

- 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.
- 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
- 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.
- Match the following.

column A	columnB
i) Avian pox	a) Bacterial disease
ii) Brooder	b) protozoan disease
	Pneumonia
iii) Fowl	c) viral disease
	diarrhoea
iv) Botulism	d) fungal disease

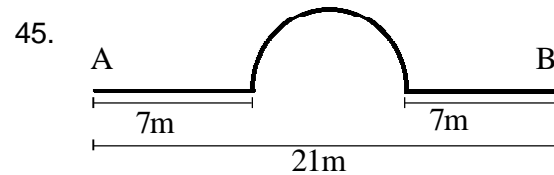
(A) i ii iii iv	(B) i ii iii iv
d c a b	d b c a
(C) i ii iii iv	(D) i ii iii iv
c d b a	b a d c
- A polymer contains
(A) the same type of monomers.
(B) different types of monomers.
(C) a single monomer
(D) A or B
- Hoolock gibbon and wild buffalo belong respectively to
(A) Endangered species and vulnerable species
(B) Vulnerable species and endangered species.
(C) vulnerable species and rare species
(D) Endangered species and rare species
- 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.
- The point of the origin of earthquake is called
(A) focus (B) epicenter
(C) zone (D) origin.
- Rayon is a
(A) fully synthetic fibre.
(B) fully natural fibre.
(C) A or B
(D) neither A nor B
- 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.

- 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
- 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
 - Streptomycin, Anabaena, Nostoc, Tetracycline, Azotobacter, Erythromycin, Oscillatoria.
The number of antibiotics is
(A) 2 (B) 3
(C) 4 (D) 5
 - i) The LPG produces poisonous gas on combustion.
ii) The LPG is a colourless and odourless gas.
iii) The chemical name of butane is C_4H_{10} .
iv) Liquid petroleum gas was discovered in 1914.
v) High temperature and low pressure transformed the dead organisms into petrolium and natural gas.
vi) Coal is a better fuel than coke.
How many statements are correct?
(A) 2 (B) 3
(C) 4 (D) 5
 - 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) $CuSO_4$
(C) H_2SO_3 (D) MgO
 - Where did the Bhopal Gas Tragedy occur?
(A) Maharashtra
(B) Uttar Pradesh
(C) Karnataka
(D) Madhya Pradesh
 - 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
 - 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
 - The force exerted on a surface which is in the form of an equilateral triangle of side 'a'm is 9.169N. Find the pres

sure 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) $\frac{23}{a^2} N/m^2$

44. 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



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
46. 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
47. What causes the depletion of ozone layer?
(A) Release of CO_2 in the atmosphere
(B) Release of SO_2 in the atmosphere
(C) Release of SPM in the atmo-

sphere
(D) Release of CFC in the atmosphere

48. 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
49. The Red Data Book was founded by
(A) UNEP (B) IUCN
(C) WWF (D) A and B
50. 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

27th MVIII (SCIENCE)

Time Allowed 1 hour

Maximum Marks : 100

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

CODE
A

- 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(Blue or Black)**.
- 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., School name** 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 answers and will be ignored for giving any credit. (only for pencil users)
- 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.

- (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
24. The hardest natural occurring substance is a
(A) metal (B) non metal
(C) metalloid
(D) good conductor of electricity
25. 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
26. 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
27. 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)
28. 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.
29. 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) $C_x(SO_4)_y + A \rightarrow A_x(SO_4)_y + C$
30. In a bee hive, the queen lays
(A) fertilized eggs
(B) unfertilized eggs
(C) Both A and B (D) A or B
31. How long is the sidereal month?
(A) 23.5 days (B) 27.3 days
(C) 29.5 days (D) 30 days
32. 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°
33. 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.
34. Which planet has the least density?
(A) Mercury (B) Venus
(C) Mars (D) Saturn
35. State whether the following statements are true or false.
i) The viruses measure $0.2-0.3 \mu m$.
ii) The WBCs can't change its shape.
iii) The units of inheritance are found

11. The audible range of dogs is
(A) 40Hz to 60kHz
(B) 40Hz to 60,000kHz
(C) 40Hz to 70kHz
(D) 20Hz to 20,000Hz
12. 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
13. Asteroids are found in between the orbits of
(A) Mars and Jupiter
(B) Jupiter and Saturn
(C) Saturn and Uranus
(D) Mercury and Venus
14. 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.
15. 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
16. 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
17. Cell sap is found in
(A) mitochondria (B) chloroplast
(C) vacuole (D) ribosome
18. 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%
19. The size of an earthquake depends on
(A) the size of the fault.
(B) the amount of slip on the fault.
(C) A or B (D) A and B
20. 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
21. The weight of air in a column of height of the atmosphere and area $10cm \times 10cm$ is as large as
(A) 10 kg (B) 100 kg
(C) 1000 kg (D) 500 kg
22. 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)
23. 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