four (B) six
(C) ten (D) thirteen
14. A polymer contains
(A) the same type of monomers.
(B) different types of monomers.
(C) a single monomer
(D) A or B
15. In which medium does sound travel?
i) solid ii) liquid iii) gas
(A) iii only (B) ii and iii only
(C) i and iii only (D) i, ii and iii
16. Choose the correct statement(s).
(A) Speed has only magnitude.
(B) Speed has a direction.
(C) Both A and B
(D) Speed and velocity have the same formula.
17. Asteroids are found in between the orbits of
(A) Mars and Jupiter
(B) Jupiter and Saturn
(C) Saturn and Uranus
(D) Mercury and Venus
18. Choose the correct statements.
i) Sodium ions will move towards the anode.
ii) Sodium ions will move towards the cathode.
- iii) Chloride ions will move towards the anode.
iv) Chloride ions will move towards the cathode.
(A) i and iv (B) ii and iii
(C) ii and iv (D) i and iii
19. In a bee hive, the queen lays
(A) fertilized eggs
(B) unfertilized eggs
(C) Both A and B (D) A or B
20. An element X reacts with oxygen to form its oxide Y. When Y reacts with water it gives a product which changes blue litmus paper to red litmus paper. which one of the following compounds is the possible product?
(A) Mg(OH)₂ (B) CuSO₄
(C) H₂SO₃ (D) MgO
21. State whether the following statements are true or false.
i) The viruses measure 0.2-0.3 μm.
ii) The WBCs can't change its shape.
iii) The units of inheritance are found in the nucleus.
iv) Plastids are present in both the plant and animal cells.
v) Various chemical reactions take place in cytoplasm.
True=T and False=F
(A) i) T ii) T iii) F iv) F v) F
(B) i) T ii) F iii) T iv) F v) T
(C) i) F ii) F iii) T iv) F v) T
(D) i) F ii) T iii) T iv) T v) F

- (A) the size of the fault.
(B) the amount of slip on the fault.
(C) A or B
(D) A and B
44. What is the distance travelled by light in vacuum in two hours?
(A) 3.0×10^8 m/s
(B) 1.21×10^{10} m/s
(C) 7.24×10^{11} m/s
(D) 2.16×10^{12} m/s
45. If the angle between the incident ray and the plane mirror is 90° , the reflected angle is
(A) 0° (B) 45°
(C) 75° (D) 90°
46. An electroscope is used to detect whether a body is
(A) a good conductor or not.
(B) of high temperature or not.
(C) charged or not.
(D) giving out heat or not.
47. If A, B and C are metals, which displacement reaction is not possible? (Reactions are in order)
(A) $A + CuSO_4 \rightarrow A_x(SO_4)_y + Cu$
(B) $A_x(SO_4)_y + B \rightarrow B_x(SO_4)_y + A$
(C) $B_x(SO_4)_y + C \rightarrow C_x(SO_4)_y + B$
(D) $C_x(SO_4)_y + A \rightarrow A_x(SO_4)_y + C$
48. Mother is responsible for the sex of her child. It is a
(A) taboo (B) myth
(C) neither A nor B
(D) both (A) and (B)

49. Match the following.
- | column A | column B |
|-----------------------|----------------------|
| i) Avian pox | a) Bacterial disease |
| ii) Brooder Pneumonia | b) protozoan disease |
| iii) Fowl diarrhoea | c) viral disease |
| iv) Botulism | d) fungal disease |
- (A) i ii iii iv (B) i ii iii iv
d c a b d b c a
(C) i ii iii iv (D) i ii iii iv
c d b a b a d c
50. When light travels from a rarer medium to a denser medium, the speed of light
(A) decreases (B) increases
(C) does not change
(D) B and C

27th MVIII (SCIENCE)

Time Allowed 1 hour

Maximum Marks : 100

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

**CODE
B**

- This booklet contains 50 questions in all.
- All questions are compulsory and each question carries 2 marks.
- 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.
- There will **NOT** be any negative marking for wrong answers.
- 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**.
- 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.
- You should write your **Name, Roll No.**, carefully on the space provided in the answer sheet. Otherwise you will be awarded **ZERO** mark.
- 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.
- 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.
- You are not allowed to leave the examination hall until you are advised to do so by the invigilator.