English

Q1. Write a letter to the Editor expressing your concern on lack of physical activities in today's youth and role motivating the masses through your views.

You are Raj/ Rajni of 10 Gomtinagar, Kanpur.

Q2. Make a video presentation of about 3 Minutes on the topic: Environmental Impact of Lockdown.

The video must incorporate
- The student's introduction
- The face of the student must be visible during introduction and presenting the ideas.
- The student may use slides of pictures and facts.
- It must be an interesting and impressive video.

Q3. There is an error in each line. Write the incorrect word and the correct word against the corresponding blank:

	Error.	Correct
The life of the people in Mewar	a. --------	-------
must have been peace.	b. --------	-------
This is reflect in their art and	c. --------	-------
literature and there loving	d. -------	-------
nature.		

Q4. Fill in the blanks with correct options:

Seasons teach us (a).--------- transition, for winter slides (b.)---------- spring as gently as adolescence into youth. And just (c.) -------- we assume that winter is gone, we see the fresh leaves (d) -------during spring.

a) 1. about   2. with.   3. by.   4. from
b) 1. into.   2. by.   3. on   4. from
c) 1. for   2. when.   3. where   4. how
d) 1. sprout 2. sprouted 3. sprouting 4. Spring

Hindi

प्र.1 निम्न संकेतों के आधार पर 150 शब्दों में एक लघु कथा की रचना कीजिए –
एक ब्राह्मण, नन्हा बालक, पालतू नेवला, काम में व्यस्त पत्नी, खून से सना नेवला, बिना विचारे किया गया कार्य।

प्र.2 वर्गीकृत विज्ञापनों का एक कोलाज तैयार कीजिए।

Mathematics

Solve the given equations graphically and write the number of solutions.

1. $2x + y = -8$, $x - y = -1$
2. $y = 2x + 1$, $y = 2x - 3$
3. $2y - x = 4$, $4y - 2x = 8$

Let a and b be positive integers show that $\sqrt{2}$ always lies between $\dfrac{a}{b}$ and $\dfrac{a + 2b}{a + b}$

OR

If d is the HCF of 56 and 72, find x, y satisfying d = 56x + 72y. Also show that x and y are not unique.
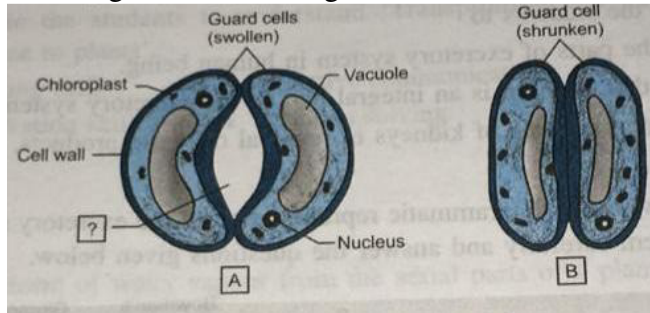
Science
Chemistry

1. On heating blue coloured powder of copper (II)nitrate in a boiling tube, black copper oxide, Oxygen(O_2) and brown gas X is formed.

   (a) Identify the type of reaction and the gas' X'.

   (b) Write balanced chemical equation of the reaction .

2. Consider the following chemical reaction

   X + Barium Chloride ---------> Y + Sodium Chloride

   (White ppt)

   (a) Identify ' X ' and 'Y '

   (b) The type of reaction.

3. Write balanced equations for the following by mentioning the type of reaction involved.

   (i) Aluminium + Bromine -------------> Aluminium bromide

   (ii) Calcium carbonate ------------> Calcium oxide + Carbon dioxide

   (iii) Silver chloride ------------> Silver + Chlorine

4. Write any two observations in an activity which may suggest that a chemical reaction has taken place. Give an example in support of your answer.

Physics

1. State Ohm's law .Write the necessary conditions for its validity. Draw a circuit diagram to verify it experimentally. What is the nature of graph between Potential difference and Current for a conductor? Name the physical quantity that can be obtained from this graph.

2. A given wire is doubled on its length and this process is repeated once again .By what factor does the resistance of the wire change?

3. A 9 ohm resistance is cut into three equal parts and connected in parallel. Find the equivalent resistance of the combination.

4. State the differences between series and parallel combination of resistors.

5. Explain how an ammeter and a voltmeter connected in a circuit ,justify your answer by giving reason.

6. Explain

   (a) How current and potential difference related to each other in series combination of resistors?

   (b) How current and potential difference related to each other in parallel combination of resistors?

   Justify your answer in each case giving reason.

7. A resistance wire has a resistance of 4.25 ohm. Calculate the resistance of another wire made from same material such that its length increases by 4 times and area of cross section decreases by 3 times.

8. When two resistors of R_1 and R_2 are connected in parallel, the net resistance is 3ohmand when connected in series its value is 16 ohm. Calculate R_1 and R_2.

9. Three resistors of 6 ohm,3 ohm and 2 ohm connected together so that the total resistance is greater than 6 ohm but less than 8 ohm. Draw a diagram to show this arrangement and calculate its total resistance.

10. Show how would you join three resistors, each of 9 ohm, so that the equivalent resistance of the combination is (a) 13.5 ohm (b) 6 ohm.

Q11. Give reason –

   (c) Alloys are used to make coils of electrical heating devices.

   (d) Tungsten is used to make filament of incandescent bulb as a long and thin wire.

   (e) Copper and Aluminium are used to make electrical transmission lines.

Q-12 Derive an expression for electrical energy based on Joule's law ofheating.

Q-13 200 J of heat is produced each second in a 4 ohm resistor. Find the potential difference across resistor.

Q-14 Differentiate between-

   (a) Ammeter and Voltmeter

   (b) Resistance and Resistivity

Q-15 Name and define the physical quantities which are represented by the following SI units-

   (a) C/S   (b) J/C   (c) Ohm   (d) Ohm-m   (e) Watt
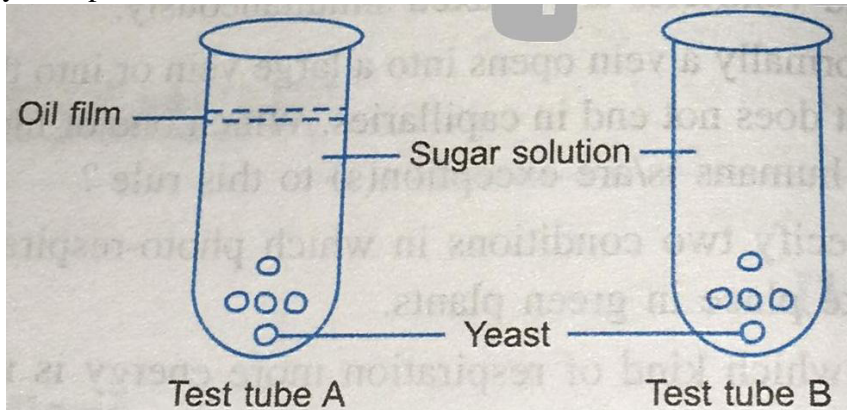
(f) Watt-Sec (g) KWh

Biology

Observe the diagram of stomata given below and answer the questions that follow.

1. Where are stomata present in the leaf?
2. In diagram 'A', one area has been marked with a question mark '?' Name this area.
3. The area mentioned in question – '2' is not been shown in diagram 'B'. What could be the reason for this?
4. The guard cells in diagram 'A' are different in shape and size from the guard cells in diagram 'B'. Which of the following sentences gives the correct reason?

   a. Guard cell swell up during the day and shrink at night
   b. Guard cells swell when water flows into them causing the stomatal pore to open. They shrink when water moves out and stomatal pore closes.
   c. The uneven thickness of cell wall of guard cells enables them to open and close at regular intervals.
5. What will happen if there are no stomata in a plant?

In the test tube A and B shown below, yeast was kept in sugar solution. Which products of respiration would you expect in tubes A and B?

Name of the following:
a. The process in plants that links light energy with chemical energy
b. Organisms that can prepare their own food
c. The cell organelle where photosynthesis occurs
d. Cells that surround a stomatal pore
e. Organisms that cannot prepare their own food
f. An enzyme secreted from gastric glands in stomach that acts on proteins.

Match group (A) with group (B)

Group (A)	Group (B)
a. Autotropic nutrition	i. Leech
b. Heterotrophic nutrition	ii. Paramoccium
c. Parasitic nutrition	iii. Deer
d. Digestion in food vacuoles	iv. Green plant

S.St.

Answer the following Questions

1. State the causes for gradual slowing down of Non Cooperation Movement in towns.

2. Highlight the features of Swaraj Flag designed by Gandhiji.

3. What was the Rowlatt Act? How did the Indians show their disapproval towards the Act?

4. Discuss the non-cooperation movement led by Baba Ramchandra in Awadh.

5. Discuss the reasons and limits of the Civil Disobedience Movement.

6. How did people belonging to different communities, regions or language groups develop a sense of collective belonging?

7. What steps can be taken to control soil erosion in the hilly areas

8. How have technical and economic development led to more consumption of resources.

9. Enlist the various institutional reform programmes introduced by the government in the interest of farmers.

10. Describe the impact of globalisation on Indian agriculture.

11. What is Resource Planning? State its importance.

12. Explain Soil Profile.

13. How many people speak French and Dutch in the capital city of Brussels?

14. Explain the ethnic problem of Sri Lanka.

15. Give examples of Coming together and Holding together federation

16. In which list do education, forest, and marriages fall

17. State the basic reasons for the tension (Civil War) between Sinhala and Tamil speaking people in Sri Lanka.

18. Describe the horizontal distribution of power. What are its advantages?

19. What are the two kinds of routes through which federations have been formed?

20. Why is it difficult to make changes to power sharing arrangement between the Union Government and State Governments? What is the amendment procedure?

21. State the two sets of reasons in favour of power sharing.

22. Describe the way in which power was shared among different social groups in Belgium?

23. Examine the language policy adopted by the Government of India.

24. India has quasi federal structure. Justify by giving suitable examples.

25. State any two goals of development other than income.

26. Define infant mortality rate.

27. 'While average income is useful for comparison, but it may hide disparities'. Discuss.

28. Differentiate between Human Development Report and World Development Report

29. Explain with the help of five examples how development could mean different things to different people.

30. 'Consequence of environmental degradation do not respect national or state boundaries.' Justify the given statement.

2. Map Skills
A. Geography
Mark the following on the map of India
   a. Different types of soils
   b. Major multiple Dam projects
   c. Rubber, Rice, Wheat, Tea and Coffee producing areas.

B. History
On an outline map of India locate and label the given places.
   a. Place where Indian National Congress Sessions were held in Sep 1920, Dec 1920
   b. Congress Session where it was decided to boycott Simon commission
   c. Congress Session where the demand of Purna Swaraj was formalised
   d. Satyagraha Movement against indigo plantation
   e. Peasant Satyagraha of 1917
   f. Place associated with No Tax Campaign

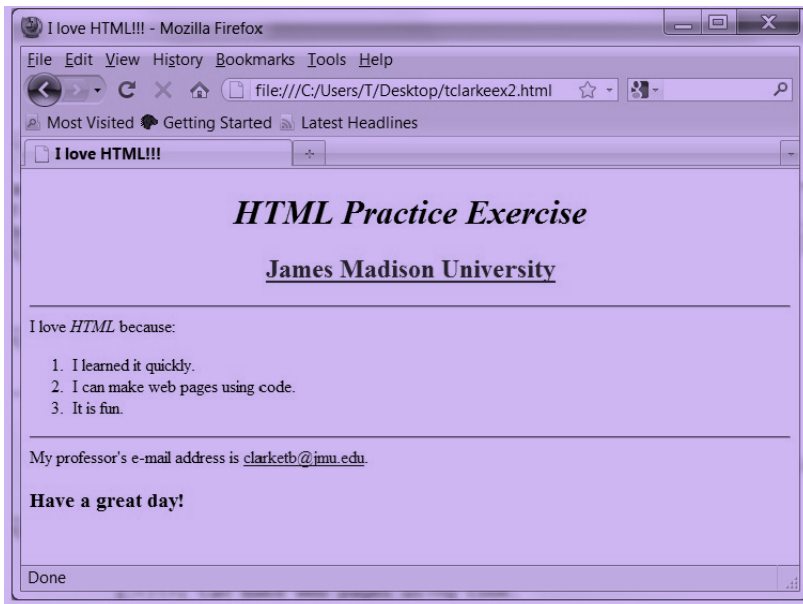## Project:
Prepare a project on any one of the following topics
   a. Consumer Awareness
   b. Social Issues
   c. Sustainable Development

Computer

Q.1

1. **Look at the image of the web page below.**
2. **Using HTML coding, replicate the page exactly.**
3. **Save the file with your first initial and full last name and ex2 (correct example: tclarkeex2.html). Your file name should have NO spaces.**
4. **Don't forget to include the title by putting the phrase "I Love HTML!!!" in your title tag.**
5. **Tip: There is one of each in the coding – H1, H2, and H3. Do not use the font size and bold tags.**
6. **The title tag should not be bold, even though looks bold in the tab on the screenshot.**

Create a HTML web page as the instructions given-

1. **The correct html, head, and body tags**

2. **Insert the following phrase, without the quotes, as your title tag: "HTML Beginner Exercise by <insert your first and last name>." Example: HTML Beginner Exercise by Theresa Clarke**

3. **One unordered list of items (must include at least four items)**

4. **One ordered list of items (must include at least four items)**

5. A bold word or phrase anywhere on the page

6.**Acentered word or phrase anywhere on the page**

7.**An italicized word or phrase anywhere on the page**

What do you mean by the term Protocol? Explain the role of TCP/ IP in data communication.

Q.4. Write a short note of blogs and types of blogging.

Art & Craft

* Name Decoration (with Calligraphy)
* Landscape (with poster colour)
* Pop up art on news paper
* Portrait Painting (Draw & Colour)