



ODM PUBLIC SCHOOL

HOLIDAY HOME WORK

CLASS- STD-X

ENGLISH

1. Read the extract given below and answer the questions that follow.

So, till the judgment that yourself arise,
You live in this, and dwell in lovers' eyes.

- (a) Which judgement is referred to here?
- (b) What is the poetic truth the speaker refers to here?
- (c) What will happen to the young man until the day of the final judgement?
- (d) Who does 'yourself' refer to here?

Or

As we made the rounds, my interest was again provoked by their remarkable demeanour. They were childish enough, and in many ways quite artless.

- (a) What does the phrase 'As we made rounds' mean?
- (b) What idea do you get about the narrator from these lines?
- (c) What did the narrator find remarkable in their demeanour?
- (d) What aspect of the boys attracted the author towards them?

2. Answer any four of the following questions in 30-40 words each.

- (a) How do the family members want to announce the death of grandfather in the newspaper? What does it show about their character?
- (b) How do the boys qualify as 'Gentlemen of Verona' as called by the author?
- (c) How differently did the frog and the other creatures react to the Nightingale's voice?
- (d) What was the postmaster's state of mind after Lakshmi Das told him about Ali's death?
- (e) How do you know that Patol Babu was a perfectionist?

3. Answer the following in 100-120 words.

What message does S.T. Coleridge wish to convey through the poem 'The Rime of the Ancient Mariner'?

Or

How was Caesar's assassination avenged by Mark Antony?

4. Answer the following question in 200-250 words.

Do you think that Mr. Frank was protective and concerned about Anne? Discuss.

Or

Draw a character sketch of Margot Frank.

MATHS

SURFACE AREAS AND VOLUMES

1. The height of a cone is 20 cm. A small cone is cut off from the top by a plane parallel to the base. If its volume be $\frac{1}{125}$ of the volume of the original cone, determine at what height above the base the section is made.
2. A bucket is in the form of a frustum of a cone of height 30 cm with radii of its lower and upper ends as 10 cm and 20 cm respectively. Find the capacity and surface area of the bucket. Also, find the cost of milk which can completely fill the container, at the rate of Rs.25 per litre. (Use $\pi = 3.14$)
3. A solid is in the shape of a frustum of a cone. The diameters of the two circular ends are 60 cm and 36 cm and the height is 9 cm. Find the area of its whole surface and the volume.
4. A bucket open at the top, and made up of a metal sheet is in the form of a frustum of a cone. The depth of the bucket is 24 cm and the diameters of its upper and lower circular ends are 30 cm and 10 cm respectively. Find the cost of metal sheet used in it at the rate of Rs.10 per 100 cm^2 . (Use $\pi = 3.14$)
5. A solid is composed of a cylinder with hemispherical ends. If the length of the whole solid is 108 cm and the diameter of the cylinder is 36 cm, find the cost of polishing the surface at the rate of 7 paise per cm^2 . (Use $\pi = 3.1416$)
6. A toy is in the form of a cone mounted on a hemisphere of radius 3.5 cm. The total height of the toy is 15.5 cm find the total surface area and volume of the toy.
7. A toy is in the form of a cone mounted on a hemisphere with the same radius. The diameter of the base of the conical portion is 6 cm and its height is 4 cm. Determine the surface area of the toy. (Use $\pi = 3.14$)
8. A solid cylinder of diameter 12 cm and height 15 cm is melted and recast into toys with the shape of a right circular cone mounted on a hemisphere of radius 3 cm. If the height of the toy is 12 cm, find the number of toys so formed.
9. A container open at the top, is in the form of a frustum of a cone of height 24 cm with radii of its lower and upper circular ends as 8 cm and 20 cm respectively. Find the cost of milk which can completely fill the container at the rate of Rs.21 per litre. (Use $\pi = \frac{22}{7}$)
10. A cone of maximum size is carved out from a cube of edge 14 cm. Find the surface area of the cone and of the remaining solid left out after the cone carved out.
11. A person, standing on the bank of a river, observes that the angle subtended by a tree on the opposite bank is 60° . When he retreats 20m from the bank, he finds the angle to be 30° . Find the height of the tree and the breadth of the river.

12. A tree 12m high, is broken by the wind in such a way that its top touches the ground and makes an angle 60° with the ground. At what height from the bottom the tree is broken by the wind?
13. From the top of a hill, the angles of depression of two consecutive kilometer stones due east are found to be 30° and 45° . Find the height of the hill.
14. Determine the height of a mountain if the elevation of its top at an unknown distance from the base is 30° and at a distance 10 km further off from the mountain, along the same line, the angle of elevation is 15° . (Use $\tan 15^\circ = 0.27$)
15. An aeroplane at an altitude of 1200 metres find that two ships are sailing towards it in the same direction. The angles of depression of the ships as observed from the aeroplane are 60° and 30° respectively. Find the distance between the two ships.

STATISTICS

16. If the mean of the following distributions 54, find the value of p:

| | | | | | |
|-----------|------|-------|-------|-------|--------|
| Class | 0-20 | 20-40 | 40-60 | 60-80 | 80-100 |
| Frequency | 7 | p | 10 | 9 | 13 |

17. The mean of the following frequency table 50. But the frequencies f_1 and f_2 in class 20-40 and 60-80 are missing. Find the missing frequencies.

| | | | | | | |
|-----------|------|-------|-------|-------|--------|-------|
| Class | 0-20 | 20-40 | 40-60 | 60-80 | 80-100 | Total |
| Frequency | 17 | f_1 | 32 | f_2 | 19 | 120 |

18. Find the mean of each of the following frequency distributions :

| | | | | | |
|---------------|-----|------|-------|-------|-------|
| Classinterval | 0-6 | 6-12 | 12-18 | 18-24 | 24-30 |
| Frequency | 6 | 8 | 10 | 9 | 7 |

19. Classinterval 0-8 8-16 16-24 24-32 32-40
 Frequency 5 9 10 8 8

20. The mean of the following frequency distribution is 62.8 and the sum of all the frequencies is 50. Compute the missing frequency f_1 and f_2 .

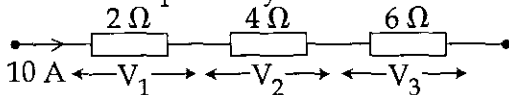
| | | | | | | |
|-----------|------|-------|-------|-------|--------|---------|
| 21. Class | 0-20 | 20-40 | 40-60 | 60-80 | 80-100 | 100-120 |
| Frequency | 5 | f_1 | 10 | f_2 | 7 | 8 |

SCIENCE

WORKSHEET-1

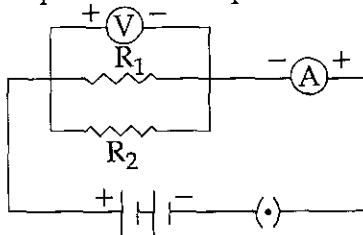
CHAPTER-ELECTRICITY

- Write the SI unit of Resistance.
 - Define the unit of resistance.
 - What happens to the resistance as the conductor is made thicker ?
 - Keeping the potential difference constant, the resistance of a circuit is doubled, how will the current change ?
- State the significance of the following devices in domestic electric circuits :
 - Main switch
 - Mains fuse
 - Electricity meter
- We connect electrical devices in parallel with the battery instead of connecting them in series. Why ?
 - An electric oven connected to a 220 V line has two resistance coils A and B, each of 20 Ω resistance, which may be used separately, in series, or in parallel. What are the currents in the three cases ?
- Obtain an expression for the heat produced in a conductor when a voltage V is applied across it. Heating effect of electric current is desirable as well as undesirable. Explain this statement.
- In the circuit diagram given below V_1 , V_2 and V_3 are potential differences across 2 Ω , 4 Ω and 6 Ω resistors respectively. The current flowing in the circuit is 10 A



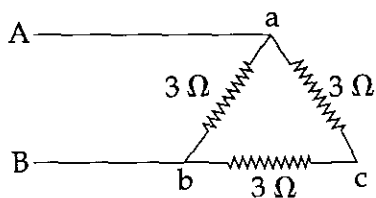
Write the correct values of V_1 , V_2 and V_3 measured in volts respectively are given by

- To calculate the equivalent resistance when R_1 and R_2 are connected in parallel, a student is not able to perform the experiment for given circuit diagram.



Write the correct reason

- While performing ohm's law experiment Hanu found that the value of the resistance is varying. What could be the possible reasons of error ? (Write any four reasons)
- How much current will an electric iron draw from a 220 V source if the resistance of its element when hot is 55 ohms ? Calculate the wattage of the electric iron when it operates on 220 volts.
- Can you run an electric geyser with power rating 2 kW; 220V on a 5 A line? Give reason to justify your answer.
- A 5 Ω resistor is connected across a battery of 6 volts. Calculate :
 - the current flowing through the resistor.
 - the energy that dissipates as heat in 10 s.
- For the parallel combination of resistors establish the relation :
$$\frac{1}{R} = \frac{1}{R_1} + \frac{1}{R_2} + \frac{1}{R_3}$$
where the symbols have their usual meanings.
Find the resistance between A and B in the following network.



12. Distinguish between resistance and resistivity of a conductor. The resistors are generally made of thin wires of Eureka or Manganin while the wires used in connections are comparatively thicker and are of copper or aluminium. Why? Give reason. What would happen to the resistance of a wire if it is stretched to double its length? Justify your answer.
13. What is the total voltage across the series combination of resistors
14. A wire of resistance R is cut into ten equal parts which are then joined in parallel. The equivalent resistance of the combination will be :
15. Mention any four precautions while doing an experiment to verify ohm's law.

WORKSHEET-2 CHAPTER-ENERGY

1. Mention the minimum temperature difference required between surface water and the water at depths of up to 2 km in an ocean thermal energy plant.
A-293 K or 208 C
2. Give the energy transformations in sequential manner in a nuclear power plant.
A-• Nuclear energy
↓
• Heat energy of fission
↓
• Heat energy of steam
↓
• Kinetic energy of turbine
↓
• Electrical energy
3. Name the types of energy transformations that take place in a Hydro electric power plant.
4. Name the gas which is produced due to incomplete combustion of fossil fuels.
5. Distinguish between exhaustible and inexhaustible resources of energy. Give one example of each.
6. Recycling is considered as a welcome practice to deal with the environmental problems. Justify this statement with two arguments.

WORKSHEET-3 CHAPTER-HUMAN EYE

1. A child while playing with his father's spectacles burnt a hole in a piece of them tissue paper by focusing the image of the Sun on it.
a) Name the defect of vision his father is suffering from.
b) List two causes of the defect.
c) Draw a ray diagram to show how this defect may be corrected using a suitable lens.
2. A person suffering from an eye-defect uses lenses of power - 1D to correct the defect. Name the defect he is suffering from and the nature of lens to be used to correct it.
3. Explain Power of Accommodation. Explain in brief the near and the far point of an eye and give their values.
4. With the help of diagram explain the structure and function of the following parts of human eye, iris, pupil, eye lens, retina.

5. A student has difficulty in reading the black board while sitting in the last row. What could be the defect he is suffering from ? How can it be corrected ? Draw ray diagrams for
 (a) The defective eye (b) Its correction
6. (a) Mention the role of crystalline lens in the human eye.
 (b) How does the focal length of the eye lens change when we shift looking from a nearby object to a distant object ?.
7. Draw a well labelled ray diagram to show myopic eye, and corrective measure for such defect. Mention two possible reasons for this defect.
8. A person cannot see objects beyond a distance of 1.5 m. Giving reasons identify the defect of vision he is suffering from. Mention its two causes. What would be the power of the corrective lens used to restore proper vision ?
9. When a concave mirror is placed facing the Sun, the Sun's rays converge to a point 10 cm from the mirror. Now, if you place a 2 cm long candle flame 20 cm away on the principal axis of the mirror, where would you place a screen to obtain the image of the candle? What would be the size of the image? Draw a ray diagram to justify your answer.

Ans-

$f = -10\text{cm}$ (since the image is formed at the focus) $\frac{1}{2}$

Now $u = -20\text{cm}$, i.e. the candle flame is at C $\frac{1}{2}$

□ The image would form at C and would be of the same size 1

Ray diagram (Refer Fig. 10.7(c) Page 166 NCERT Text-book)

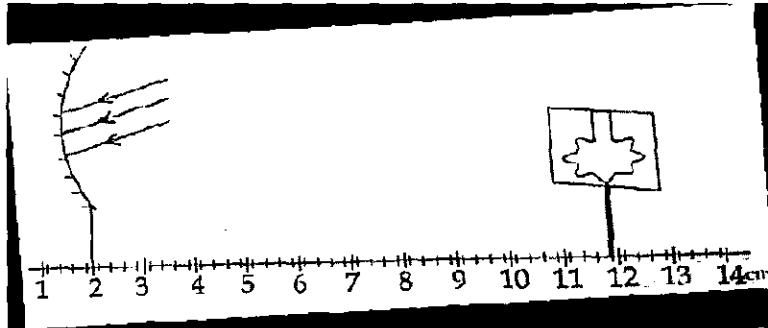
WORKSHEET-4 CHAPTER-LIGHT

1. A student has to project a three times magnified image of a candle flame on a wall. Name the type of the lens (converging/ diverging) required for the purpose. If the candle flame is at a distance of 6 m from the wall, find the focal length of the lens.
2. A. Explain the formation of rainbow in the sky with the help of a diagram. List the three phenomena of light involved. Which colour - violet or red appears at top of the rainbow?
 B. What is the difference in colours of the sun observed during sunrise/ sunset and noon? Give explanation for each.
3. (i) Which property of concave mirror is utilized for using them as shaving mirrors?
 (ii) Light passes through a rectangular glass slab and through a triangular glass prism. Using proper ray diagram, explain in what way does the direction of the two emergent beams differ with respect to the incident beam of light.
 (iii) A concave lens has a focal length of 50 cm Calculate its power.
4. (i) Rohit claims to have obtained an image twice the size of object with a concave lens. Is he correct? Give reason for your answer.
 (ii) Where should an object be placed in case of a convex lens to form an image of same size as of the object? Show with the help of ray diagram the position and the nature of the image formed.
 (iii) With the help of ray diagram, illustrate the change in position, nature and size of the image formed if the convex lens in case of (ii) is replaced by concave lens of same focal length.
5. Four students A,B,C and D did their experiment of finding the focal length of convex lens by obtaining image of a distant object as follows:
 ☐ Student A used the window grill in the laboratory as the object and a white paper sheet held in hand as the screen.
 ☐ Student B used a distant tree in the shade and a white thick held in a stand as the screen.

- Student C used a well illuminated laboratory window grill as the object and a white paper sheet held in a stand as the screen.
- Student D used a well illuminated distant tree as the object and a white thick board held in a stand as the screen.

Which student has used the correct method for performing experiment out of the above setups?

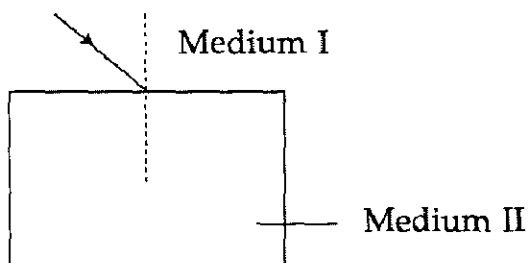
6. In the setup shown below, a clear image of a distant object is obtained on the screen. The focal length of the concave mirror is:



7. In the experiment on refraction of light through a rectangular glass slab done by four students A, B, C and D, the following observations were made:
- (A) The emergent ray moves towards the normal after second refraction through glass slab with $\angle i = \angle e$
 - (B) The emergent ray moves away from the normal after second refraction through glass slab $\angle i < \angle e$
 - (C) For any angle of incidence, always $\angle i = \angle e$, always.
 - (d) The emergent ray moves away from normal after second refraction through glass slab with $\angle i = \angle e$

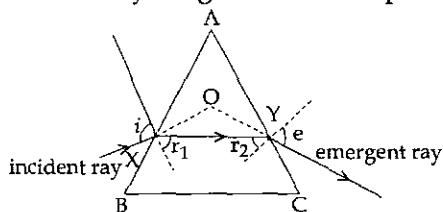
The student who has made the correct observation is:

8. To trace the path of ray of light through the triangular glass prism, a student observes that the emergent ray has
- (a) bent away from the base of the prism
 - (b) bent towards the base of the prism
 - (c) moved parallel to the direction of incident ray
 - (d) gone perpendicular to incident ray.
9. A ray of light enters from medium I into a slab made up of a transparent substance II. Refractive index of medium I and II are 1.65 and 2.42 respectively.
- (a) Complete the path of ray of light in medium II.
 - (b) In the diagram given below which medium is optically more denser? Give reason for your answer.

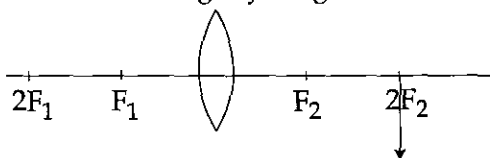


10. (i) What is meant by scattering of light?
 (ii) Explain how does scattering take place in earth's atmosphere?
 (iii) How does the colour of scattered light depends on the size of particles?

11. When an object is placed at a distance of 50 cm from a convex mirror the magnification produced is $+\frac{1}{2}$. Find the focal length of the mirror and nature of image.
12. (a) If the person looks at different objects through the hot air over fire, the objects appear to him to be moving or shaking slightly. Justify this statement.
 (b) When white light passes through a triangular glass prism, a student observes that different colours bend through different angles with respect to the incident white light. Give reason.
 (c) Which colour in the spectrum of white light, has the maximum wavelength ?
13. An object is situated at 15 cm from convex lens of focal length 10 cm. Find the position and nature of the image. Draw ray diagram for formation of image in this case (not to scale).
14. A beam of white light falling on a glass prism gets split up into seven colours marked 1 to 7 as shown in the diagram. Redraw this diagram on the answer sheet and mark these seven colours. A student made a statement that the colour at position marked 5 and 3 are similar to the colour of the sky and colour of gold metal respectively. Is the above statement made by the student correct or incorrect ? Justify.
 Appraise the cause of dispersion, when white light enters a glass prism and write the least and most dispersed colour.
15. An 8 cm tall object is placed perpendicular to the principal axis of a convex lens of focal length 25 cm. The distance of the object from the lens is 30 cm. Find position, nature size of the image formed.
16. An object placed at 30 cm from a concave mirror of focal length 10 cm. Find the position and nature of image formed. Draw ray diagram for the image formation in the case. (not to scale).
17. (a) Describe atmospheric refraction. Explain with the help of diagram why the sun is visible to us two minutes before the actual sun-rise and two minutes even after the sunset.
 (b) How will you use two identical glass prisms so that a narrow beam of white light incident on one prism emerges out of the second prism as a beam of white light? Draw a labelled diagram to illustrate it.
18. A concave mirror is used to form an image of a distant object on a white screen. If the lower half of the mirror were covered with an opaque card, the effect on the image formed on the screen would be
19. A sharp image of a distant object is obtained on a screen by using a convex lens. In order to find the focal length of the lens, you need to measure the distance between the :
20. A student while doing the experiment to trace the path of light ray through a triangular glass prism made a ray diagram of the experiment. The mistake he did in making the diagram is :

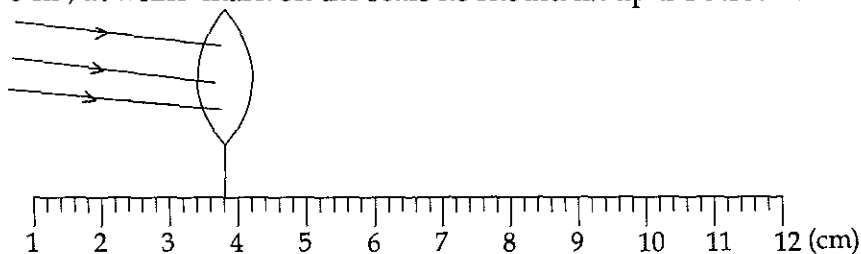


21. In the following ray diagram.



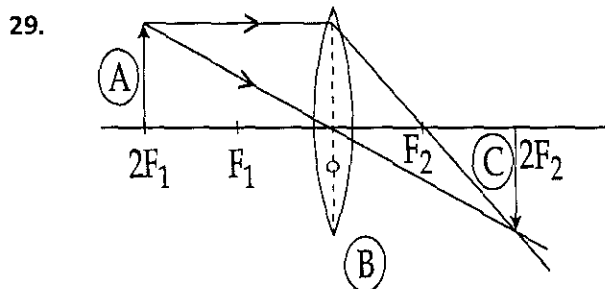
- (i) What will be the position of the object ?
 (ii) Compare the size of image A' B' with the object.
22. Meena observes that a thin paper begins to burn when sun rays are allowed to fall on it through a particular type of lens kept at a particular distance from the paper.

- (a) Name the type of lens with which paper can be burnt.
 (b) Draw ray diagram for the above situation.
23. It is known that the sun is visible to us two minutes before the actual sunrise. Explain in brief how it happens with a diagram? Name the phenomenon due to which it so happens.
24. What is meant by power of a lens? Define its unit. Name the lens that has
 (a) negative and
 (b) positive power.
 Give reason for your answer.
25. A student has three concave mirrors A, B, C of focal lengths 20 cm, 15 cm and 10 cm respectively. For each concave mirror he performs the experiment of image formation for three values of object distance of 30 cm, 10 cm and 20 cm.
 Giving reason answer the following :
 (a) For the three object distances identify the mirror which will form an image equal in size to that of object. Find at least one value of object distance.
 (b) Out of the three mirror identify the mirror which would be preferred to be used for shaving purpose.
 (c) For the mirror B draw ray diagram for image formation for any two given values of object distance.
26. (a) Describe an activity to show refraction of light through a prism. Draw relevant figure, marking angle of incidence, refraction emergence and deviation.
 (b) Is the position of a star as seen by us its true position? Justify your answer.
27. While performing an experiment to determine the focal length of a convex lens the teacher asks a student to fix the given screen at an appropriate place in the given experimental set-up, so that a clear image can be obtained on the screen. If the focal length of the convex lens is 6 cm, at which mark on the scale he should fix up the screen?



28. A concave mirror produces a real, inverted image of the same size as that of the object. If the object is placed at a distance of 16 cm from the mirror, the focal length of the mirror is :

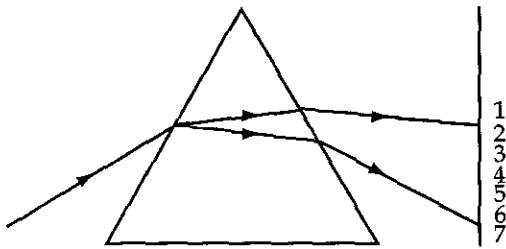
Ans-8 cm



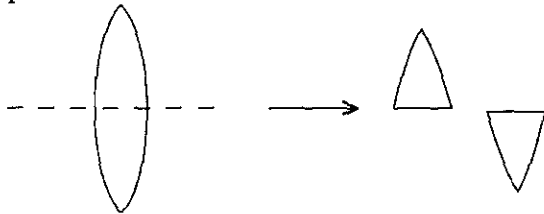
Observe the above ray diagram and answer the following questions :

- (a) What are (A), (B) and (C) in the diagram.
 (b) What is the similarity in (A) and (C).
30. An object 4 cm in size is placed at 25 cm in front of concave mirror of focal length 15 cm. At what distance from the mirror should a screen be placed in order to obtain a sharp image? Find the nature and size of the image.

31. A beam of white light falling on a glass prism gets split up into seven colours marked 1 to 7 as shown in the diagram identify the seven colours. A student made a statement that the colour at position marked 3 and 5 are similar to the colour of the sky and colour of gold metal respectively. Is the above statement made by the student correct or incorrect? Justify.
Appraise the cause of dispersion, when white light enters a glass prism and write the least and most dispersed colour.

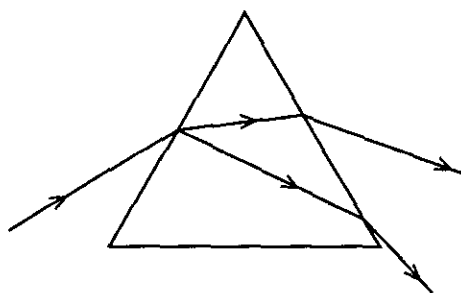


32. (a) A converging lens forms a real and inverted image of an object at a distance of 100 cm from it. Where should an object be placed in front of the lens, so that the size of the image is twice the size of the object? Also, calculate the power of a lens.
(b) State laws of refraction.
33. A double convex lens of focal length 'f' is cut into two equal parts as shown. The focal length of each part will be

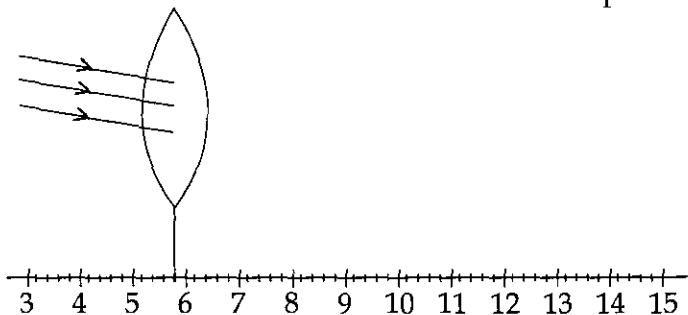


- (a) $2f$ (b) f (c) $\frac{f}{2}$ (d) zero

34. Kushagra wishes to obtain a virtual, erect and an image bigger in comparison to the object by a thin convex lens of focal length 15 cm. Where should the object be placed? Draw the ray diagram to show the image formation. (not to the scale)
35. (a) Define radius of curvature and focal length of a spherical mirror and show it on a figure.
(b) Write relation between radius of curvature and focal length of a spherical mirror.
36. (i) Name the device which is used in laboratory to show splitting of white light into seven colours.
(ii) Name the colours of light for which angle of deviation is :
(a) maximum (b) Minimum
(iii) Why is angle of deviation different for different colours. Name the scientist who first showed that white light is composed of seven colours.
37. (a) In the figure given below mark the angle of prism, angle of deviation for red and violet colour and incident ray.
(b) Explain how the components of white light can be recombined after a prism has separated them. Explain with the help of figure.

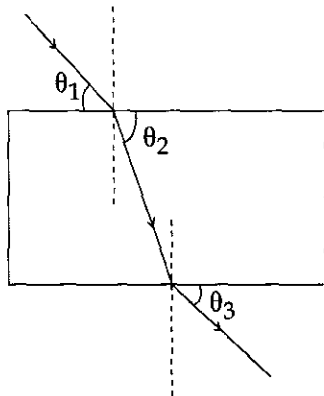


38. (a) Write relation between u , v , f for lens and for mirrors where u , v , f are object distance, image distance and focal length respectively.
 (b) The magnification produced by a plane mirror is $m = 1$. Write the information about the image given by this statement.
 (c) Draw a ray diagram for the following and show the formation of the images in case of concave mirror when the object is placed in :
 (i) Between the pole and focus point
 (ii) On centre of curvature
39. A student determines the focal length of a device 'x' by focussing the image of a far - off object on the screen placed behind it. The device 'x' is a :
 (a) concave mirror (b) convex mirror
 (c) convex lens (d) concave lens
40. The teacher asks a student to fix the given screen at an appropriate place in the given experimental setup, so that a clear image can be obtained on the screen. If the focal length of convex lens is 8 cm, the mark on the scale at which he should fix up the screen is :

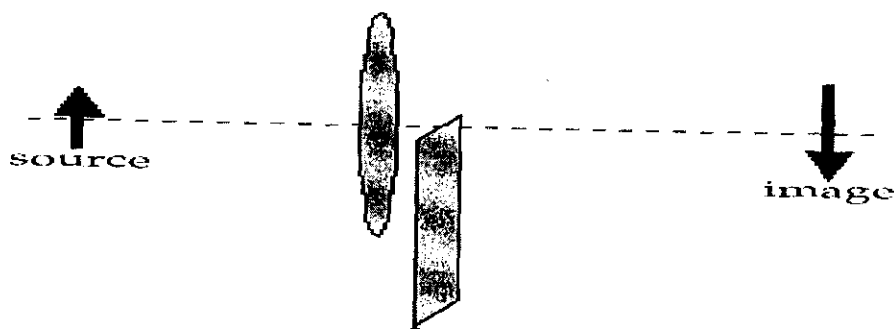


- (a) 12.8 cm (b) 13.0 cm (c) 8 cm (d) 13.8 cm

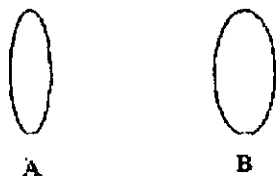
41. A student, while doing the experiment, on the tracing the path of a ray of light passing through a rectangular glass slab, measured the three angles marked as θ_1 , θ_2 and θ_3 in the figure. His measurements could be correct if he were to find :



42. An image is formed by a converging lens. Suppose the bottom half of the lens is covered, as shown, the expected changes to image will be :



43. Two lenses A and B are made of the same material. A is thin lens while B is a thick lens. Which of the following statements is/are correct ?
- (1) Both lenses A and B are converging lens.
 - (2) Lens A has a shorter length than B.
 - (3) Both lenses can form virtual images.



WORKSHEET-5 CHAPTER MAGNETISMS

1. A uniform magnetic field is directed vertically upwards. In which direction in this field should an α - particle (which are positively charged particles) be projected so that it is deflected south ward? Name and state the rule you have used to find the direction in this case.
2. The flow of current in a circular loop of wire creates a magnetic field at its centre. How may existence of this field be detected ? Illustrate with the help of diagram. State the rule which helps to predict the direction of this magnetic field.
3. What is meant by magnetic field?
4. (a) When the north pole of a magnet is moved towards a coil connected with a galvanometer, its pointer gets deflected to one side. Explain this observation with reason. Name the phenomenon.
 (b) What will happen to the deflection in galvanometer when the magnet is taken away from the coil ?
 (c) If the experiment is repeated with the magnet being moved towards the coil with great speed, state the change that you would notice in the deflection in the galvanometer ? Name and state the rule which helps in predicting the direction of deflection in each case.

CHEMISTRY

WORKSHEET-1

WRITE DOWN THE BALANCED CHEMICAL EQUATIONS FOR THE FOLLOWING WORD EQUATION WITH ALL NECESSARY INFORMATION AND ALSO TYPE OF REACTION IN YOUR CLASS WORK COPY.

| | |
|----|--|
| 1. | Magnesium + Oxygen -----> Magnesium oxide |
| 2. | Zinc + Sulphuric acid ----- > Zinc sulphate + Hydrogen |
| 3. | Iron+ Water----- → Iron Oxide + Hydrogen gas |
| 4. | Carbon monoxide + Hydrogen gas----- → Methyl Alcohol |
| 5. | Carbon Dioxide + Water----- → Glucose + oxygen + water |
| 6. | Hydrogen + Chlorine -----> Hydrogen chloride |

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| 7. | <i>Barium chloride + Aluminium sulphate -----> Barium sulphate + Aluminium chloride</i> |
| 8. | <i>Sodium + Water -----> Sodium hydroxide + Hydrogen</i> |
| 9. | <i>Solutions of barium chloride and sodium sulphate in water react to give insoluble barium sulphate and the solution of sodium chloride.</i> |
| 10. | <i>Sodium hydroxide solution (in water) reacts with hydrochloric acid solution (in water) to produce sodium chloride solution and water.</i> |
| 11. | <i>Calcium oxide reacts vigorously with water to produce slaked lime releasing a large amount of heat.</i> |
| 12. | <i>Calcium hydroxide reacts slowly with the carbon dioxide in air to form a thin layer of calcium carbonate.</i> |
| 13. | <i>Natural gas burns in presence of oxygen to give out carbon dioxide and water.</i> |
| 14. | <i>Glucose combines with oxygen in the cells of our body and provides energy.</i> |
| 15. | <i>Ferrous sulphate crystals lose water when heated and the colour of the crystals changes. It then decomposes to ferric oxide sulphur dioxide and sulphur trioxide .</i> |
| 16. | <i>Decomposition of calcium carbonate to calcium oxide and carbon dioxide.</i> |
| 17. | <i>Lead nitrate on heating changes to (Lead oxide) , (Nitrogen (dioxide) & oxygen gas.</i> |
| 18. | <i>silver chloride gets decomposed in to into silver and chlorine by light.</i> |
| 19. | <i>Zinc reacts with copper sulphate to give Zinc sulphate and copper .</i> |
| 20. | <i>Lead reacts with Copper chloride to give Lead chloride and copper.</i> |
| 21. | <i>Sodium sulphate reacts with Barium chloride to give Barium sulphate and sodium chloride.</i> |
| 22. | <i>The surface of copper powder becomes coated with black copper(II) oxide.</i> |
| 23. | <i>Hydrogen gas is passed over this heated material (CuO), the black coating on the surface turns to brown copper.</i> |
| 24. | <i>Hydrogen gas combines with nitrogen to form ammonia.</i> |
| 25. | <i>Hydrogen sulphide gas burns in air to give water and sulphur dioxide.</i> |
| 26. | <i>Barium chloride reacts with aluminium sulphate to give aluminium chloride and a precipitate of barium sulphate.</i> |
| 27. | <i>Potassium metal reacts with water to give potassium hydroxide and hydrogen gas.</i> |
| 28. | <i>Calcium hydroxide + Carbon dioxide reacts to give Calcium carbonate + Water</i> |
| 29. | <i>Zinc + Silver nitrate reacts to give Zinc nitrate + Silver</i> |
| 30. | <i>Aluminium + Copper chloride reacts to give Aluminium chloride + Copper</i> |
| 31. | <i>Barium chloride + Potassium sulphate gives Barium sulphate + Potassium chloride</i> |
| 32. | <i>Potassium bromide(aq) + Barium iodide(aq) give out Potassium iodide(aq) + Barium bromide(s)</i> |
| 33. | <i>Zinc carbonate(s) on heating gives Zinc oxide(s) + Carbon dioxide(g)</i> |
| 34. | <i>Magnesium(s) + Hydrochloric acid(aq) reacts to give Magnesium chloride(aq) + Hydrogen(g)</i> |
| 35. | <i>Nitric acid reacts with calcium hydroxide to give calcium nitrate and water.</i> |
| 36. | <i>Sodium chloride reacts with silver nitrate to give sodium nitrate and silver chloride.</i> |
| 37. | <i>Barium chloride reacts with sulphuric acid to give barium sulphate and hydrochloric acid.</i> |

WORKSHEET-2

| | |
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| 1. | SODIUM REACTS WITH HYDROCHLORIC ACID TO GIVE SODIUM CHLORIDE AND HYDROGEN GAS. |
| 2. | POTASSIUM REACTS WITH SULPHURIC ACID TO GIVE POTASSIUM SULPHATE AND HYDROGEN GAS. |
| 3. | CALCIUM REACTS WITH NITRIC ACID TO GIVE CALCIUM NITRATE AND HYDROGEN GAS. |
| 4. | MAGNESIUM REACTS WITH ACETIC ACID TO GIVE MAGNESIUM ACETATE AND HYDROGEN GAS. |
| 5. | ZINC REACTS WITH SODIUM HYDROXIDE TO GIVE SODIUM ZINCATE AND HYDROGEN GAS. |
| 6. | ALUMINIUM REACTS WITH SODIUM HYDROXIDE TO GIVE ALUMINIUM ZINCATE AND HYDROGEN GAS. |
| 7. | SODIUM CARBONATE REACTS WITH HYDROCHLORIC ACID TO GIVE SODIUM CHLORIDE , WATER & CARBON DIOXIDE GAS. |
| 8. | SODIUM HYDROGEN CARBONATE REACTS WITH HYDROCHLORIC ACID TO GIVE SODIUM CHLORIDE , WATER & |

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| | <i>CARBON DIOXIDE GAS.</i> |
| 9. | <i>CALCIUM HYDROXIDE REACTS WITH CARBON DIOXIDE TO GIVE CALCIUM CARBONATE & WATER.</i> |
| 10. | <i>CALCIUM HYDROXIDE REACTS WITH EXCESS CARBON DIOXIDE TO GIVE CALCIUM BICCARBONATE & WATER.</i> |
| 11. | <i>SODIUM HYDROXIDE REACTS WITH HYDROCHLORIC ACID TO GIVE SODIUM CHLORIDE & WATER.</i> |
| 12. | <i>CALCIUM REACTS WITH SULPHURIC ACID TO GIVE CALCIUM SULPHATE & WATER.</i> |
| 13. | <i>POTASSIUM HYDROXIDE REACTS WITH ACETIC ACID POTASSIUM ACETATE AND HYDROGEN GAS.</i> |
| 14. | <i>COPPER OXIDE REACTS WITH HYDROCHLORIC ACID TO GIVE COPPER (II) CHLORIDE & WATER..</i> |
| 15. | <i>CALCIUM HYDROXIDE REACTS WITH CARBON DIOXIDE TO GIVE CALCIUM CARBONATE & WATER.</i> |
| 16. | <i>HYDROCHLORIC ACID REACTS WITH WATER TO GIVE HYDRONIUM ION & CHLORIDE ION.</i> |
| 17. | <i>SODIUM CHLORIDE REACTS WITH WATER TO GIVE SODIUM HYDROXIDE, CHLORINE GAS & HYDROGEN GAS.</i> |
| 18. | <i>CALCIUM HYDROXIDE REACTS WITH CHLORINE TO GIVE CALCIUM OXY CHLORIDE & WATER.</i> |
| 19. | <i>SODIUM CHLORIDE REACTS WITH WATER, CARBON DIOXIDE & AMMONIA TO GIVE AMMONIUM CHLORIDE & SODIUM HYDROGEN CARBONATE.</i> |
| 20. | <i>SODIUM HYDROGEN CARBONATE GIVES SODIUM CARBONATE WATER & CARBON DIOXIDE GAS.</i> |
| 21. | <i>GYPSUM WHEN HEATED AT 373 K GIVES PLASTER OF PARIS.</i> |
| 22. | <i>PLASTER OF PARIS REACTS WITH WATER TO GIVE GYPSOM.</i> |
| 23. | <i>DILUTE SULPHURIC ACID REACTS WITH ALUMINIUM PAWDER TO GIVE ALUMINIUM SULPHATE & HYDROGEN GAS.</i> |

BIOLOGY

STD X Biology Revision Worksheet – 1

(LIFE PROCESSES)

- Q.1 Name the enzyme present in saliva and state its function.
- Q.2 What is the mode of nutrition in- (i) fungi (ii) Amarbel (Cuscuta)
- Q.3 What are villi? Explain their function in the digestive system.
- Q.4 'Stomata remain closed in desert plants during daytime.' How do they do photosynthesis ?
- Q.5 (a) Draw a diagram to show open stomatal pore and label on it : (i) guard cells (ii) chloroplast
(b) State two functions of stomata.
(c) How do guard cells regulate the opening and closing of stomatal pore ?
- Q.6 (a) Explain the process of nutrition in amoeba with the help of a diagram.
(b) Explain how does a paramecium obtain its food.
- Q.7 (a) List two functions performed by dilute hydrochloric acid in our stomach.
(b) Name the raw materials required for photosynthesis.
- Q.8 Draw a diagram of the human alimentary canal and label the following parts :
- (i) Largest gland. (ii) The gland that secretes digestive enzymes and hormone.
(iii) Part where HCl is produced. (iv) Part where digested food is absorbed

STD X Biology Revision Worksheet – 2
(LIFE PROCESSES)

- Q.1 Name the respiratory pigment in human beings and state the cell in which it is present.
- Q.2 Explain why ventricles have thick muscular walls than the atria ?
- Q.3 During breathing cycle what is the advantage of residual volume of air in lungs? Explain
- Q.4 Why is the rate of breathing in aquatic organisms much faster than in terrestrial organisms?
- Q.5 List in tabular form three differences between aerobic respiration and anaerobic respiration.
- Q.6 List three characteristics of lungs which make it an efficient respiratory surface
- Q.7 What is lymph? What is the direction of its flow? List two functions of lymphatic system.
- Q.8 Draw the diagram of sectional view of human heart and on it name and label the following parts :
- (a) The chamber of the heart that pumps out de-oxygenated blood.
 - (b) The blood vessel that carries away oxygenated blood from the heart.
 - (c) The blood vessel that receives de-oxygenated blood from the lower part of our body.

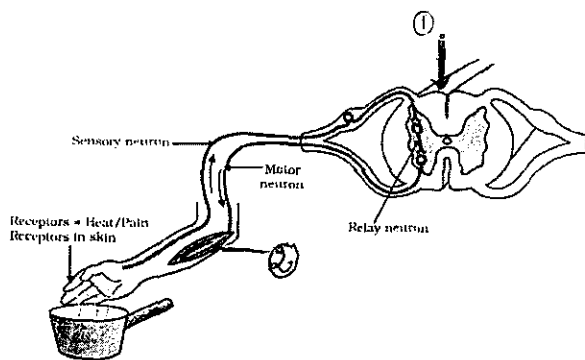
STD X Biology Revision Worksheet – 3
(LIFE PROCESSES)

- Q.1 Name the factors on which the amount of water reabsorbed along the tubular part of nephron depend on ?
- Q.2 Why do plants have a slow transport system ?
- Q.3 List two major steps involved in the formation of urine and state in brief their functions
- Q.4 List in tabular form two ways in which „transpiration“ is different from „translocation“.
- Q.5 (a) Name the part of the neuron where information is acquired.
(b) Name the part of neuron through which the information travels as an electric impulse.
- Q.6 Draw a diagram of human excretory system and label the following :
- (i) part in which urine is produced.
 - (ii) part which stores the urine.
 - (iii) part which connects (i) and (ii).
 - (iv) part from which urine is passed out.

STD X Biology Revision Worksheet – 4
(CONTROL AND COORDINATION)

- Q.1 A florist sprinkled a plant hormone to prevent wilting of leaves. Name the hormone he must have used.
- Q.2 Which part of the brain controls involuntary actions?
- Q.3 Name the hormone secreted by thyroid. Write its function.
- Q.4 What is the structural and functional unit of nervous system ? Name it's any two components.

- Q.5 Which part of the nervous system controls reflex arcs? With the help of a diagram trace the sequence of events, which occur when we touch a hot object. Mention the part of the neuron that acquires information and the form in which information travels?
- Q.6 (a) Which hormone is responsible for the changes noticed in males at puberty?
 (b) Deficiency of which hormone leads to dwarfism.
 (c) Name the hormone which is injected to a diabetic patient.
- Q.7 What is meant by plant hormone? Give one example each of plant hormone that:
 (a) promotes growth. (b) promotes cell division.
 (c) inhibits growth. (d) promote the growth of a tendril around a support.
- Q.8 Describe an activity to illustrate the phenomenon of phototropism and explain why does this occur.
- Q.9 (a) Label the two parts indicated by question marks and labelled 1 and 2 in the below diagram
 (b) Which part of the nervous system controls reflex arcs?

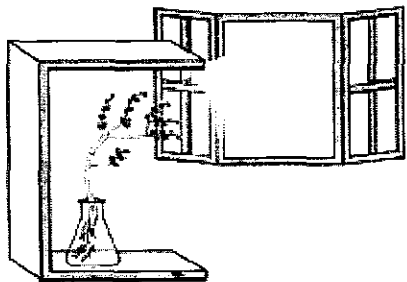


- Q.10 State the events in sequence that take place when an electrical impulse travels from a dendritic tip of a nerve cell to another nerve cell.

STD X Biology Revision Worksheet – 5 (CONTROL AND COORDINATION)

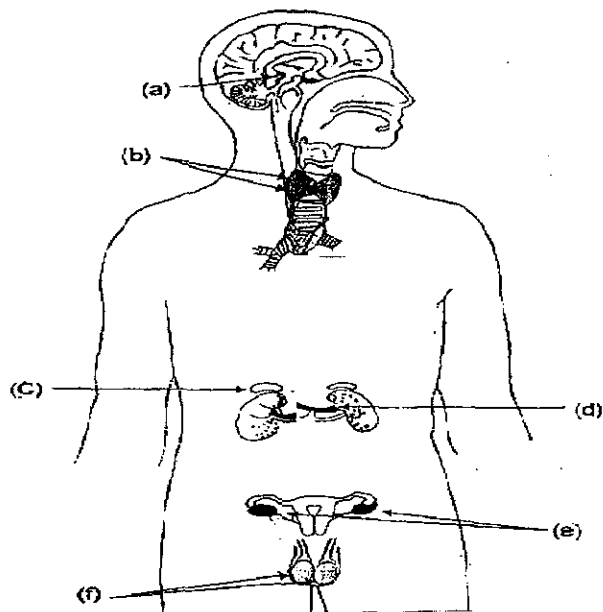
- Q.1 Name the hormone synthesized at the shoot tips.
- Q.2 Which part of the brain controls involuntary actions?
- Q.3 (a) Identify the glands that secrete
 (i) insulin (ii) thyroxin
- Q.4 A boy runs on seeing a stray dog. His breathing becomes very fast and blood pressure also increases. Name the hormone found to be high in his blood and the gland which produces it.
- Q.5 State the events in sequence that take place when an electrical impulse travels from a dendritic tip of a nerve cell to another nerve cell.
- Q.6 (i) Differentiate between sensory neurons and motor neurons.
 (ii) How is brain protected in our body?
 (iii) Name the part of the brain responsible for precision of voluntary actions and maintaining body posture and balance of the body.

- Q.7 (a) Why should we use iodized salt in our diet?
 (b) If iodine is insufficient in one's diet, what might be the deficiency disease?
- Q.8 (a) Explain how auxins help in bending of plant stem towards light.
 (b) State the objective of the experiment for which experimental set up is shown in the given diagram.



**STD X Biology Revision Worksheet – 6
 (CONTROL AND COORDINATION)**

- Q.1 The gap between two neurons is known as ____.
 (a) synapse (b) synopsis (c) impulse (d) synaptic node
- Q.2 Artificial ripening of fruit is carried out by -
 (a) Auxins (b) Ethylene (c) Absciscic acid (ABA) (d) Gibberellins
- Q.3 Name the centre of the brain that controls
 (i) Swallowing
 (ii) hearing
- Q.4 Represent schematically the path of a reflex action.
- Q.5 Name the hormone synthesized at the shoot tips. How does it help the plant to respond to light?
- Q.6 How does feed-back mechanism regulate hormone secretion?
- Q.7 "Use of iodized salt is essential". List three reasons to justify the statement.
- Q.8 (a) Identify the endocrine glands a, b and c in the given diagram. (3)
 (b) List their functions..



STD X Biology Revision Worksheet – 7

(HOW DO ORGANISMS REPRODUCE?)

- Q.1 Explain how a spirogyra reproduces.
- Q.2 Fallen leaves of 'Bryophyllum' on the ground produce new plants whereas the leaves of rose do not. Explain this difference between the two plants.
- Q.3 What is reproduction? Mention the importance of DNA copying in reproduction.
- Q.4 Mention any four ways of asexual reproduction.
- Q.5 What is meant by DNA copying? Mention its importance in reproduction.
Draw diagrams showing binary fission in Amoeba. Give an example of an organism which reproduces by multiple fission.
- Q.6
- Q.7 (a) How do organisms reproduce by fission?
(b) Write names of any two organisms which reproduce by this method.
(c) Differentiate between the fission of Leishmania and Plasmodium.
- Q.8 a) Differentiate between binary and multiple fission for reproduction.
b) List three advantages of growing plants by vegetative propagation.

STD X Biology Revision Worksheet – 8

(HOW DO ORGANISMS REPRODUCE?)

- Q.1 (a) Why are papaya flowers called unisexual?
(b) After fertilization in a flower, mention the structures that develop into the embryo and seed.
- Q.2 List any two differences between pollination and fertilization.
- Q.3 Name the female organ which provides nutrition to the embryo. Where is it located?
- Q.4 What happens when a pollen grain falls on the stigma?
- Q.5 (a) In the male reproductive system, where is the organ that produces male germ cells situated? Why?
(b) Mention the role of prostate gland and seminal vesicles in the human male reproductive system.
(c) How are the male and female germ cells produced in the human body different from each other?
- Q.6 (a) Explain the terms (i) Implantation (ii) Placenta.
(b) What is the average duration of human pregnancy?
- Q.7 (a) Draw a diagram showing longitudinal section of a flower and label – Stigma, Ovary, Anther, Filament.
(b) How is the process of pollination different from fertilization?

STD X Biology Revision Worksheet – 9

(HEREDITY AND EVOLUTION)

- Q.1 Give an example where sex determination is regulated by environmental factors.
- Q.2 The genotype of green stemmed tomato plants is denoted by GG and that of purple stemmed tomato plants as gg. When these two plants are crossed :
- In what ratio would you find the green and purple colour in the F₂ progeny?
- Q.3 How is the sex of a new-born determined genetically in humans?
- Q.4 The genotype of a round seeded pea plant is denoted as RR and that of wrinkle seeded plants as rr. When a cross between them occurs:
- (a) What will be the phenotype expected in F₁ generation?
- (b) Give the % of wrinkle seeded plants if F₁ plants are self pollinated.
- (c) In which ratio do you find RR, rr and Rr in F₂ progeny?
- Q.5 A child questioned his teacher “Why do organisms resemble their parents more as compared to grandparents?” In which way will the teacher explain to the child?
- Q.6 In Mendel’s monohybrid cross between tall and short pea plants, all offsprings were tall. What does this tell us about the trait? What is the ratio of tall and short plants in the F₂ generation?
- Q.7 In human beings, the statistical probability of getting either a male or a female child is 50:50. Give reasons and explain with the help of diagram.

STD X Biology Revision Worksheet – 10

(HEREDITY AND EVOLUTION)

- Q.1 Define evolution. Why are traits acquired during the life-time of an individual not inherited?
- Q.2 a) Forelimbs of man and frog - are they homologous or analogous organs?
Give a reason for your choice.
- b) How does it help in the study of evolution?
- Q.3 An organ like a wing in birds is an advantage to the organism. Did they appear in different stages or were they formed due to a single sudden change in them?
- Q.4 (a) Identify the analogous and homologous amongst the following : Wings of an insect, wings of a bat, forelimbs of a frog, forelimbs of a lizard.
- (b) How were the descendants of wild cabbage developed?
- Q.5 What are fossils? List two methods by which the age of fossils is determined.
- Q.6 Define the terms homologous and analogous organs and give an example of each.
- Q.7 (a) Name two factors that could lead to the rise of new species.
- (b) What is the structural difference between the wings of bats and birds?
- (c) Why are the wings of birds and bats considered analogous organs?

STD X Biology Revision Worksheet – 11
(OUR ENVIRONMENT)

- Q.1 Name the two abiotic components of an ecosystem.
- Q.2 Mention the role of microorganisms like bacteria and fungi in the ecosystem.
- Q.3 a) Consider a food chain of the following - fish, crab, plankton, shark.
Arrange the above chain in proper order of trophic levels.
- b) Mention the role of decomposers in our ecosystem.
- Q.4 What is meant by 'non-biodegradable' waste? Identify biodegradable waste from the following:
Empty packet of chips, Empty plastic bottle of mineral water, Empty paper box of sweets, Empty tin of a cold drink.
- Q.5 In the following food chain, grass provides 4000J of energy to the grasshopper. How much energy will be available to snakes and frogs? Grass→ Grasshopper→ Frogs→ Snakes.
- Q.6 a) Choose any two biodegradable wastes from the following.
Cow dung, DDT, plastic, radioactive waste, vegetable peel.
- b) In which form do plants store the trapped solar energy?
- Q.7 a) Choose one consumer each that belongs to the second and third trophic levels from the organisms given below.
Eagle, frog, tiger , rabbit, fox
- b) Pesticides added to a field is seen in increased amounts in the crop and in the birds that feed on them. What is this phenomenon called?
- Q.8 a) A food chain consisting of – wheat→ rat→ snakes→ peacock. What will happen if all the snakes are killed?
- b) What is meant by biological magnification?
- c) What are biodegradable substances? Give two examples.

STD X Biology Revision Worksheet – 12
(OUR ENVIRONMENT)

- Q.1 What are ozone depleting compounds called?
- Q.2 How does the ozone layer of atmosphere protect humans on earth?
- Q.3 What is ozone?What happens during the first step of ozone formation in the atmosphere?
- Q.4 a) Which chemical is used in fire extinguishers? How is it harmful?
- b) 'Reuse of material is considered better than recycling'. Why?
- Q.5 a) "Energy flow in a food chain is unidirectional". Justify this statement.
- b) Give two examples to emphasize the concept of REUSE.
- Q.6 a) Mention any two ways of garbage disposal.
- b) How can we reduce the problem of waste disposal? (Mention two ways).
- Q.7 Suggest any five changes you would like to incorporate in your lifestyle in a move towards sustainable use of available resources.

STD X Biology Revision Worksheet – 13
(MANAGEMENT OF NATURAL RESOURCES)

- Q.1 Forests are 'biodiversity hotspots'. Justify this statement.
- Q.2 Name the three 'R' s to save environment. Explain any one with the help of one example.
- Q.3 Mention the steps taken by West Bengal Government to protect badly degraded sal forests.
- Q.4 (a) What is 'Chipko Movement'?
- (b) Why should we conserve forests?
- Q.5 Mention any three harms caused by the destruction of forests.
- Q.6 Mention three reasons to explain why forests and wild-life should be conserved.
- Q.7 List the stake holders in conservation of forests and mention their stakes.

STD X Biology Revision Worksheet – 14
(MANAGEMENT OF NATURAL RESOURCES)

- Q.1 Mention any two reasons for which environmentalists protested against raising the height of the Sardar Sarovar dam on river Narmada.
- Q.2 Why should fossil fuels be used judiciously? Write any two reasons.
- Q.3 Fossil fuels are being increasingly used as source of energy. List any two reasons for replacing these by alternate sources of energy.
- Q.4 List any three advantages of water harvesting over water stored in ponds.
- Q.5 The advantages of water stored in the ground are many. State three of them.
- Q.6 Although coal and petroleum are produced by degradation of biomass, yet we need to conserve them. Why? Mention two reasons.
- Q.7 (a) Mention any two advantages of constructing dams.
- (b) Name a dam which was a subject of much opposition from locals as well as NGO's.
- (c) Mention any three problems which may arise due to construction of large dams.

SST

SET-I

- (i) The question paper has 26 questions in all. All questions are compulsory. (ii) Marks are indicated against each question.
- (iii) Questions from serial number 1 to 7 are Very Short Answer type Questions. Each question carries one mark.
- (iv) Questions from serial number 8 to 18 are 3 marks questions. Answers of these questions should not exceed 80 words each.

- (v) Questions from serial number 19 to 25 are 5 marks questions. Answers of these questions should not exceed 100 words each.
- (vi) Question number 26 is a map question. It has two parts 26(A) and 26(B). 26(A) of 2 marks from History and 26(B) of 3 marks from Geography. After completion attach the map inside your answer book.
- (vii) There is no overall choice. However, internal choice has been provided in some questions. You have to attempt only one of the alternatives in all such-questions.
1. When was primary education law made mandatory in London?
 2. How many countries are included in HDI ranking?
 3. Define fresh Water.
 4. Define infant mortality rate?
 5. Write down one disadvantage of unorganized sector.
 6. Name the party that leads NDA.
 7. Name the leader who first referred to the Dalits as 'Harijans'.
 8. Which sector is called public sector? Give some examples
 9. Why are the logos like Agmark and ISI important to use in products?
 10. State the difference between unitary and federal form of government?
 11. What are the majoritarian measures taken in Sri Lanka to establish supremacy?
 12. Short note on Ho chi minh.
 13. Analyze the meaning of sustainable development. How can sustainable development be achieved.
 14. Distinguish between khaddar Soil and Bhangar soil.
 15. Suggest any three values that will help globalization in benefiting all nations alike?
 16. "The idea of democracy is overwhelmingly supported all over the world". Analyze this statement.
 17. What is the importance of Waterways In India.
 18. State any three further innovations in print.
 19. Describe the "go east movement".
 20. Describe the important factors responsible for the water scarcity in the world.
 21. How did the growing role of money and muscle power in political party become a threat for democracy?
 22. Discuss the various mode of occurrence of minerals with examples.
 23. How does politics affect caste system? Give its positive and negative effects.
 24. Globalization has both advantages and disadvantages. Explain 5 points in each case

OR

The three sectors of economy are interdependent on each other. Explain with suitable examples

25. What is meant by 'Satyagraha'? How did Gandhiji apply the idea of 'Satyagraha' in our country?
26. (A) On the given political outline map of India, mark and locate the following:
- (i) A place associated with 'No Tax Campaign'.
 - (ii) An incident took place here, due to which the Non-Cooperation Movement was called off.
1. (B) On the political map of India locate and label the following
- (i) Sardar sarovar Dam
 - (ii) Mumbai High oil field
 - (iii) Tarapur Nuclear Plant

SET-2

- (i) The question paper has 26 questions in all. All questions are compulsory. (ii) Marks are indicated against each question.
 - (iii) Questions from serial number 1 to 7 are Very Short Answer type Questions. Each question carries one mark.
 - (iv) Questions from serial number 8 to 18 are 3 marks questions. Answers of these questions should not exceed 80 words each.
 - (v) Questions from serial number 19 to 25 are 5 marks questions. Answers of these questions should not exceed 100 words each.
 - (vi) Question number 26 is a map question. It has two parts 26(A) and 26(B). 26(A) of 2 marks from History and 26(B) of 3 marks from Geography. After completion attach the map inside your answer book.
 - (vii) There is no overall choice. However, internal choice has been provided in some questions. You have to attempt only one of the alternatives in all such-questions.
1. Define Compositor.
 2. State any one reason for over use of resources.
 3. Define Net Attendance Ratio?
 4. Who elects the Community Government in Belgium?
 5. Indian Government has imposed tax on import of Chinesetoys to promote Indian toys. By what term it is known in globalisation?
 6. What do you mean by consumer forum.
 7. Why did scholars revolt take place in 1868?
 8. Why did Mahatma Gandhi lay emphasis on spinning yarn and weaving khadi?

9. When a consumer is buying a product, he/she has right to know which information about the product? What will be your responsibility as a consumer if you find any defect in the product or false information?
10. What is primitive subsistence farming? State two of its demerits.
11. "The outcome of politics of social divisions depends on how the political leaders raise the demands of any community". Explain the statement.
12. What role can citizens play in strengthening democracy?
13. "Most of the poor households are still dependent on informal sources of credit". Why? Do you see the ineffectiveness of Indian Banking System in this situation?
14. "Printed matter introduced debate and discussion in our society". Justify the statement.
15. Distinguish between ferrous and non ferrous minerals.
16. Why people do not develop much in unorganised sector? State any three reasons.
17. What was the impact of the First World War on India?
18. Differentiate between public sector and private sector?
19. How can you say that US citizens were against the US-Vietnamese war?
20. "Dalit participation was limited in the Civil Disobedience Movement". Explain the statement.

OR

When was the Civil Disobedience Movement started? What were the significant effects of it on Indians?

21. Mention the five different inland waterways of India.
22. Explain the ways in which democracies have been able to reduce inequality and poverty.
23. "Democracy is the best way to fight for recognition and reconciliation of social diversity". Justify the statement.
24. Discuss the merits and demerits of multipurpose river valley projects.
25. Elucidate the significance of Secondary sector in Indian economy.

OR

Generally the formal credit is not available to the rural poor. State the main reasons why there is a need to expand rural credit

26. (A) On the given political outline map of India, mark and locate the following:
 - (i) The place where the Civil Disobedience Movement started.
 - (ii) The place where the Indian National Congress Session was held in 1929.
1. (B) On the political map of India locate and label the following [1+1+1]
 - (i) Kochchi sea port
 - (ii) Jharia coal field
 - (iii) Bhakra-Nangal Dam

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'କ' ବିଭାଗ

୧. ଅନୁଛେଦଟିକୁ ପଢ଼ି ପ୍ରଶ୍ନଗୁଡ଼ିକର ଉତ୍ତର ଲେଖ ।
- ସଂସ୍କୃତି କିଛି ଗୋଟିଏ ଦୃଶ୍ୟମାନ ବସ୍ତୁ ନୁହେଁ, ଯାହାକୁ ହାତରେ ଧରି ଦେଖାଇହେବ । ଏହା ମଣିଷର ଜୀବନୀ ଶକ୍ତି ପରି କୌଣସି ଏକ ସମାଜ ବା ଜାତିର ଜୀବନୀ ଶକ୍ତି ମାତ୍ର । ଏହାର ପ୍ରକାଶର ମାଧ୍ୟମ ହେଉଛି ସାହିତ୍ୟ, ସଂଗୀତ, ସ୍ଥାପତ୍ୟ, ଚିତ୍ରକଳା ପ୍ରଭୃତି । ପୂର୍ବେ ଓଡ଼ିଶାର ଭୌଗୋଳିକ ସ୍ଥିତି ଗୋଦାବରୀଠାରୁ ଗଙ୍ଗା ପର୍ଯ୍ୟନ୍ତ ବିସ୍ତୃତ ଥିଲା ବୋଲି ଐତିହାସିକମାନେ ମତ ଦିଅନ୍ତି । ଏ ଭୂଖଣ୍ଡ ବିଭିନ୍ନ ସମୟରେ କଳିଙ୍ଗ, ଉତ୍କଳ, କଙ୍ଗୋଦ, ସମାପା, ତୋଷଳୀ, ଓଷଳୀ, ମୋଷଳୀ ଆଦି ବିଭିନ୍ନ ନାମରେ ଅଭିହିତ ହୋଇଆସିଛି । ଏହାର ଆଦିମ ଅଧିବାସୀ ହେଉଛନ୍ତି ଆଦିବାସୀ ଗୋଷ୍ଠୀ । ଏମାନେ ବଣଜଙ୍ଗଲର ପ୍ରାଣୀ । ସରଳ, ନିରାତମ୍ଭର ଓ ଦୃଢ଼ନିଷ୍ଠା ଏମାନଙ୍କ ସ୍ୱାଭାବିକ ଗୁଣ । ଏମାନଙ୍କ ଉପରେ ଉତ୍ତର ଭାରତର ଆର୍ଯ୍ୟବର୍ତ୍ତୀୟ ଓ ଦକ୍ଷିଣ ଭାରତୀୟ ଦ୍ରାବିଡ଼ୀୟ ସଂସ୍କୃତି ପରବର୍ତ୍ତୀ କାଳରେ ଉଭୟ ପଦ୍ମ ଆସି ଏତେ ଦୂର ଆସନ ଜମାଇ ଦେଲେ ଯେ କେହି କାହାର ସ୍ୱାତନ୍ତ୍ର୍ୟ ରକ୍ଷା କରିପାରିଲେ ନାହିଁ କିମ୍ବା କେହି କାହାରି ମଧ୍ୟରେ ଅନ୍ତର୍ଜାତ ହେବାକୁ ମଧ୍ୟ ପସନ୍ଦ କଲେ ନାହିଁ । ଫଳରେ ଜନ୍ମ ହେଲା ଏକ ନୂତନ ସଂସ୍କୃତି । ଯାହାକି ଓଡ଼ିଶା ସଂସ୍କୃତି ନାମରେ ପରିଚୟ ଲାଭ କଲା । ଏହି ସଂସ୍କୃତି ଏବେ ସମଗ୍ର ବିଶ୍ୱରେ ନିଜର ମର୍ଯ୍ୟାଦା ପ୍ରତିଷ୍ଠା କରି ଆଦୃତି ଲାଭ କରୁଛି ।

ପ୍ରଶ୍ନାବଳୀ:

- ସଂସ୍କୃତି କହିଲେ ତୁମେ କ'ଣ ବୁଝ ?
- ଓଡ଼ିଶାର ପୂର୍ବ ନାମ ଗୁଡ଼ିକ କ'ଣ ?
- ସଂସ୍କୃତି କାହା ମାଧ୍ୟମରେ ପ୍ରକାଶ ପାଇଥାଏ ?
- ଆଦିବାସୀମାନଙ୍କ ସ୍ୱଭାବ ଜାତ ଗୁଣ କ'ଣ ?
- 'ଓଡ଼ିଶା ସଂସ୍କୃତି' କିପରି ସୃଷ୍ଟି ହେଲା ?

'ଖ' ବିଭାଗ

୨. ଯେକୌଣସି ଗୋଟିଏ ବିଷୟରେ ରଚନା ଲେଖ ।
- ଜାତୀୟ ସଂସ୍କୃତି
 - ହକି ବିଶ୍ୱକପ
 - ଦେଶ ଗଠନରେ ଛାତ୍ର ସମାଜର ଭୂମିକା
୩. ଯେକୌଣସି ଗୋଟିଏ ବିଷୟରେ ପତ୍ରଟିଏ ଲେଖ ।
- ନାଗରିକର ମୌଳିକ କର୍ତ୍ତବ୍ୟ ସଂପର୍କରେ ଲିଖିତ ତୁମର ଏକ ଲେଖା ସମ୍ବାଦପତ୍ରରେ ପ୍ରକାଶନ ନିମନ୍ତେ ଅନୁରୋଧ ଜଣାଇ ଏହାର ସଂପାଦକଙ୍କୁ ପତ୍ର ଲେଖ ।

କିମ୍ବା

ଓଡ଼ିଆ ଭାଷା ଓ ସଂସ୍କୃତିର ସୁରକ୍ଷା ନିମନ୍ତେ ସରକାରଙ୍କ ସହିତ ଜନସାଧାରଣ ସଜାଗ ଓ ଯତ୍ନବାନ ହେବାର ଆବଶ୍ୟକତା ଦର୍ଶାଇ ସଂପାଦକଙ୍କ ନିକଟକୁ ପତ୍ରଲେଖ ।

'ଗ' ବିଭାଗ

୪. ନିମ୍ନଲିଖିତ ପ୍ରଶ୍ନଗୁଡ଼ିକର ଉତ୍ତର ଲେଖ ।
- କ) ନିର୍ଦ୍ଦେଶ ଅନୁସାରେ ବାକ୍ୟ ପରିବର୍ତ୍ତନ କର । (ଯେକୌଣସି ଚାରେଟିର)
- ତୁମେ ଯଦି ପୁରୀ ଯିବ, ମୋ ପାଇଁ ମହାପ୍ରସାଦ ଆଣିବ । (ସରଳବାକ୍ୟ)
 - ସେ ଧନୀ ମାତ୍ର ସୁଖୀ ନୁହଁନ୍ତି । (ସରଳବାକ୍ୟ)
 - ମହା ଭାଷଣ ଦେଉଥିବା ବେଳେ ବୁଢ଼ାଟିଏ ମଞ୍ଚ ଉପରକୁ ଚଢ଼ିଗଲା । (କଟିଳବାକ୍ୟ)
 - ଚାଲି ଜାଣିଲେ ବାଟ ସୁନ୍ଦର । (କଟିଳବାକ୍ୟ)
 - ଯଦି ମାମୁ ଆସିବେ, ତେବେ ଆମେ ଖୁସି ହେବୁ । (ଯୌଗିକବାକ୍ୟ)

- ଚ) ଡାକ୍ତରଙ୍କ ବହୁ ଚେଷ୍ଟା ସତ୍ତ୍ୱେ ରୋଗୀଟି ବଞ୍ଚିଲା ନାହିଁ । (ଯୌଗିକ ବାକ୍ୟ)
- ଖ) ଶୁଦ୍ଧ କରି ଲେଖ । (ଯେ କୌଣସି ଚାରୋଟିର)
- କ) ପୂଜ୍ୟାସ୍ତ
- ଖ) ମନଭାବ
- ଗ) ଆଶ୍ରାବାଦ
- ଘ) ଶୂଦ୍ର
- ଙ) ଅନୁସୂୟା
- ଚ) ଅପରାହ୍

ଗ) ଉପଯୁକ୍ତ ଯତିଯାତ ଲଗାଇ ଉଦାହରଣ ସହ ଯେକୌଣସି ଗୋଟିଏ ଛନ୍ଦକୁ ବୁଝାଇ ଲେଖ ।
ରାମକେରୀ କିମ୍ପା ବଙ୍ଗଳାଶ୍ରୀ

- ଘ) ରୁଡ଼ିକୁ ବାକ୍ୟରେ ବ୍ୟବହାର କର । (ଯେକୌଣସି ଚାରୋଟିର)
- i) ଅଲଣା କଥା
- ii) କୃପ ମଣ୍ଡୁକ
- iii) ବଣ ବିଛୁଆଡ଼ି
- iv) ଆଖିରେ ଧୂଳିଦେବା
- v) ଚଳୁ କରିଦେବା
- vi) ମୁଣ୍ଡଝାଳ ତୁଣ୍ଡରେ ମାରିବା

ଙ) ଓଡ଼ିଆରେ ଅନୁବାଦ କରି ଲେଖ ।

People of different religions live in India. There is unity among different communities. Secularism has been mentioned in the Indian constitutions. So we should not quarrel among one another in the name of religion. Gandhiji, the Pioneer of Indian freedom movement, was a secular statesman. We should follow his footprints.

‘ଘ’ ବିଭାଗ

୫. ସପ୍ତସଙ୍ଗ ସରଳାର୍ଥ ଲେଖ ।

ଏମାନେ ପୁଷ୍ପିତ ପଲ୍ଲୀଶବନରେ ଦେଖନ୍ତି ବିଦ୍ରୋହର ବହି, ସ୍ଥଳପଦ୍ମରେ ଦେଖନ୍ତି ଆହବର ରକ୍ତ ଓ ଆନନ୍ଦ କୃଷ୍ଣରୂପରେ ଦେଖନ୍ତି ଅନାଗତ ଯୁଗର ରକ୍ତକେତନ ।

କିମ୍ପା

ଭାରତୀୟ ଦର୍ଶନରେ, ‘ମନୁଷ୍ୟର ସେବା ହିଁ ଈଶ୍ଵର ସେବା’ ।

୬. ଯେକୌଣସି ତିନୋଟି ପ୍ରଶ୍ନର ଉତ୍ତର ଲେଖ ।

- କ) କେଉଁ ଘଟଣାରେ ବିବେକାନନ୍ଦଙ୍କ ହୃଦୟ ବିଗଳିତ ହୋଇଥିଲା ?
- ଖ) ସମୂହ ଜନତା ଅଳ୍ପ ସମୟ ମଧ୍ୟରେ କିପରି ଶିକ୍ଷିତ ହୋଇପାରିବେ ?
- ଗ) ଭାରତୀୟ ସଭ୍ୟତାର ଆଦର୍ଶ କହିଲେ କ’ଣ ବୁଝ ?
- ଘ) ପଲ୍ଲୀରେ ଏକ ପରିବାରର ଗଢ଼ିଉଠିବାର କି ପ୍ରମାଣ ମିଳେ ?
- ଙ) ସତ୍ୟବାଦୀ ପର୍ବର ମୁଖ୍ୟ ଆଦର୍ଶ କ’ଣ ଥିଲା ?

୭. ଉତ୍ତର ପର୍ଯ୍ୟାୟରୁ ଠିକ୍ ଉତ୍ତରଟି ବାଛି ଲେଖ ।

କ) ଓଡ଼ିଆ ସାହିତ୍ୟର ପ୍ରଥମ ପୁରୁଣା ଉପନ୍ୟାସର ନାଁ କ’ଣ ?

- i) ଛ’ମାଣ ଆଠଗୁଣ୍ଠ ii) ସୌଦାମିନୀ
- iii) ପଦ୍ମମାଳା iv) ଭୀମାଭୂୟାଁ

ଖ) ଶ୍ରୀରାମକୃଷ୍ଣଙ୍କର ଶିଷ୍ୟମାନେ ପ୍ରଥମେ କେଉଁଠାରେ ଆସ୍ଥାନ ଜମାଇଥିଲେ ?

- i) କାଳିଘାଟ ii) ବରାହନଗର
- iii) ହରଦ୍ଵାର iv) ଗାଜାପୁର

- ଗ) ପୋଲାଷ୍ଟବାସୀଙ୍କ ମାତୃଭାଷା କ'ଣ ?
 i) ଇଂରାଜୀ ii) ହିନ୍ଦୁ
 ii) ପୋଲାଷ୍ଟିସ୍ iv) ପୋଲିସ୍
- ଘ) ଗୋବିନ୍ଦଭାଇ ପ୍ରାବନ୍ଧିକଙ୍କୁ କୁଟୀରରେ ବସାଇ କ'ଣ ବ୍ୟାଖ୍ୟା କରୁଥିଲେ ?
 i) ଉପନିଷଦ ii) ଓଡ଼ିଆ ଭାଗବତ
 iii) ସାରଳା ମହାଭାରତ iv) ମନବୋଧ ଚଉତିଶା
- ଙ. ସପ୍ତସଙ୍ଗ ସରଳାର୍ଥ ଲେଖ ।
 ଯେହାତ ରଖିଲି ମୁଁ ବଂଶରକ୍ଷାର ନିମନ୍ତେ
 ଗତ ଆଗତ ରୁଡ଼ିଲା ଯେ ତୋହର କୃତ୍ୟେ ।

କିମ୍ପା

- ‘ଭାଗ୍ୟବତୀ ମୋତେ ସଂସାରେ
 ବୋଲିବେ ତୋ’ ଯୋଗୁଁ ଏକା ପରଶଂସାରେ ।’
୯. ଯେକୌଣସି ତିନୋଟି ପ୍ରଶ୍ନର ଉତ୍ତର ଲେଖ ।
 କ) ମାନଗୋବିନ୍ଦ କାହିଁକି ଅଧୈର୍ଯ୍ୟ ହୋଇପଡ଼ିଲେ ?
 ଖ) ଅଙ୍ଗଦଙ୍କ ଶକ୍ତ ଚାପୁଡ଼ା ପ୍ରହାରରେ ମନ୍ତ୍ରାଦ୍ୟକର କି ଅବସ୍ଥା ହୋଇଥାନ୍ତା ?
 ଗ) ପୋତପାଳ ମଶାଲ ଜାଳିଛି କାହିଁକି ?
 ଘ) ତମସାକୁ ଆଶ୍ରମ ଧାତ୍ରୀ ବୋଲି କାହିଁକି କୁହାଯାଇଛି ?
 ଙ) ତିନିରକାରା ଭାଙ୍ଗିଦେବା କଥା କବି କାହିଁକି କହିଛନ୍ତି ?
୧୦. ଉତ୍ତର ପର୍ଯ୍ୟାୟରୁ ଠିକ୍ ଉତ୍ତରଟି ବାଛି ଲେଖ ।
 କ) ‘ଜାଗ ବନ୍ଧନହରା’ କବିତାରେ କବି କେଉଁ ମାଳା ଘେନିବା ପାଇଁ କହିଛନ୍ତି ?
 i) ପୁଷ୍ପମାଳା ii) ରତ୍ନମାଳା
 iii) ଯଶମାଳା iv) ବିଜୟମାଳା
- ଖ) ବରୁଣଙ୍କୁ ପ୍ରସନ୍ନ କରିବା ପାଇଁ ରାମଚନ୍ଦ୍ର କେଉଁ ଆସନରେ ଶୟନ କଲେ ?
 i) କମଳାସନ
 ii) ସିଂହାସନ
 iii) ମେଘାସନ
 iv) ଦର୍ଭାସନ
- ଗ) ଛାୟାମିଶ୍ରିତ ଆଲୋକରେ ବନସ୍ତଳାର ଦୃଶ୍ୟକୁ କାହାରୁପ ସହିତ ତୁଳନା କରାଯାଇଛି ?
 i) ମହାଦେବ ii) ଚନ୍ଦ୍ରକଳା
 iii) ମହାବଳ ବାଘ iv) କାଳସର୍ପ
- ଘ) କ’ଣ ଖୋଜି ଦେବା ପାଇଁ କବି ମାଟି ମା’କୁ ନିବେଦନ କରିଛନ୍ତି ?
 i) ହଜିଲାଦିନ ii) ମଧୁର ସ୍ମୃତି
 iii) ଚେତନାର ଚାବିକାଠି iv) ନିଜସ୍ୱ ସମ୍ପତ୍ତି
୧୧. ଯେକୌଣସି ଗୋଟିଏ ପ୍ରଶ୍ନର ଉତ୍ତର ଲେଖ ।
 କ) ରାଜନୀତିରେ ବ୍ରହ୍ମାସ୍ତ୍ର ହେଉଛି ଷଡ଼ଯନ୍ତ୍ର – ଏ କଥା କୁହାଯାଇଛି କାହିଁକି ?
 ଖ) ବରଗଛକୁ ମହାନ ସ୍ନେହମୟୀ ଜନନୀ ସହିତ ଗାନ୍ଧିଜୀ କାହିଁକି ତୁଳନା କରିଛନ୍ତି ?
 ଗ) ଦେବଶିଳ୍ପୀ ଅପରୂପ ଅପୂର୍ବ କାମିନୀକୁ କିପରି ସୃଷ୍ଟି କଲେ ?

HINDI

१. अनुच्छेद लिखो - "मेरे जीवन का लक्ष्य"
२. अनुशासनहीनता को लेकर प्रधानचार्य व अभिभावक बीच वार्तालाप को संवाद रूप में लिखिए
३. विभिन्न प्रकार के टेलीविजन हेतु आकर्षक विज्ञापन तैयार कीजिए ।
४. बैंक की पैक - बुक खो जाने की सूचना हेतु बैंक-प्रबंधक को पत्र लिखिए ।
५. मुहल्ले में पार्क में योग की कक्षाएँ लगेन और लाभ उठाने की सूचना २५-३० शब्दों में लिखिए ।

SANSKRIT

१. अपठित अनुच्छेदम् - पञ्च
२. चित्र लिखनम् - पञ्च
३. पत्र लिखनम् - पञ्च



ODM PUBLIC SCHOOL

HOLIDAY HOME WORK

CLASS- STD-X

GEOGRAPHY

1. What are basic industries?

Ans. Industries which provide raw materials to other secondary industries are called basic industries. Example- Iron & Steel Industries.

Or

Why is Iron and Steel Industry called the basic Industry?

Ans. The Iron and Steel Industry is called the basic Industry since it supplies machineries to all other Industries in secondary sector be it Heavy, medium or Light Industry.

2. Discuss different stages of Resource planning in India.

Ans. The three different stages of Resource planning are

- (i) Identification of Resources across different regions of the country and making an Inventory or List of it.
- (ii) Evolving a planning structure with available appropriate technology.
- (iii) Matching the resource development plans with overall National Development Plans.

3. What is Soil Erosion? What steps can be taken to control soil Erosion in Hilly areas.

Ans. Removal of top soil cover and subsequent degradation of land is called soil erosion.

The most effective way of checking soil erosion in Hilly areas may be –

- (i) Contour farming
- (ii) Terrace farming
- (iii) Afforestation/Re-afforestation of Hill slopes

4. Discuss the various mode of occurrence of minerals with suitable examples.

Ans. The various modes of occurrence of minerals are as follows –

- (i) Some minerals occur as Veins/Lodes in Igneous & Metamorphic rocks. Example-Copper.
- (ii) In sedimentary rocks a number of minerals occur in beds or layers. Example-Coal.
- (iii) Some minerals are weathered products of pre-existing rocks. Example-Bauxite
- (iv) Certain minerals may occur as Alluvial deposits in sands. Example-Gold
- (v) Some minerals are obtained/derived from sea water. Example-Common Salt.

5. Name the different Iron Ore belts of India. Name two ports which export Iron Ore.

Ans. The major Iron Ore belts in India are –

- (i) Odisha – Jharkhand belt : The most productive Iron Ore belt where Iron Ore Hematite is found.
- (ii) Durg-Bastar-Chandrapur belt : It lies in between Chhattishgarh and Maharashtra where high grade Haematite Ores are found.
- (iii) Bellary-Chitradurga-Tumkur belt : Stretches in between Karnataka and T.N. Has large reserves of Magnetic Ores.
- (iv) Maharashtra – Goa Belt : Yields low grade Iron Ores like – Limonite & Siderite.

The ports that export Iron Ore to foreign countries are –

- (a) Marmagao (Goa)
- (b) Mangalore Port (Karnataka)
- (c) Visakhapatnam Port (A.P.) and
- (d) Paradeep Port (Odisha)