CBSE EXAMINATION PAPER-2026

SCIENCE

(Solved)

Time allowed : 3 hours | Maximum Marks : 90

General Instructions :

Read the following instructions carefully and follow them :

i. This question paper contains **44 questions.** All questions are **compulsory.**

ii. This question paper is divided into **5 sections.**

iii. **Section A** – questions number **1 to 2** are case based questions

iv. **Section B** – questions number **3 to 22** are multiple choice questions

v. **Section C** – questions number **23 to 30** are very short answer

vi. **Section D** – questions number **31 to 38** are short answer

vii. **Section E** – questions number **39 to 44** are long answer

viii. There is no overall choice given in the question paper. However, an internal choice has been provided in few questions.

ix. Use of calculator is NOT allowed.

Section A

Question 1. Plants exhibit movements in response to various environmental stimuli to adopt and survive in their surroundings. These movements, influenced by external factors such as light, gravity, water and chemicals are regulated by specific plant hormones. For example, the differential growth of plant parts allows them to bend, grow or orient themselves in particular directions. Roots and shoots often show contrasting response to the same stimulus, highlighting the complex mechanisms involved in plant growth and development.

(1) Why is hydrotropism essential for plants ?

[1 Marks]

(2) What role does auxin play in the growth of plants ?

[1 Marks]

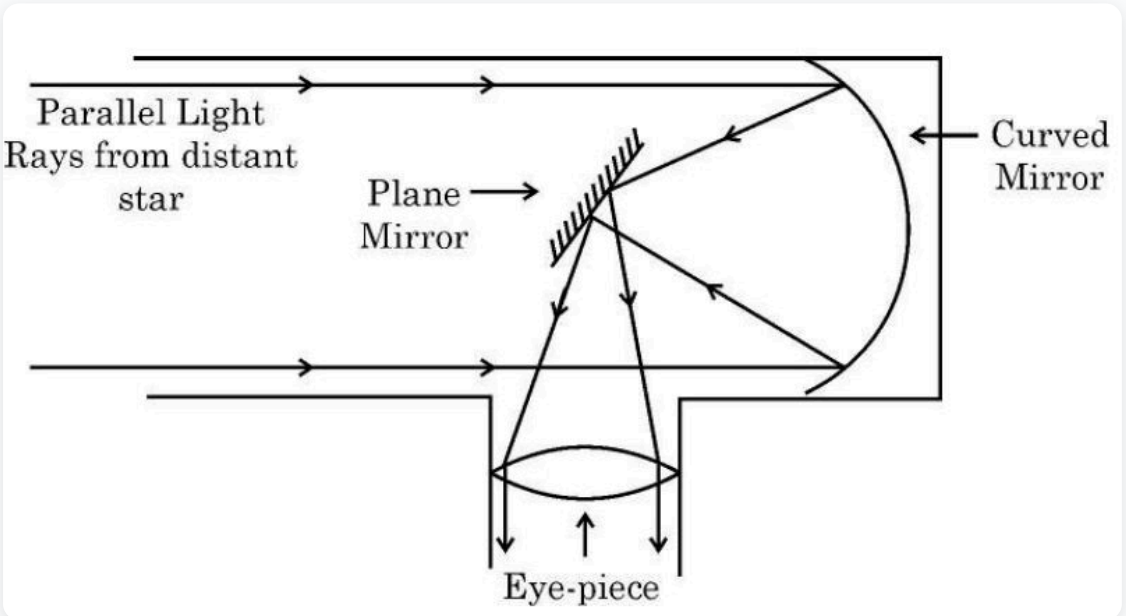
(3) Differentiate between movement shown by the sensitive plant and tropic movement by plants (Two points).

[1 Marks]

(4) How does movement of roots differ from that of shoots in response to gravity and light ?

[1 Marks]

Question 2. The above ray diagram is to show image formation by a reflecting telescope. Reflecting telescope revolutionized our way of looking into the sky. Reflecting telescopes employ large mirrors to gather and focus light rather than relying solely on lenses as we do in the refracting telescopes. These telescopes utilize precisely shaped and polished mirrors to capture incoming light and reflect it to a focal point, where the telescope forms an image for observation.



(1) What kind of image of a star is seen by the observer in the eye-piece ?

[1 Marks]

(2) What kind of mirror is used in this reflecting telescope ?

[1 Marks]

(3) Explain with the reason, what kind of optical device (type of lens or mirror) is used at the eye-piece.

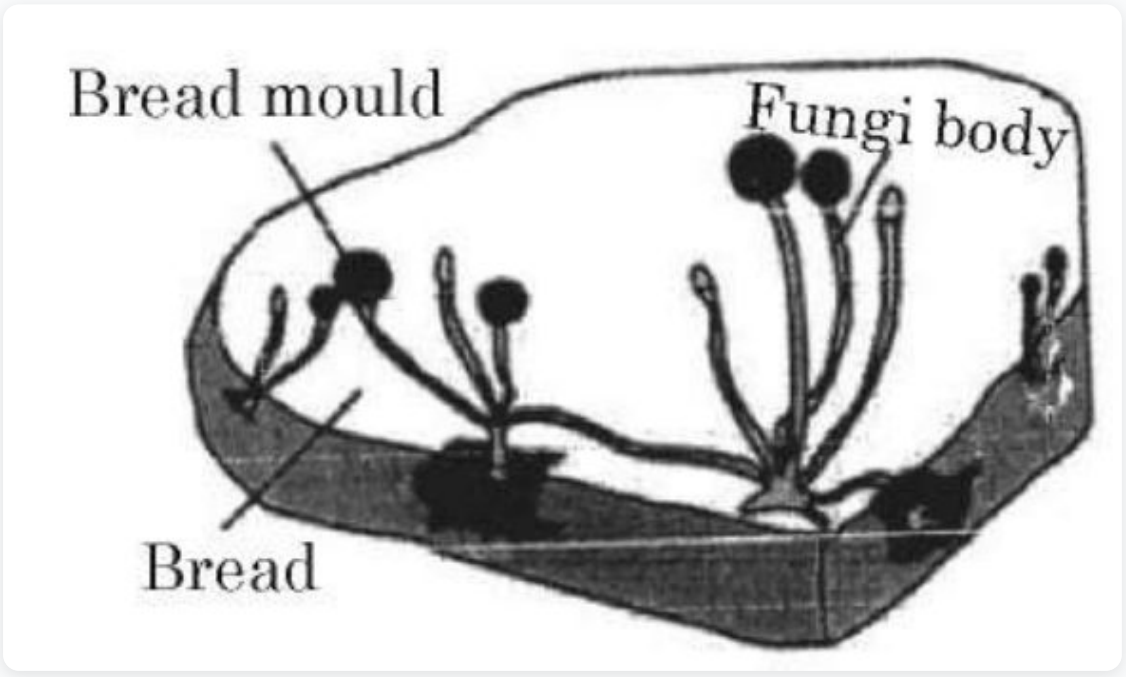
[2 Marks]

Section B

Question 3.

Observe the given figure and select the statement that correctly states how these fungi obtain nutrition.

[1 Marks]



(A) By eating the bread on which it is growing

(B) By breaking down the nutrients of bread outside the body and then absorbing them.

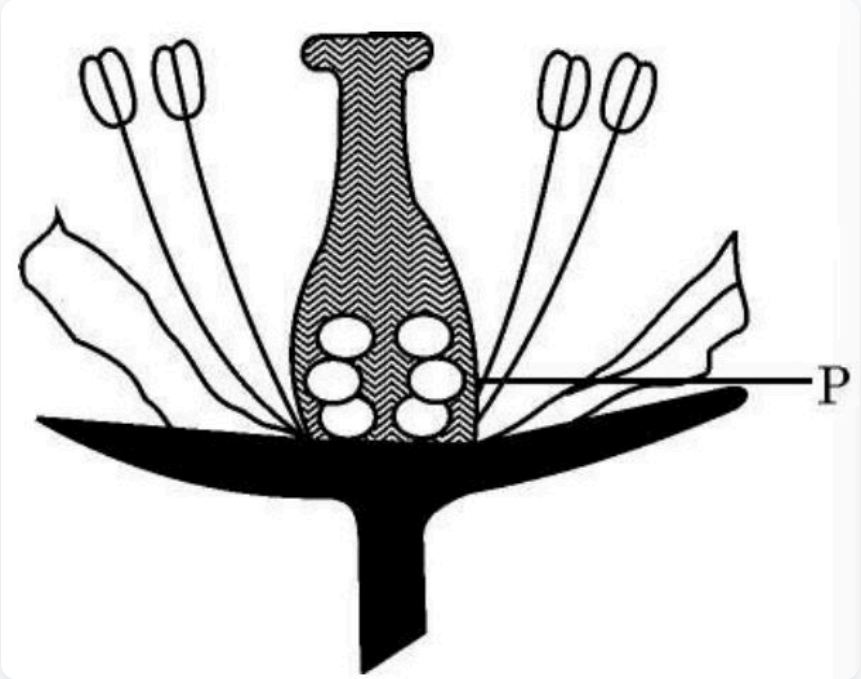
(C) By using nutrients from the bread to prepare their own food.

(D) By allowing other organisms to grow on the bread and then consuming them.

Question 4.

If the part 'P' of the flower is removed, which of the following processes will not take place ?

[1 Marks]



(A) Formation of flower

(B) Formation of pollens

(C) Formation of seed

(D) Formation of fruit

Question 5.

Given below are some of the statements regarding our environment :

(i) Change in our life-styles have resulted in greater amounts of waste material generation.

(ii) Changes in attitude have resulted in use of more disposable things.

(iii) Changes in packaging has resulted in much of our waste becoming non-biodegradable.

(iv) Organic farming

Which amongst these is not leading to any damage of environment ?

[1 Marks]

(A) (ii) and (iv)

(B) (i), (ii), (iii)

(C) (i) and (iii)

(D) (iv)

Question 6.

Identify the traits that cannot be transmitted from parents to the offsprings : (i) Swimming technique (ii) Blood group (iii) Eye colour (iv) Dancing skills

[1 Marks]

(A) (ii) and (iii)

(B) (iii) and (iv)

(C) (i) and (iv)

(D) (i) and (ii)

Question 7. Following are the statements about the different parts of the brain. Select the correct statements. (i) The thinking part of the brain is the forebrain. (ii) Centres for smell, hearing, memory, sight are located in forebrain. (iii) Salivation, vomiting, blood pressure are controlled by medulla in the hind brain. (iv) Cerebellum does not control the posture and balance of the body.

[1 Marks]

(A) (i), (ii) and (iii)

(B) (ii), (iii) and (iv)

(C) (i), (ii) and (iv)

(D) (i), (iii) and (iv)

Question 8.

Two pea plants, one with round green seeds (RRyy) and another with wrinkled yellow (rrYY) seeds were crossed with each other which produced F_1 progeny that have only round yellow (RrYy) seeds. When F_1 plants are self-pollinated, the F_2 progeny will have which new combination of characters, as compared to the parents : (i) Round, yellow (ii) Round, green (iii) Wrinkled, yellow (iv) Wrinkled, green Correct options are :

[1 Marks]

(A) (ii) and (iv)

(B) (i) and (iii)

(C) (i) and (ii)

(D) (i) and (iv)

Question 9.

In human beings the oxygen rich blood is pumped out to the body by :

[1 Marks]

(A) contraction of left ventricle

(B) relaxation of left ventricle

(C) contraction of right atrium

(D) contraction of right ventricle

Question 10.

Two statements : Assertion (A) and Reason(R). Answer these questions selecting the appropriate option from (A), (B), (C) and (D) given below :

Assertion (A) : Variations are not often seen in off-springs produced by asexual reproduction.

Reason (R) : DNA molecule generated by replication is not similar to the original DNA.

[1 Marks]

(A) (A) Both Assertion (A) and Reason (R) are true and Reason (R) is the correct explanation of the Assertion (A).

(B) Assertion (A) is false, but Reason (R) is true.

(C) Assertion (A) is true, but Reason (R) is false.

(D) Both Assertion (A) and Reason (R) are true, but Reason (R) is not the correct explanation of the Assertion (A).

Question 11.

Two statements : Assertion (A) and Reason (R). Answer these questions selecting the appropriate option from (A), (B), (C) and (D) given below :

Assertion (A) : Highest percentage of pesticides is found in tertiary consumers in a food chain.

Reason (R) : Chemicals / pesticides get accumulated progressively at each trophic level.

[1 Marks]

(A) Assertion (A) is true, but Reason (R) is false.

(B) Both Assertion (A) and Reason (R) are true and Reason (R) is the correct explanation of the Assertion (A).

(C) Both Assertion (A) and Reason (R) are true, but Reason (R) is not the correct explanation of the Assertion (A).

(D) Assertion (A) is false, but Reason (R) is true.

Question 12.

The volume ratio of hydrogen and oxygen gases liberated during electrolysis of water is

[1 Marks]

(A) 1:2

(B) 4:1

(C) 2:1

(D) 1:1

Question 13.

An aqueous solution turns red litmus blue. Excess addition of which of the following solution would reverse the change ?

[1 Marks]

(A) Sodium hydroxide

(B) Hydrochloric acid

(C) Baking soda

(D) Slaked lime

Question 14. While washing dirty clothes by soap, micelles are formed. Select the correct statement about micelles.

[1 Marks]

(A) The hydrophobic tail of the soap molecule is in the interior of the cluster, whereas hydrophilic end is on the surface of the cluster

(B) The hydrophobic tail is on the surface of the cluster, whereas hydrophilic end is in the interior of cluster.

(C) Both hydrophobic tail and hydrophilic end are in the interior of the cluster.

(D) Both hydrophobic tail and hydrophilic end are on the surface of the cluster.

Question 15.

Which one of the following metals does not react with cold water ?

[1 Marks]

(A) Sodium

(B) Potassium

(C) Calcium

(D) Magnesium

Question 16.

Alloys are homogeneous mixture of metal with a metal or non-metal. Which among the following alloys contain non-metal as one of its constituents ?

[1 Marks]

(A) Brass

(B) Bronze

(C) Steel

(D) Amalgam

Question 17. How will you protect yourself from the heat generated while diluting a concentrated acid ?

[1 Marks]

(A) By adding acid to water with constant stirring.

(B) By adding water to acid with constant stirring.

(C) By adding water to acid followed by base.

(D) By adding base to acid with constant stirring.

Question 18. In the question, two statements are given – One labelled as Assertion (A) and other labelled as Reason (R). Write the correct answer selecting the appropriate option from (A), (B), (C) & (D) given below : Assertion (A) : Pure ethanoic acid is also known as glacial acetic acid. Reason (R) : Pure ethanoic acid often freezes during winter due to its low melting point of 290 K.

[1 Marks]

(A) Both Assertion (A) and Reason (R) are true and Reason (R) is the correct explanation of the Assertion (A).

(B) Both Assertion (A) and Reason (R) are true, but Reason (R) is not the correct explanation of the Assertion (A).

(C) Assertion (A) is true, but Reason (R) is false.

(D) Assertion (A) is false, but Reason (R) is true.

Question 19. The pair of eye parts responsible for admitting different amount of light in to the eyes is

[1 Marks]

(A) Iris and pupil

(B) Ciliary muscles and pupil

(C) Retina and Iris

(D) Ciliary muscles and cornea

Question 20.

The vision defect which arises due to gradual weakening of the ciliary muscles and diminishing flexibility of eye lens is :

[1 Marks]

(A) Myopia and hypermetropia both

(B) Hypermetropia

(C) Presbyopia

(D) Myopia

Question 21.

Two statements are given – one labelled as Assertion (A) and other labelled as Reason (R). Select the correct answer to this question from the codes (A), (B), (C) & (D) as given below :

Assertion (A) : With the help of compass, magnetic field lines can be traced outside the bar magnet.
Reason (R) : The north pole of a compass needle always points towards the south pole of the magnet when brought close to it.

[1 Marks]

(A) Both Assertion (A) and Reason (R) are true and Reason (R) is the correct explanation of the Assertion (A)

(B) Assertion (A) is false, but Reason (R) is true.

(C) Assertion (A) is true, but Reason (R) is false.

(D) Both Assertion (A) and Reason (R) are true, but Reason (R) is not the correct explanation of the Assertion (A).

Question 22.

$C_6H_{12}O_6(aq) + 6O_2(g) \rightarrow 6CO_2(g) + 6H_2O_{(l)}$. The above reaction is an example of -

[1 Marks]

(A) Neutralisation Reaction

(B) Exothermic Reaction

(C) Endothermic Reaction

(D) Displacement Reaction

Section C

Question 23.

“Transpiration in plants is a necessary evil.” Comment on the statement giving two reasons.

[2 Marks]

Question 24.

Explain why food chains generally consist of three or four steps.

[2 Marks]

Question 25.

Varun is diabetic. His latest ultrasound reports showed a blockage in his pancreatic duct. How will this affect the dual functioning of the pancreas ?

[2 Marks]

Question 26.

Sunil unconsciously touched the hot iron rod and immediately withdrew his hand. Which type of action is involved ? Also define this action. Draw a flow chart to show the path followed for this action.

[2 Marks]

Question 27.

(a) A compound ‘A’ is used in soda-lime fire-extinguisher and decomposes on heating to form compound ‘B’. Compound ‘B’ is used for removing permanent hardness of water. Identify ‘A’ and ‘B’.

(b) Write chemical formula of Plaster of Paris. At what temperature gypsum is heated to obtain Plaster of Paris ?

[2 Marks]

Question 28.

A fuse in electric circuit is rated 4 A. Can it be used with an electric heater of rating 2 kW, 200 V ? Explain your answer.

[2 Marks]

Question 29.

How is an electromagnet made ? Write any two ways by which the strength of electromagnet can be increased.

[2 Marks]

Question 30.

(a) Define volt, the unit of potential difference.

(b) Calculate the work done required to move an electron between two points A and B located at a potential difference of 100 V in an electric field.

[2 Marks]

Section D

Question 31.

Give reasons for the following :

(a) Adrenal gland is known as the stress gland of the body.

(b) Prenatal sex determination is banned in India.

(c) Vegetative propagation is advantageous in some plants.

[3 Marks]

Question 32.

Study the given table and answer the following questions :

(a) Depict the information given in the table in the form of a cross.

(b) Deduce the F2 phenotypic ratio/F2 ratio showing external look as well as genotypic /genetic makeup, ratio.

[3 Marks]

Parents	F_1	F_2
A pea plant with red flowers was crossed with a pea plant with white flowers.	30 seeds were sown and all bore plants with red flowers.	44 seeds were sown, 33 plants bore red flowers and 11 plants bore white flowers.

Question 33.

Account for the following :

(a) White silver chloride turns grey when exposed to sunlight.

(b) Lead (II) nitrate on heating releases brown fumes.

(c) Bags of oil and fat containing food items are flushed with nitrogen gas.

[3 Marks]

Question 34.

(i) Which method will be used to convert each of them to their respective metal oxides ?

(a) Carbonate ore (b) Sulphide ore

(ii) Write a chemical reaction to illustrate the use of aluminium for joining cracked railway tracks.

(iii) During extraction of metals, electrolytic refining is used to obtain pure metals. Which material will be used as anode and cathode for the refining of copper metal by this process ?

[3 Marks]

Question 35.

(i) Write all the reactions involved in the extraction of Zn from ZnS.

(ii) Hydrogen gas is not evolved when most of the metals react with nitric acid. Give reason.

[3 Marks]

Question 36.

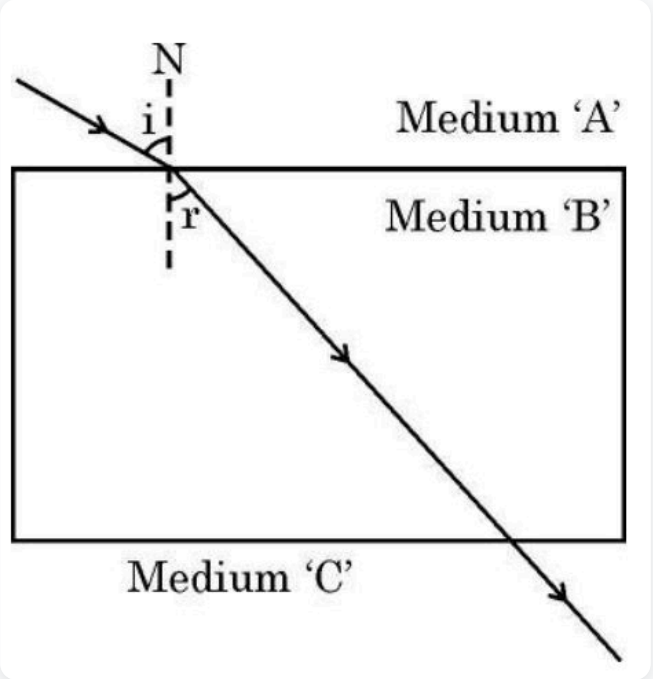
(a) Observe the given ray diagram and compare :

(i) the speed of light in medium A and the speed of light in medium B.

(ii) the optical densities of medium B and medium C.

(b) Draw a ray diagram for refraction where the optical density of medium ‘A’ becomes equal to the optical density of medium ‘C’ and optical density of medium ‘B’ is greater than the optical density of medium ‘A’ and medium ‘C’.

[3 Marks]



Question 37.

Explain the phenomenon of rainbow formation in the sky. Draw the labelled ray diagram in support of your explanation.

[3 Marks]

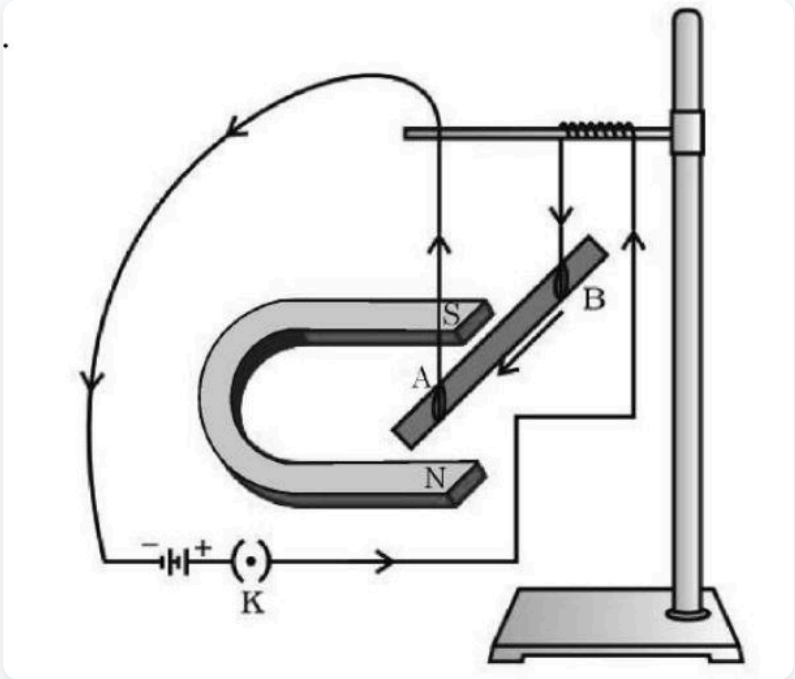
Question 38.

On the basis of the given circuit arrangement, answer the following questions :

(a) What happens to the rod AB when the key K is closed and why ?

(b) Name and state the rule that determines this behaviour of the rod AB in the above situation.

[3 Marks]



Section E

Question 39.

(a) Draw a labelled diagram showing open and closed stomatal pore.

(b) List the main events that occur during the process of photosynthesis.

(c) Write a balanced chemical equation showing photo-synthesis in plants.

[5 Marks]

Question 40.

(a) Draw a well-labelled diagram of nephron and label atleast 4 of its parts.

(b) Write the role of capillary cluster inside Bowman's capsule.

(c) What is meant by selective reabsorption ?

[5 Marks]

Question 41.

(i) Carbon cannot form C^{4+} cation and C^{4-} anion. Explain.

(ii) Define homologous series of carbon compounds. Why are the melting and boiling points of C_4H_{10} higher than C_3H_8 or C_2H_6 ?

(iii) What happens when ethanol is heated with acidified potassium dichromate ?

[5 Marks]

Question 42.

(i) How would you name the following :

II. $CH_3 - C \equiv CH$

(ii) When ethanol reacts with ethanoic acid in the presence of conc. H_2SO_4, a substance with sweet smell is produced. Answer the following :

I. State the class of compounds to which the sweet smelling compounds belong.

II. Write the chemical equation for the reaction.

(iii) Why soaps do not produce foam with hard water ?

[5 Marks]

(i) How would you name the following :

I. $CH_3 - CH_2 - \underset{\underset{H}{|}}{C} = O$

Question 43.

(i) The given electric circuit is a part of an electrical device. Use the information given in the electric circuit diagram to calculate :

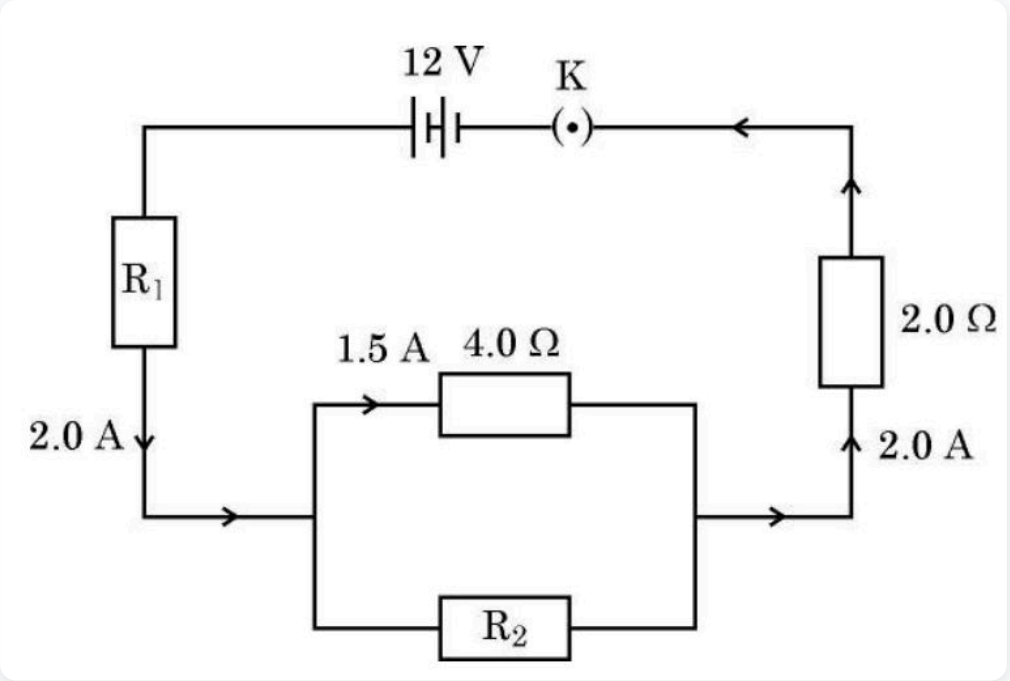
(I) Potential difference across the ends of resistor R_2 .

(II) Value of resistor R_2 .

(III) Value of resistor R_1 .

(ii) Write the factors on which resistance of a conductor depends and derive the formula for resistance of a given conductor.

[5 Marks]



Question 44.

(i) How much electric current will an electric iron draw from 220 V source if the resistance of its heating element when hot, is 55Ω ? Calculate the power consumed by the electric iron when it is operated at 220 V.

(ii) In a house, 3 bulbs of 100 watt each, are lit for 5 hours daily and an electric heater of 1.0 kW is used for half an hour daily. Calculate the total energy consumed in a month of 30 days and its cost at the rate of Rs 3.60 per kWh.

(iii) With reason explain, why are alloys commonly used to make elements of electrical heating devices.

[5 Marks]