TIME :3 HRS. CLASS 8 M.M 90

Sample paper -3

SCIENCE

***General Instructions:***

* ***The question paper consists of 2 sections – section A and Section B. you are to attempt all the questions***
* ***All questions are compulsory.***
* ***There is no overall choice. However internal choices have been provided in three questions of 2/3 marks category and all the six questions of five marks each.***
* ***All question of section A and section B are to be attempted separately.***
* ***Questions 1 to 4 in section A and questions 28 and 29section B are multiple choice question and carry 1 mark each.***
* ***Question 5 to 10 in section A and questions 30 to 32 in section B are very short answer type questions and carry 1 mark each.***
* ***Question 11-16 in section A and question 33-35 are short answer type questions and carry 2 marks each.***
* ***Questions 17-23 in section A and question 36 and 37 in section B are also short answer type question and carry 3 marks each.***
* ***Question 24-27 in section A and question 38 and 39 in section B are long answer type question and carry 5 marks each…***

**SECTION A**

1. a boy is beating the drum in the assembly. On seeing the crowd he starts beating, he starts beating the drum with more energy and double the number of beats at the same time.The sound now has (1)

a) increased amplitude, increased frequency

b) increased amplitude, decreased frequency

c) decreased amplitude, increased frequency

d) increased amplitude, decreased frequency

2) The dispersion of white light , through a glass prism is represented by : (1)

a) b)

V

R

R

V

c) d)

B

G

G

Y

3) The process of removing impurities from the ore is called (1)

a) Concentration of ore b) Metallurgy

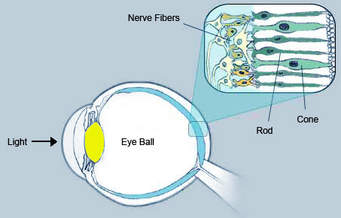
c) Refining d) Reduction

4) Which one of the following fibre is not a synthetic fibre ? (1)

a) Rayon b) Nylon c) Terylene d ) Jute

5) Milky way is referred to as a “ spiral galaxy “ . State the reason for the same (1)

6) Label the parts (A) and (B) in the given diagram (1)



B

A

7) There are two types of light sensitive cells—the rods and the cones present in the retina . Which of these cells respond to the (1)

(1) Amount of incident light energy?

(2) Colours of the incident light ?

8) How is molecular arrangement of thermoplastic different from thermosetting plastic? (1)

9) Write full form of PET (1)

10) What are water pollutants ? (1)

11) A person produces a sound in ---- (2)

a) An open space having some cliffs

b) the school lababoratory

He is able to hear an echo in the first case but not in the second case. Give the reasons for these observations

12) The normal human eye can comfortably see a book lying on the table as well as a Star in the sky . Name the property of the eye that enables it to see nearby as well as far off objects and state in brief , the reason for this amazing ability of the human eye ?(2)

13 ) On the basis of given ray diagrams , state which of the two media is optically denser than the other in each case. (2)

**I**

**II**

**iu**

**r**

**I**

**II**

**i**

**r**

14) Write the name of the gas which is evolved when a metal is reacted with acid . How is this gas identified ? (2)

15) Name two major sources of water pollution (2)

16) State two advantages of synthetic plastics over natural plastics? (2)

17) a) An astronaut on the moon , is not able to hear the sound of even a nearby loud explosion but a person , on the earth , can easily hear the ring of a phone even from some distance . Why ?

b)One can hear the sound of an approaching train well in advance by pressing the ear against the railway track , why ? (3)

18) (a) Define the term light year . Calculate the approximate distance covered by light, in reaching from the sun to the earth . Given that light of the sun takes 8 minutes 20 seconds to reach the earth and the speed of light is 3X108 m/s

(b) Why does a given star not appear to rise at the same time on different days ? (3)

19) Give reason….

(a) Colourful bands are associated with Jupiter

(b) Average density of mars is lower than that of earth

(c) Venus is hotter than mercury even though it is more distant (3)

20) (a) Name a natural effect of dispersion . When do we observe this natural effect?

(b) “ The combination of a plane mirror and water can act like a prism “ Describe an activity that supports this statement (3)

(OR)

In an examnation room you find some visually challenged students reading by using a logical system based on their sense of touch . Some others are listening to an audio CD.

(a) Name the type of aids they are using .

(b) Also give the names and use of two optical aids for such persons.

21) compete the given ray diagram . Name the phenomenon responsible for the change in the path of light . label the apparent and real depth of the coin (3)

Air

Water

22) (a) With the help of an activity explain that copper wires can conduct electricity.

(b) Which allotropic form of carbon conducts electricity ? (3)

23) (a) What causes depletion of oxygen in water ?

(b) How does it affect aquatic life ? (3)

24 (a) State the function of ---

(i) the auditory canal

(ii) ear drum

(iii) three bones of the middle ear in the human ear .

(b) We strike a metallic rod against a metallic table and when against a wooden table . Why is there a difference in the nature of sounds produced in the two cases ?

(OR)

People living in a society protested against the set up of a factory , using many vibrating machines , adjoining their society.

(a) Explain , giving any three reasons , that make you support their protest.

(b) State two methods / techniques that are useful for communication by hearing impaired people. (5)

25 ) a) A given lens ‘L’ forms the image A’B’ of an object AB , as shown here . Identify the nature of the lens.

A

B’

B

A

L

(b) Draw a ray diagram for the same lens when the object is kept

(i) Beyond 2F (ii) At F

State the nature and size of the image in each case

(OR)

a) Define principal focus and optical centre of a convex lens.

b) Draw three special rays used for drawing ray diagrams for

(i) convex lens (ii) concave lens (5)

26) (a) write any three advantages and three disadvantages of synthetic fibres

(b) Give reason :

(i) Rayon is also known as regenerated fibre

(ii) Acrylon is used for making blankets .

(OR)

a) Define Polymerisation

b) State two uses of nylon .

c) Name the polymer used for making

(i) Conveyor belts

(ii) bottles used for storing soft drinks. (5)

27 ) (i) Define reactivity series .

(ii) Arrange the following metals in the order of their increasing reactivity.

Cu, Fe , Mg , Zn

(iii) What happens when :-

Copper wire is dipped in silver nitrate solution

(OR)

(a) Give reasons :-

(i) Aluminium is used for making thin foils.

(ii) silver is used for high precision electrical contacts in computers

(b) How can we modify the properties of metals ?

(c) Name the Non- metal used as

(i) an antiseptic

(ii) A cutting tool

d) Write the composition of stainless steel (5) SECTION B

Q28 ) The bacteria , that present in the root nodules of leguminous plants , convert

(a) Gaseous nitrogen to urea

(b) gaseous nitrogen to nitrtes

(c) Nitrates to nitrites

(d) Gaseos nitrogen to ammonia (1)

Q 29) Identify the viviparous animal from the following----

a) fish b) Whale c) Frog d) hen

Q30) State the number of autosomes in human cell (1)

Q31) How ploughing helps to hold the soil finaly ? (1)

Q32) What is the term used to denote the period between childhood and adulthood? (1)

Q33) Why should we grow a leguminous crop between two successive crops ? (2)

Q34) Name the type of asexual reproduction in which a new individual arises as a small protuberance on the parent body. Name two organism that reproduce by this method ? (2)

Q35) Define the term metamorphosis and give any two examples of animals that exhibit metamorphosis during their life cycle (2)

Q36 ) write the correct sequence of agricultural practices for growing crops in the given boxes

1. soil preparation

2

3.

Agricultural

Practices

4.

5.

6

(OR)

7.

(OR)

Name and explain any three methods that farmers can adopt to increase the fertility of soil in their fields. (3)

Q37) (a) Name the revolution that was brought about in india in1960's to increase the production of food grains

(b) Mention any two advantages of the mexican wheat variety over the indian varieties

(c) Name the phenomenon that is used to improve the crop yield by cross breeding two different varites of crops. (3)

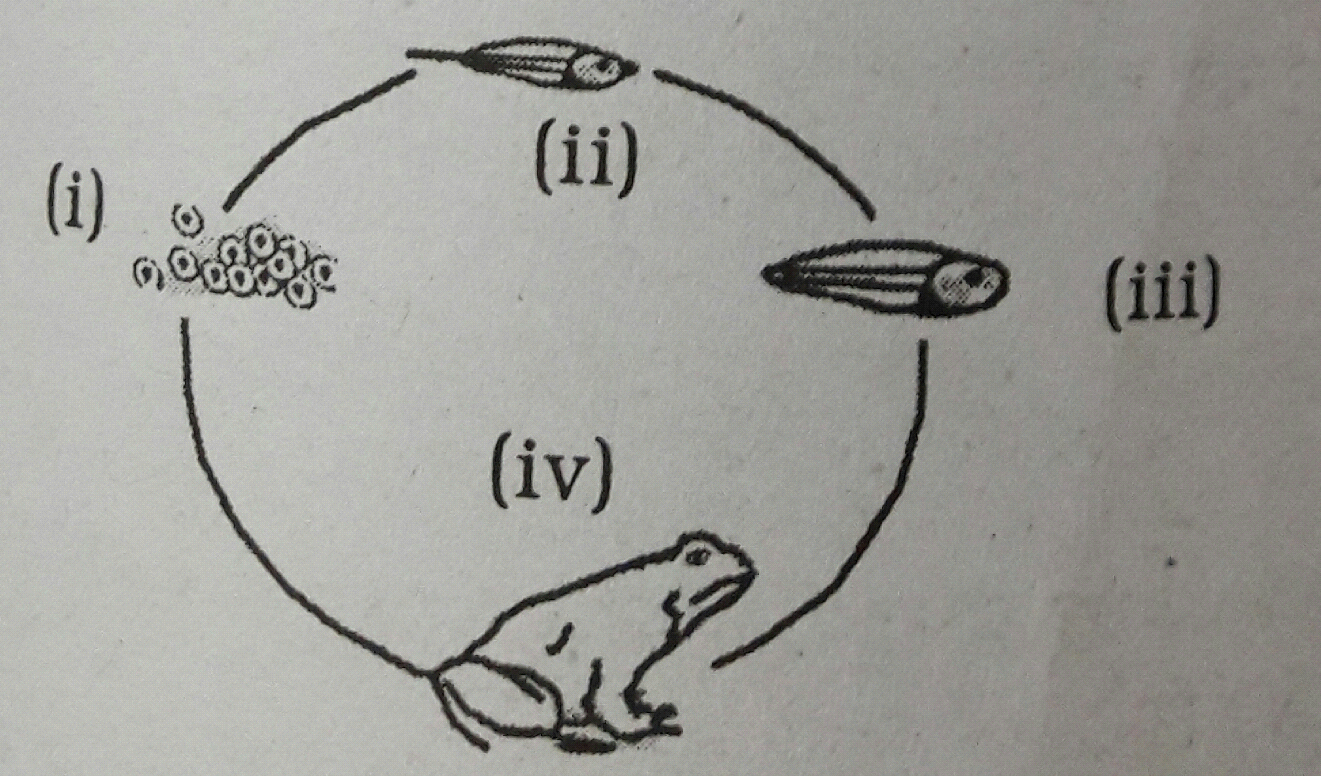
Q38 ) (a) Which organ of the female reproductive system produces hormones ?

(b) Give any two main functions of female reproductive system.

(c) Differentiate between internal fertilisation and external fertilisation . Give one example of each type

(0R)

a) Observe and label the different stages of life cycle of a frog given below.



(b) Enlist three changes that take place in a tadploe during it metamorphosis (5)

Q39, a) Why are endocrine glands known as ductless glands?

b) Name the hormone secreted by pancreas in human beings. Which disease is caused if it is not secreted in a sufficient quantity?

c) Which endocrine gland is located on the top of each kidney in human beings ? Mention the function of the hormones secretd by it.

(OR)

(a) Name the gametes produced by testes.

(b) Which hormone is secreted by testes ?

(c) Describe the major events that occur in the reproductive phase in human females if fertilisation does not takes place ? (5)