

Time: - 2 hrs

I SEMESTER EXAM 2023-2024

Date: - 11/10/23

Marks: - 40

SUBJECT: SCIENCE I

Std: - X

Q 1) A) Write the correct alternative.

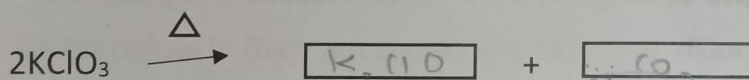
(5)

- The _____ force is much weaker than other forces in nature.
a) Gravitational b) electromagnetic c) nuclear force d) inter molecular
- Newlands' Law of Octaves is applicable upto _____
a) oxygen b) calcium c) cobalt d) potassium
- Writing a chemical reaction in brief by using chemical formulae is called as _____
a) chemical change b) chemical symbol
c) chemical equation d) chemical reaction
- The frequency of AC is _____ Hz
a) 20Hz b) 50Hz c) 25Hz d) 75Hz
- In a relaxed state, the focal length of healthy eyes is _____.
a) 2cm b) 2.5cm c) 25cm d) 5cm

B) Answer the following

(5)

- Find the correlation
Beryllium : alkaline earth metal :: sodium: _____
- Find odd one out and give its explanation
Voltmeter, Ammeter, Galvanometer, Electric motor
- Complete the given chemical reaction.



- State true or false. Correct the false statement.
The speed of release of an object does not depend on the mass of the object.
- Write the name: _____
The ability of lens to adjust the focal length as per need is _____

Q 2) A) Write Scientific reasons. (any 2)

(4)

- The non-metallic character increasing while going from left to right in a period.
- Tungsten metal is used to make a solenoid type coil in an electric bulb.
- Presbyopia effect is more common in people over 40 years of age.
- High and low tides are regular phenomena.

B) Answer the following questions. (any 3)

(6)

- Mahendra and Virat are sitting at a distance of 1 meter from each other. Their masses are 75 kg and 80 kg respectively. What is the gravitational force between them?

2. Find the period in which these elements can be placed.

Be, Cl, He, Al
4, 17, 2, 13

3. Draw a labelled diagram of human eye.

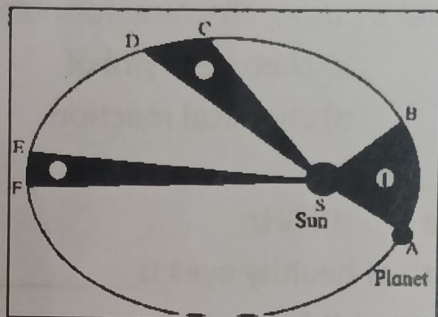
4. Explain the factors affecting the rate of chemical reaction with example.

5. Explain the Right hand thumb rule with the help of diagram.

Q 3) Answer the following questions. (any 5)

(15)

1. State the laws related to the given diagram.

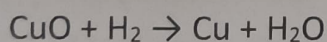


2. State Dobereiner's Triads with one example.

3. At which position will you keep an object in front of a convex lens so as to get a virtual image of the very large size of the object? Draw a figure. Where you will use such arrangement?

4. An electrical iron uses a power of 1100 W when set to higher temperature. If set to lower temperature, it uses 330 W power. Find out the electric current and the respective resistances for the two settings. The iron is connected to a potential difference of 220 V.

5. Identify the following reactions, define and explain it and give another example of same type.



6. Draw a neat labelled diagram to show the magnetic effect of electric current in a solenoid and explain it.

7. Some elements and their atomic radii are given here.

Element	:	K	Na	Rb	Cs	Li
Atomic radius (pm):		231	186	244	262	152

a. By referring to the modern periodic table find out the groups to which above the elements belong.

b. Arrange the above elements vertically downwards in an increasing order of atomic radii.

c. Which of the above elements have the biggest and the smallest atom? Why?

8. Explain the following terms

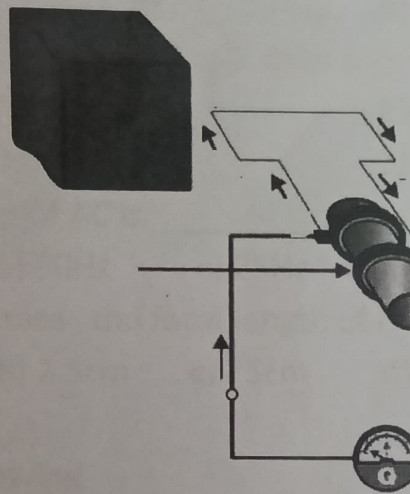
- a. Reactant
- b. Product
- c. Catalyst

Q 4) Answer any one of the following questions.

(5)

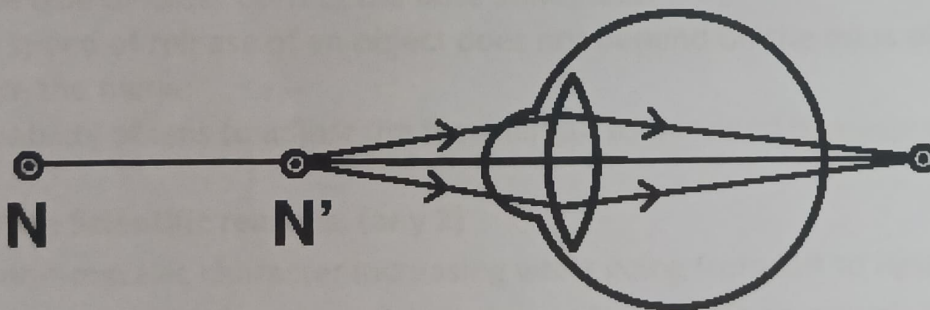
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1. Observe the figure and write the answers to the questions asked.



- a. Identify above diagram. Draw a labelled diagram. (2)
- b. Explain the principle on which this device works. (1)
- c. Write the working of this device. (2)

2. Given below is Diagram showing a defect of vision.



- a. Name the defect of vision, write its reason, how will you correct it? (3)
- b. Draw an accurate labelled diagram to correct this defect. (2)

3

+

2

Q 1) A) Write the correct alternative.

(5)

1. Protein located in bones is _____.
 a) myosin b) melanin c) haemoglobin d) ossein
2. We get _____ energy from lipids.
 a) 4 cal / gm. b) 9 cal/ gm c) 9 kcal/ gm. d) 4 kcal/gm.
3. Pollen grains are formed by _____ division in locules of anthers.
 a) Meiosis. b) mitosis c) amitosis. d) binary
4. _____ is a chemical factor of abiotic components
 a) ~~A~~ Air. b) water. c) Nutrients d) sunlight
5. Wind turbines with capacity are commercially available.
 a) 1 KW to 7 MW. b) 1 KW to 7 KW
 c) 1 KW to 7000 W d) 1 W to 7 MW

B) Answer the following

(5)

1. Find the correlation
 Theory of evolution : Darwin : : ^{inheritance of} ~~acquired~~ _{characters} : Lamarck
2. Find odd one out and give its explanation
 CO, Hydro-carbons, hydrogen sulphides, asbestos.
3. Answer in one sentence.
 What is gamete formation?
4. State true or false. Correct the false statement.
 Blood-plasma contains 70% of water. ~~70%~~ ^{F, 90%}
5. Write the name:
 Name any two natural gases.
 (N₂, O₂)

Q 2) A) Write Scientific reasons. (any 2)

(4)

1. Cell division is one of the important properties of cells and organisms.
2. Fertilization in plants is called double fertilization.
3. The role of human beings in environmental balance is important.
4. Hydroelectric energy, Solar energy and Wind energy are called renewable energies.

B) Answer the following questions. (any 3)

(6)

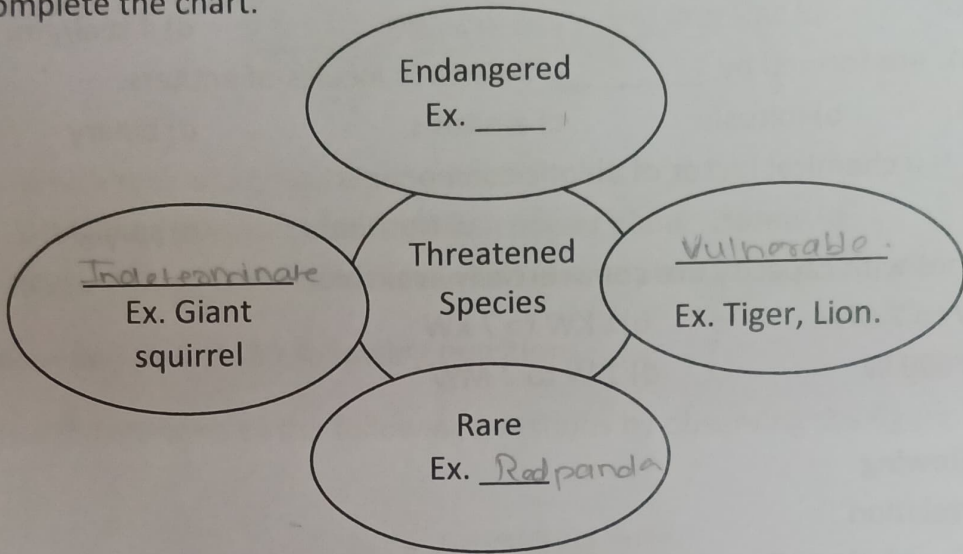
1. What are vitamins? State it's two groups & six types.
2. Draw a labelled diagram of Parts of flower.
3. Distinguish between: - Thermal Power Plant & Solar thermal power plant

4. Identify and define the evidence of evolution shown in the figure.

Vestigial organs



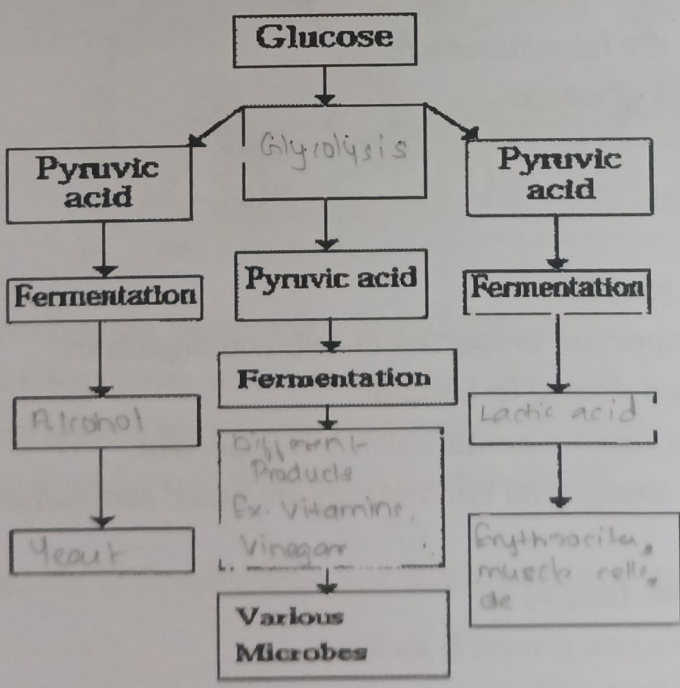
5. Complete the chart.



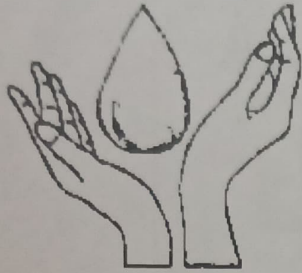
Q 3) Answer the following questions. (any 5)

(15)

1. Complete the concept map

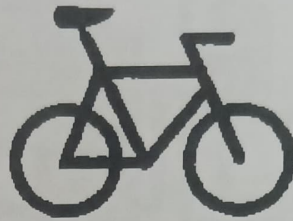


2. What is the meaning of the following symbols? Write your role accordingly.



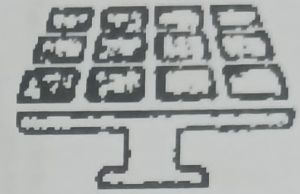
(i)

save water



(ii)

save fuel

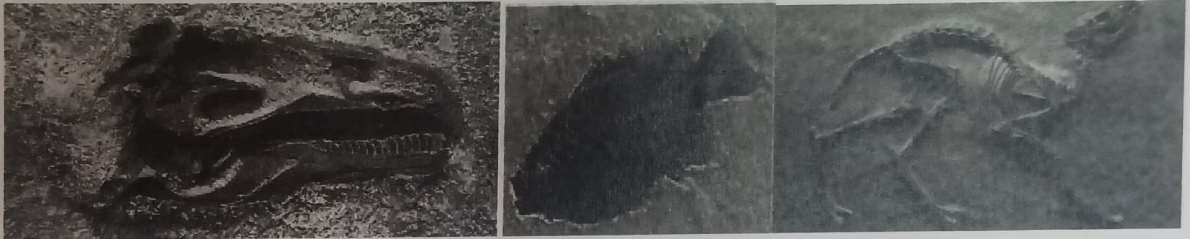


(iii)

Solar panels

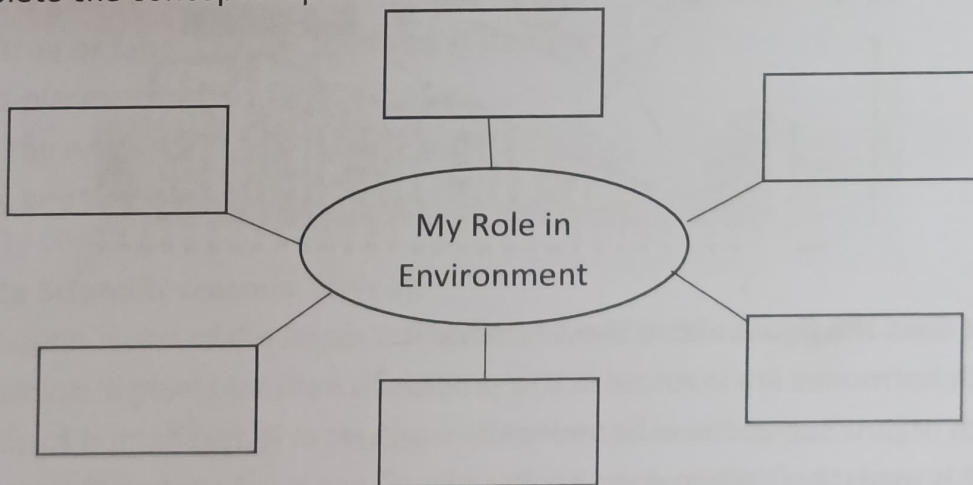
3. Draw the schematic diagram of wind mill.

4. Observe the following images and answer the questions.



- a) Which evolutionary evidences are indicated in the given picture?
Paleontological evidence
- b) Which method is used to measure their age or their time? Explain it.
carbon dating method.

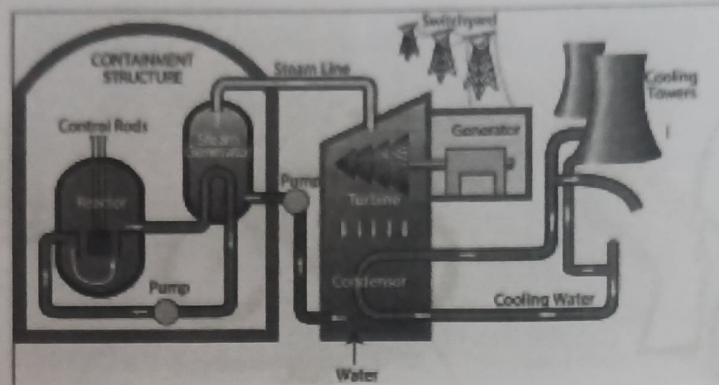
5. Complete the concept map



6. Explain the Steps of Glycolysis.

7. Write short notes based upon the information known to you on Lamarckism

8. Observe the given diagram and answer the questions.



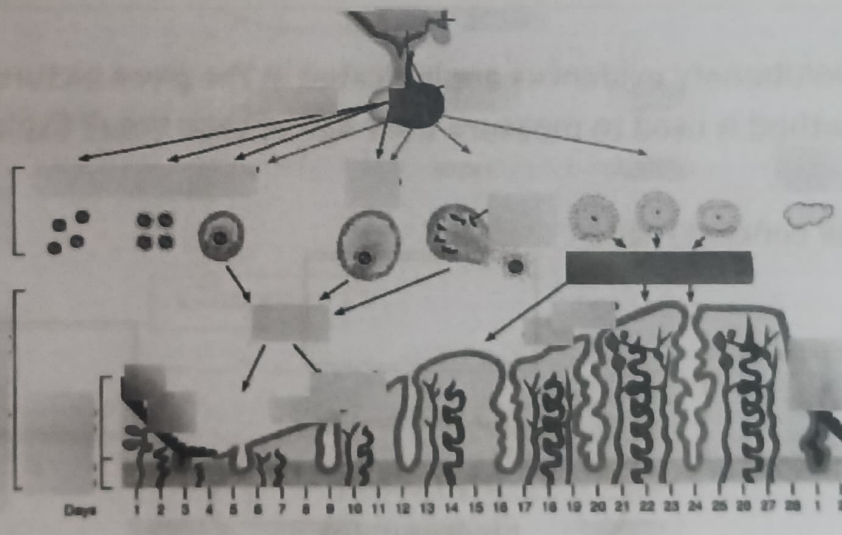
- Which type of energy is generated?
- Draw the flowcharts for the given power plant.
- Show Energy transformation in this power plant.

Q 4) Answer any one of the following questions.

(5)

1. Write the answers to the following questions by observing the figure below.

4/2



- What does the figure above show? Define it.
- Which hormones are involved in this process?
- Which organs secrete these hormones? Pituitary glands
- What is ovulation? When does it takes place?

(1)

(2) 2

(1) 1/2

(1) 1/2

2. With the help of suitable diagrams, explain the five stages of prophase-I of meiosis.

MUBARAKA ENGLISH HIGH SCHOOL, DOMBIVLI

Time: - 3 hrs.

I Semester EXAM 2023-2024

Date:04/10/23

Marks: - 80

Subject: English

Std:- X

Section 1: Language Study

Q1. A1) Do as directed. (Any 4)

(4)

1) Write the verb form:

- a) prosperity
- b) ignorant
- c) social
- d) silence

2) Identify the main and subordinate clauses in the sentence

If the two functions are true to their roles, they will work together for the betterment of the humanity.

[space]

3) Frame a Wh- question for the underlined part in the sentence.

Unique ideas helped him earn both name and wealth.

4) Make a meaningful sentence from the given phrase.

hits in head

5) Identify the non finite verb and state its type.

The sunken ship was discovered last year.

A2) Do as directed (Any 2)

(4)

1) Rewrite the sentence into an interrogative sentence

This challenge became my silent motivation.

2) Change the given statement into past perfect continuous:

My doctor advised me.

3) Punctuate the sentences

a) Beware of the upcoming typhoon the weather forecaster warned on national television

b) The cranky Corgi had a lot of other things in its mind dog treats cuddle and of course the toy that was hidden away from him

A3) Do as directed (Any 1)

(2)

1) Change the given statement into positive and comparative degree.

Puppet theatre is one of the oldest form of theatre in India.

2) Rewrite the statement beginning with "The mirror".

Only when the dust is removed, the mirror shines and the reflection becomes clear.1

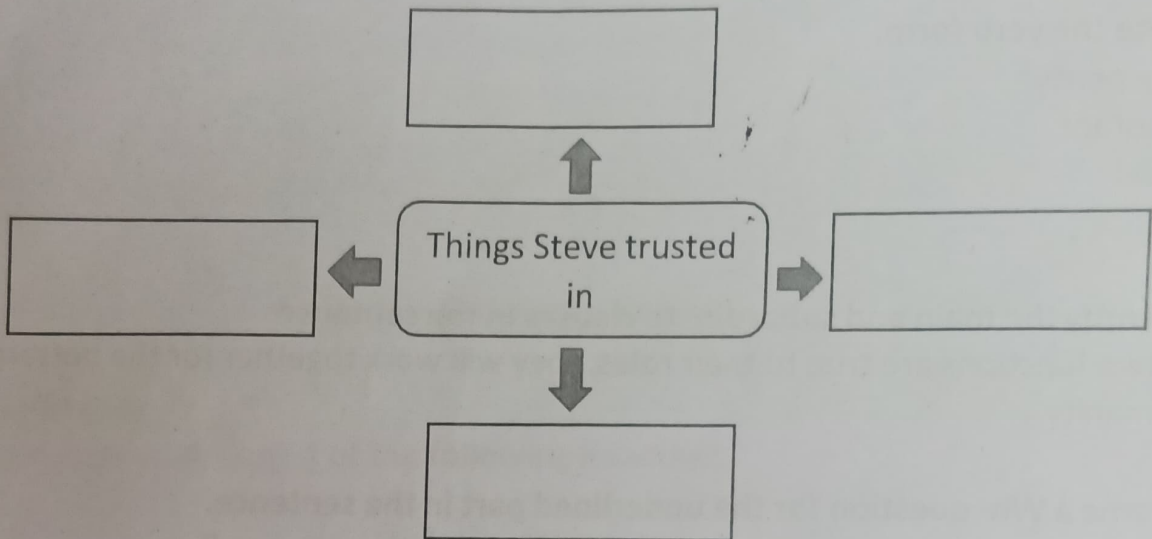
Section 2: Textual passages

Q2. A) Read the following passage and do the activities:

(10)

A1) Complete the web chart

(2)



Today I want to tell you three stories from my life. That's it. Just three stories. The first story is about connecting the dots. I dropped out of Reed College after the first 6 months, but then stayed around as a drop-in for another 18 months before I really quit. Looking back, it was one of the best decisions I ever made. I could stop taking the required classes that didn't interest me, and begin dropping in on the ones that looked interesting. I didn't have a dorm room, so I slept on the floor in friends' rooms. I returned Coke bottles for the 5 cent deposits to buy food with, and I would walk seven miles across town every Sunday night to get one good meal a week at the Hare Krishna temple. I loved it. And much of what I stumbled into by following my curiosity and intuition turned out to be priceless later on. Here's one example: Reed College offered perhaps the best calligraphy instruction in the country. Because I had to take a calligraphy class, I learned about serif and san serif typefaces, about what makes great typography great. Ten years later, when we were designing the first Macintosh computer, it all came back to me. And we designed it all into the Mac. If I had never dropped in on that course in college the Mac would have never had multiple typefaces or for that matter even proportionally spaced fonts. And since Windows just copied Mac, it's likely no personal computer would have them. Of course it was impossible to connect the dots looking forward when I was in college. But it was very clear looking backwards 10 years later. You can't connect the dots looking forward; you can only connect them looking backwards. So you have to trust that the dots will somehow connect in your future. You have to trust in some things - your gut destiny, life, karma, whatever. This approach has never let me down.

Q2) Answer the following questions

(4)

What did Steve do every Sunday night? Why?

What impression of Steve jobs do you get from the passage?

A3) Vocabulary Questions

(2)

Pick out one word from the passage that means the following

a) living quarters for students - *Dorm*

b) art of designing text - *typography*

Give synonyms of

a) fate - *destiny*

b) anxious - *stumbled*

A4) Grammar

(2)

a) Because I had to take calligraphy class, I learned about serif. (Underline the subordinate clause and state its type.)

b) You can't connect the dots looking forward (Add a question tag)

Q2. B) Read the following passage and do the activities.

(10)

B1) Who said to whom and why

(2)

a) "For the last time, I pray you to answer my questions."

b) "If you'd not pitied my weakness yesterday and stayed to dig these beds for me, you would have gone back and been killed by that man"

The king was very glad to have made peace with an enemy so easily and to have gained him for a friend. He not only forgave him but said he would send his men and his own physician to attend to him. The king then took leave of him and went out of the hut to look for the hermit. Before going away he wished once more to beg for an answer to the questions he had asked. The hermit was outside, on his knees, sowing seeds in the beds that had been dug the day before. The king approached him and said, "For the last time, I pray you to answer my questions, wise man." "You have already been answered!" said the hermit still crouching on his thin legs and looking up at the king who stood before him. "What do you mean?" asked the king. "Do you not see?" replied the hermit. "If you'd not pitied my weakness yesterday and stayed to dig these beds for me, you would have gone back and been killed by that man. So the most important time was when you were digging the beds, and I was the most important man and to do me good was your most important business. Afterwards, the most important time was when you were attending to that man, for if you'd not bound his wounds, he would have died without having made peace with you. So he was the most important man and what you did for him was your most important business. Remember then, there is only one time that is important-now! It is the most important time because

it's the only time when we have any power. The most necessary person is the one with whom you are, for you do not know whether you will ever have dealings with anyone else; and the most important thing is to do this person good, because for that purpose alone were you sent into this life!"

B2) Answer the following question

(4)

- a) What qualities of the king stand out as he forgave his enemy?
- b) How was the king saved from death?

B3) Vocabulary Questions

(2)

1) Give the noun forms for

- a) necessary
- b) important

2) Make a word register for

Farming

B4) Grammar Questions

(2)

- a) It is the most important time. (Change into interrogative sentence)
- b) The king sent his men and his own physician to attend to him. (Use Not only...but also)

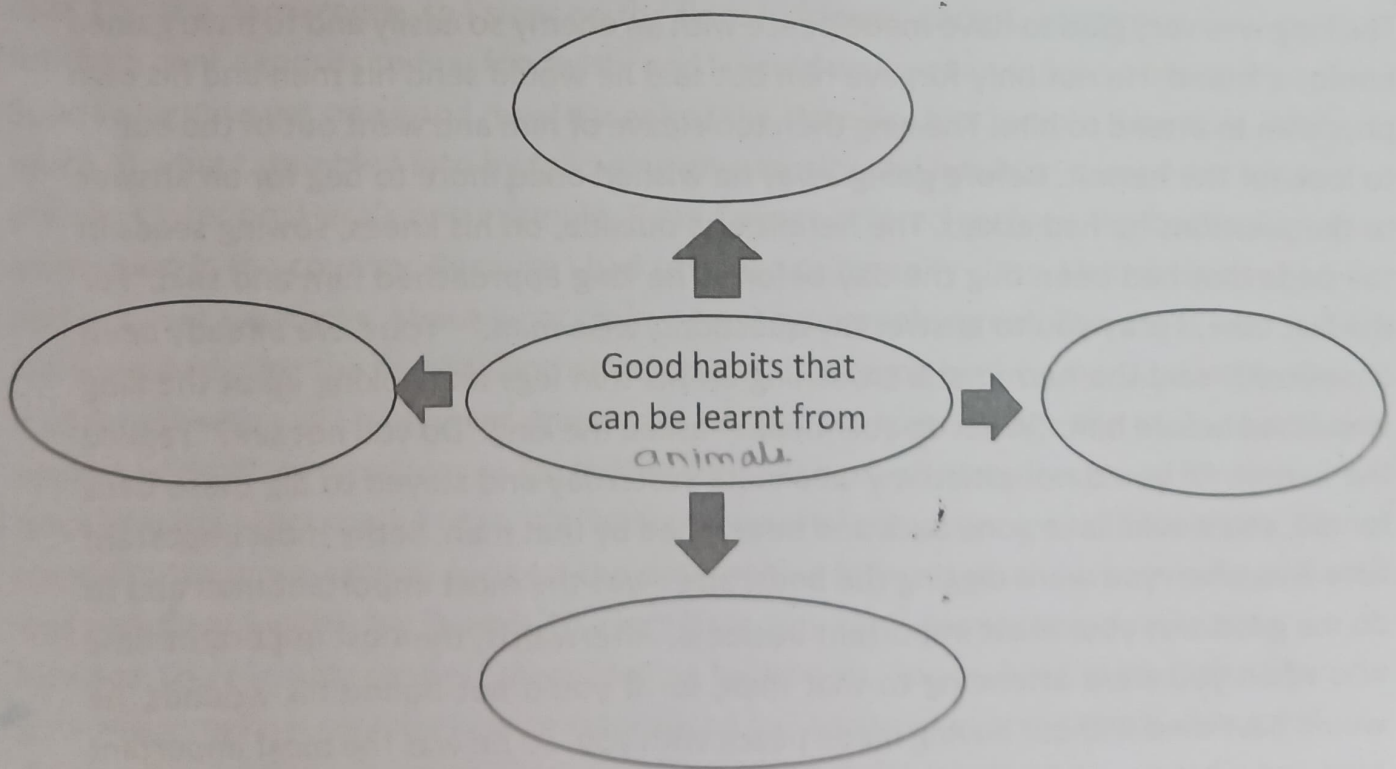
Section 3 : Poetry

Q3. Read the poem and do the following activities:

(10)

A1) Complete the web chart.

(2)



I think I could turn and live with animals,
they are so placid and self-contain'd (1)

I stand and look at them long and long.

They do not sweat and whine about their condition, (2)

They do not lie awake in the dark and weep for their
sins, They do not make me sick discussing their duty
to God,

Not one is dissatisfied, (3) not one is demented
with the mania of owning things.

Not one kneels to another, nor to his kind
that lived thousands of years ago,

Not one is respectable or unhappy over the whole
earth. So they show their relations to me and I
accept them,

They bring me tokens of myself, they
evince them plainly in their possession

I wonder where they get those tokens,

Did I pass that way huge times ago and negligently drop them?

A2) What craze do animals never display?

(1)

A3) Name and explain the figure of speech of the following lines.

(2)

They are so placid and self-contain'd

Not one is respectable or unhappy over the whole earth.

Q3. B) Read the following poem and write an appreciation of it with the help of the given points in a paragraph format.

(5)

The title and the poet of the poem.

Rhyme scheme.

The central idea/ theme (At least 3-4 lines)

Figures of speech

Section 4: Non-textual passages

Q.4A) Read the following passage and do the activities.

(10)

A1) Complete the following sentences.

(2)

- 1) Peacocks shed their tail feathers once _____
- 2) The peacock is our _____
- 3) The peacock, although a shy bird, dances _____
- 4) The peacocks have a special place in our arts, songs, _____

The peacock is perhaps the most beautiful among male birds, with its long blue neck. Fan-shaped crest, and its gorgeous train or tail of feathers. Each feather ends in a half-moon or 'eye'. When raised, the tail spreads like a fan from which a thousand eyes seem to gaze.

Ironically the female or peahen is a small, ^{not attractive} drab bird in comparison, without the sweeping train. Peacocks shed their tail feathers once a year and grow new ones. People carefully take these old feathers, which are then made into lovely fans and other decorative items. The peacock, although a shy bird, dances in front of the peahens during courtship. He then struts before them showing off his many-coloured train. The sight of rain clouds is another occasion for such display, perhaps to hail the arrival of rain after the long hot summer. The peacock's loud strutting has also given rise to the commonly used phrases, 'proud as a peacock' and 'as ^{proud} vain as a peacock'. The peacock is our national bird. The peacocks have a special place in our arts, songs, dances, culture and stories.

A2) Match the Columns.

(2)

Match the words in Column 'A' with their antonyms (opposites) in Column 'B'

'A'	'B'
1) Gorgeous	a. Too proud of one's appearance
2) Shy	b. Not attractive
3) Vain	c. Very beautiful and attractive
4) Drab	d. nervous

A3) Answer the following questions.

a) What are the different activities of the peacock?

(2)

A4) Do as directed:

a) The peacock is the most beautiful among male birds. (Change the sentence into positive degree)

(2)

b) His tail spreads like a fan, _____ (Add a question tag)

A5) Personal Response:

How can we help the birds to survive in Summer season?

(2)

Section 5: Writing Skill

Q5A) Letter Writing:

(5)

Imagine you are Rohit/ Richa Sahani, member of student council at New Pearl International School, Sainik Colony, Pune -411501.

Write a letter and invite the Head of the Space Research Centre as the chief guest for the Science Exhibition held in school.

OR

Write a letter to your friend Anup / Anita Dixit and describe about the prize won by your group in the Science Exhibition.

B) Information Transfer

(5)

1) Non - Verbal to Verbal

Write a paragraph on 'Rocks and Its formation' with the help of the given table.

Types of Rocks	Formed by	Examples
i. Igneous	molten materials became cooler and solidified	granite
ii. Sedimentary	rivers brought down small pieces of material into sea	Shale, limestone and chalk
iii. Metamorphic	Lava affected the material over which it flowed	Slate

2) Verbal to Non Verbal:

Draw a tree diagram to represent the following

The word Literature is really hard to define. Many interpretations are made about the word. But all are incomplete. Some opine that literature is the mirror of life; some others say that it is the criticism of life. Whatever may be the controversy about the word, we may say that literature is that which reflects life. The branches of literature are poetry, drama, novel and short stories. Poetry is of two types, imaginative and realistic. Drama is either a comedy or a tragedy. Novels are also of many kinds, historical, psychological, realistic, scientific and regional. Short Story is that one which stands very close to life in spite of a little scope.

Section 6: Creative Writing

Q6A) Report Writing

(10)

Prepare a news report on Any 1 of the following headline.

Food poisoning affected 30 school children

OR

Tree Plantation program in school

B) Speech Writing

(10)

Write a speech on Any 1 of the given topics

Prepare a speech to be delivered by you at Children's Day celebration laying stress on, "Today's Children-Future of India.

OR

Write a speech on topic 'What Can I do for India'.