



GEETA DEVI DAV PUBLIC SCHOOL

BHANDARKOLA, SATAR ROAD, DEOGHAR

SUMMER VACATION HOLIDAY HOME WORK-(2025-26)

Class: -X

ENGLISH

Assignment

Q1. Describe the value of freedom for the human beings and how it is important for the growth of Civilization as well as upliftment of nation as described in the lesson " Nelson Mandela: Long Walk to Freedom ". Give any corresponding example from India as well.(80 -100 words)

Q2. General Grammar and Language learning and practice. Write Synonyms of the following words.

Abrupt
Accede
Adept
Adhere
Analogy
Bliss
Catastrophe
Decorum
Pretence
Judicious

(Students are instructed to complete above mentioned assignments in a notebook)

Project

Prepare a chart of Branching of Clause with definition and examples on a full Chart paper.

MATHS

1. Revise chapters – 1,2,3 and 7.
2. Solve all the questions related to the above chapters in the last five years of CBSE question papers (Basic and standard both).
3. Activity (Maths Lab Manual):
 - a. Verify the conditions of consistency/inconsistency for a pair of linear equations in two variables by graphical method (Activity-3)
 - b. Verify the distance formula by graphical method (Activity – 10)

4. Answer the following questions:-(use class work copy)
[4×5=20]

- a. Prove that for any prime positive integer p , \sqrt{p} is an irrational number.
- b. If m and n are zeros of the polynomial $(3x^2 - x - 2)$, find the values of the following without factorising the polynomial.
 - (i) $\frac{1}{m} + \frac{1}{n}$
 - (ii) $m^2 + n^2$
- c. A train covered a certain distance at a uniform speed. If the train would have been 6 km/h faster, it would have taken 4 hours less than the scheduled time and if the train were slower by 6 km/h, it would have taken 6 hours more than the scheduled time. Find the length of the journey.
- d. Point P divides the line segment joining the points $A(2,1)$ and $B(5,-8)$ such that $\frac{AP}{AB} = \frac{1}{3}$. If P lies on the line $2x - y + k = 0$, find the value of k .

HINDI

ग्रीष्मावकाश गृहकार्य

कक्षा -10 विषय -हिंदी

1) निम्न विषयों में से किन्हीं दो विषयों पर 100 से 150 शब्दों का अनुच्छेद लिखें।

*समाचार पत्र

*समय का सदुपयोग

*विद्यार्थी अनुशासन

2) धूम्रपान से होने वाले नुकसान के बारे में बताते हुए अपने छोटे भाई को पत्र लिखें।

3) विकारी तथा अविकारी शब्दों का विस्तार से अध्ययन करें।

4) 'अर्थालंकार' उदाहरण सहित समझें तथा पढ़ें।

5) किसी प्रतिष्ठित कंपनी की कार का विज्ञापन बनाएँ।

6) 'क्षितिज' तथा 'कृतिका' के पठित पाठों के प्रश्नोत्तर पढ़ें।

परियोजना कार्य

'रचना के आधार पर वाक्य भेद' को उदाहरण सहित चार्ट पेपर पर अपनी रचनात्मकता के साथ प्रदर्शित करें।

SANSKRIT

ग्रीष्मावकाशस्य गृहकार्य परियोजनाकार्यं च

कक्षा-दशमी, विषय संस्कृतम्

प्रथम-द्वितीयपाठतः स्वरसन्धेः उदाहरणानि अन्विष्य उत्तरपुस्तिका यहाँ लिखत।

परियोजनाकार्यम् - वेदाः, आश्रमाः, पुरुषार्थाः, मठाः

महावाक्यानि च चत्वारः सन्ति तेषां नामानि चित्रफलके सुन्दरैः अक्षरैः लिखित्वा प्रदर्शयत।

SCIENCE

PHYSICS

ASSIGNMENT:-

Write down the new Cartesian sign convention (NCSC) of the spherical mirror.
Solve 10 numerical related to the spherical mirror.

Note :- This given work is to be done in H.W. notebook.

PROJECT WORK:-

Draw ray diagrams of spherical mirror (Concave mirror & Convex mirror).

Note :- This Work is to be done in chart paper with full decoration & creativity.

CHEMISTRY

1. Answer all NCERT intext and exercise questions from Chapter 1.
2. What happens when food materials containing fats and oils are left for a long time? List two observable changes and suggest three ways by which this phenomenon can be prevented.
3. Why aluminium sheets do not corrode easily? Why does a copper vessel get covered with a green coating in rainy season?

PROJECTS :

1. Create a presentation or poster illustrating different types of chemical reactions with examples and balanced chemical equations.
2. Prepare a self assessment quiz or test covering the chapter-1 including questions on balancing chemical equations, different types of chemical reactions, corrosion and rancidity.

BIOLOGY

ASSIGNMENT :-

CHOOSE THE CORRECT OPTION:-

1. In which of the following groups of organisms, food material is broken down outside the body and absorbed?
(a) Mushroom, green plants, Amoeba
(b) Yeast, mushroom, bread mould
(c) Paramecium, Amoeba, Cuscuta
(d) Cuscuta, lice, tapeworm
2. Which of the following statements about autotrophs is incorrect?
(a) They synthesise carbohydrates from carbon dioxide and water in the presence of sunlight and chlorophyll
(b) They store carbohydrates in the form of starch
(c) They convert carbon dioxide and water into carbohydrates in the absence of sunlight
(d) They constitute the first trophic level in food chains
3. Which is the correct sequence of parts in the human alimentary canal?
(a) Mouth → stomach → small intestine → oesophagus → large intestine
(b) Mouth → oesophagus → stomach → large intestine → small intestine
(c) Mouth → stomach → oesophagus → small intestine → large intestine
(d) Mouth → oesophagus → stomach → small intestine → large intestine
4. Select the correct statement
(a) Heterotrophs do not synthesise their own food
(b) Heterotrophs utilise solar energy for photosynthesis
(c) Heterotrophs synthesise their own food

(d) Heterotrophs are capable of converting carbon dioxide and water into carbohydrates

5. The inner lining of the stomach is protected by one of the following from hydrochloric acid. Choose the correct one (a) Pepsin

(b) Mucus

(c) Salivary amylase

(d) Bile

6. If salivary amylase is lacking in the saliva, which of the following events in the mouth cavity will be affected?

(a) Proteins breaking down into amino acids

(b) Starch breaking down into sugars

(c) Fats breaking down into fatty acids and glycerol

(d) Absorption of vitamins

7. A few drops of iodine solution were added to rice water. The solution turned blue-black in colour. This indicates that rice water contains

(a) complex proteins

(b) simple proteins

(c) fats

(d) starch

8. Which part of the alimentary canal receives bile from the liver?

(a) Stomach

(b) Small intestine

(c) Large intestine

(d) Oesophagus

9. Choose the function of the pancreatic juice from the following

(a) trypsin digests proteins and lipase carbohydrates

(b) trypsin digests emulsified fats and lipase proteins

(c) trypsin and lipase digest fats

(d) trypsin digests proteins and lipase emulsified fats

10. When air is blown from the mouth into a test-tube containing lime water, the lime water is turned milky due to the presence of

(a) oxygen

(b) carbon dioxide

(c) nitrogen

(d) water vapour

11. The correct sequence of anaerobic reactions in yeast is

(a) Glucose cytoplasm → Pyruvate mitochondria → Ethanol
+ Carbondioxide

(b) Glucose cytoplasm → Pyruvate cytoplasm → Lactic acid

(c) Glucose cytoplasm → Pyruvate mitochondria → Lactic acid

(d) Glucose cytoplasm → Pyruvate cytoplasm → Ethanol
+ Carbondioxide

12. Which of the following is most appropriate for aerobic respiration?

- (a) Glucose mitochondria → Pyruvate cytoplasm → $\text{CO}_2 + \text{H}_2\text{O} + \text{Energy}$
- (b) Glucose cytoplasm → Pyruvate mitochondria → $\text{CO}_2 + \text{H}_2\text{O} + \text{Energy}$
- (c) Glucose cytoplasm → Pyruvate + Energy mitochondria → $\text{CO}_2 + \text{H}_2\text{O}$
- (d) Glucose cytoplasm → Pyruvate + Energy mitochondria → $\text{CO}_2 + \text{H}_2\text{O} + \text{Energy}$

13. Which of the following statement(s) is (are) true about respiration?

- (i) During inhalation, ribs move inward and diaphragm is raised
- (ii) In the alveoli, exchange of gases takes place i.e., oxygen from alveolar air diffuses into blood and carbon dioxide from the blood into the alveolar air
- (iii) Haemoglobin has a greater affinity for carbon dioxide than oxygen
- (iv) Alveoli increase surface area for exchange of gases
- (a) (i) and (iv)
- (b) (ii) and (iii)
- (c) (i) and (iii)
- (d) (ii) and (iv)

14. Which is the correct sequence of air passage during inhalation?

- (a) Nostrils → larynx → pharynx → trachea → lungs
- (b) Nasal passage → trachea → pharynx → larynx → alveoli
- (c) larynx → nostrils → pharynx → lungs
- (d) Nostrils → pharynx → larynx → trachea → alveoli

15. Oxygen liberated during photosynthesis comes from

- (a) water
- (b) chlorophyll
- (c) carbon dioxide
- (d) glucose

ASSERTION AND REASON:-

Following questions consist of two statements – Assertion (A) and Reason (R). Answer these questions selecting the appropriate option given below:

- (a) Both A and R are true and R is the correct explanation of A.
- (b) Both A and R are true but R is not the correct explanation of A.
- (c) A is true but R is false.
- (d) A is false but R is true.

Q.1. Assertion (A) : In anaerobic respiration, one of the end product is alcohol.

Reason (R) : There is an incomplete breakdown of glucose.

Answer

Q.2. Assertion (A) : In plants there is no need of specialised respiratory organs.

Reason (R) : Plants do not have great demands of gaseous exchange.

Answer

Q.3. Assertion (A) : Bile is essential for digestion of lipids.

Reason (R) : Bile juice contains enzymes.

Answer

Q.4. Assertion (A) : Carbohydrate digestion mainly takes place in small intestine.

Reason (R) : Pancreatic juice contains the enzyme lactase.

Answer

Q.5. Assertion (A) : Aerobic respiration requires less energy as compared to anaerobic respiration.

Reason (R) : Mitochondria is the powerhouse of the cell.

Answer

Q.6. Assertion (A): Energy is required to carry out different life processes.

Reason (R) : Energy is obtained in the form of ATP in the mitochondria.

Answer

Q.7. Assertion (A): Rings of cartilage are present in the throat,

Reason (R) : These ensure that the air-passage does not collapse

Answer

Q.8. Assertion (A): Pyruvate is a six-carbon molecule

Reason (R) : It is prepared in the cytoplasm as the first step to cellular respiration

Answer

Q.9. Assertion (A): Diffusion does not meet high energy requirements of multi-cellular organisms

Reason (R) : Diffusion is a fast process but occurs at the surface of the body.

Answer

Q.10. Assertion (A): The opening and closing of the pore is a function of the guard cells.

Reason (R) : Stomatal pores are the site for exchange of gases by diffusion.

Answer

PROJECT

MAKE A MODEL OF HUMAN DIGESTIVE SYSTEM AND HUMAN BREATHING SYSTEM

SOCIAL SCIENCE HISTORY / CIVICS

1. Who was Fredric Sorrieu?
2. What was the main objective of the Treaty of Vienna?
3. What were features of civil code of 1804?
4. Explain the concept of liberalism in political and economic spheres.
5. How did sense of collectiveness spread among French people?
6. How did Germany and Italy unite as independent nations?

7. How formation of nation state was the result of a long drawn out process in Britain?
8. What do you mean by Allegory? Compare between Marne and Germania.
9. Differentiate between Horizontal power sharing and Vertical power sharing.
10. Explain the ethnic composition of Belgium and Sri Lanka.
11. Why did Belgians amend their Constitution four times?
12. Why is power sharing desirable? Explain.
13. What are the main features of Federalism?

14. ACTIVITY WORK:-

- A. Write about Bismarck and Giuseppe Mazzini.
- B. Compare the image of Bharat Mata with the image of Germania.
- C. Find out the functions of Local Self Government.

Note: - write answers in a separate copy and Activity work in project file.

GEOGRAPHY

ASSIGNMENT

1. How has technical and economic development led to more consumption of resources.
2. Prepare a list of resources found in your state and also identify the resources that are important but deficit in your state.
3. Explain the importance of SUSTAINABLE DEVELOPMENT.

PROJECT

On an outline map of India, mark the different states which have wildlife sanctuaries, reserves and national parks.

ECONOMICS

Project

Chapter :- Development

Part A: Understanding the Basics

Q1. Answer the following in brief (50–80 words each):

- a) What is development? Give two examples of different development goals.
- b) Why do different people have different development goals?
- c) What is per capita income? Why is it used to compare countries?
- d) Explain the difference between growth and development.

Part B: Data-Based Activity

Q2. Compare the following data:

Country	Per Capita Income (USD)	Life Expectancy	Literacy Rate (%)
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		(Years)	
India	2,200	70	77
Sri Lanka	4,300	77	92
Nepal	1,200	69	67

Tasks:

- Which country is economically better off? Why?
- Which country has better health and education indicators?
- What does this tell you about the importance of non-income factors in development?

Part C: Creative & Research Work

Q3. Project Work (Choose One – 2–3 pages):

- Case Study: Kerala vs. Punjab
 - Compare them based on income, education, and health.
 - Which one is more “developed” and why?
- Sustainable Development:
 - What is it and why is it important?
- List 5 ways we can practice sustainable development at home.

Part D: Fun & Real-Life Application

Q4. Make a poster (hand-drawn or digital):

Topic: “What Does Development Mean to Me?”

Include both income and non-income goals like education, health, freedom, and environment.

Submission Format:

File

Include pictures, graphs, and personal insights wherever possible.

ARTIFICIAL INTELLIGENCE (AI)

Answer the following questions-

- Write any three advantages of verbal communication.
- What do you mean by body language?
- How can we give the feedback?
- What do you mean by weakness? Write a few words to describe weakness
- Explain briefly the 7Cs basic principles of communications
- What are the advantages and disadvantages of verbal communications?
- What are some common signs and symptoms of stress?
- What is Good and Bad Stress?
- What are the factors that cause common stress to students?
- What do you mean by weakness? Write a few words to describe weakness.

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