



DELHI PUBLIC SCHOOL GAYA

Under the aegis of the Delhi Public School Society, New Delhi
Affiliated to C.B.S.E., New Delhi Affiliation No.330530, School Code – 65572

SUMMER VACATION ASSIGNMENT (SESSION:2024-25)

Medium :	Class: IX
Subject :	Adm. No:
Name :	

Are you looking for some interesting and fun learning assignments to make your learning session interesting and engaging? Here in this assignment, you will find some very interesting and engaging tasks that will be fun to solve.

ENGLISH LANGUAGE AND LITERATURE (184)

Instructions:

1. Compile a file, in a presentable, colourful way. Title it as Portfolio.
2. Be creative in describing about yourself. You can stick your photographs, show your style and thoughts through the file.
3. Write an acknowledgement on the second page.
4. List the content headings and page numbers on the third page.
5. Write each topic on a new page.
6. Use pictures and captions whenever possible.
7. All you Holiday Assignments of English must be attached to this and submitted on the day of your arrival.

SPEAKING:

Read the poem 'No Men Are Foreign' in Beehive. The poem is based on the theme of universal brotherhood.

Listen to the Swami Vivekananda's Message of Universal Brotherhood in YouTube. Draft a speech on the topic 'Vasudhaiva Kutumbakam'

Deliver the speech in front of your parents, ask them to evaluate your speech as per the criteria below: (Attach your speech written copy as well.)

Clarity: /2; Articulation: /2; Engaging: /2; Fluency: /2

Gesture: /2

How do I feel about my son's/daughter's speech? (Feedback can be in any language of parents' choice).

Make it a neat presentation, for your file.

LISTENING:

Unit-2: The Sound of Music- Evelyn Glennie Listens to the Music without Hearing It (Beehive)

Listen to the video available in YouTube.

Here is the key word to search: Turning disability into ability | Liam Malone | TEDxAuckland

Write up, what are all qualities that Liam speaks? Are they already there in you? What do you want to learn to become the better version of yourself?

Consider you are inspired by this speech, where do you see yourself in the next 10 years. Elaborate.

Make it a neat presentation, for your file.

WRITING:

Unit-1: The Fun They Had (Beehive)

Listen to Future Talk: How AI and Robotics Will Reshape Education by Dr Yao Zhang in YouTube; explore the feasibility of AI and Robotics enabled education system in India. Prepare a questionnaire (10 questions, mcqs, and take five printouts) to know the public opinion on this, take a survey with your nearby neighbours, ask them the questions from the questionnaire and fill the forms. The details of the neighbours must be specified without phone number. Write a detailed report on the basis of your research, public opinion and survey.

Make it a neat presentation, for your file.

READING:

Unit-11: If I Were You (Beehive, Self-reading)

Read the one-act play, If I Were You. As the intruder is outwitted by Gerrard, write a paragraph of 150 words, highlighting the importance of brilliant wit, a sharp mind, smart thinking, and a sense of humour to overcome even a life threatening situation very successfully.

Make it a neat presentation, for your file.

2. A. ART INTEGRATED LEARNING:

Read the poem A LEGEND OF THE NORTHLAND in BEEHIVE

Recall any legend narrated to you by your grandparents in your childhood. The legend describes the folklore of your culture and tradition. Translate the legend into English in 150 words.

Make it a neat presentation, for your file.

3. A MULTIDISCIPLINARY PROJECT

Psychology and Emotional Well-being: Based on Chapter-1, The Lost Child (Moments), analyse the psychological impact of getting separated from his parents on the lost child. Also evaluate the lost child's emotional transformation in the wake of getting separated from his parents at the fair. Write your assessment in 150 words.

Make it a neat presentation, for your file.

हिन्दी (085)

1. भक्तिकाल के किन्हीं पाँच रचनाकारों का संक्षिप्त परिचय लिखिए तथा उनकी किसी एक प्रचलित रचना की पंक्तियों का उल्लेख भी कीजिए।

2. भगवाना की माँ जैसी समाज की किसी अन्य गरीब महिला के जीवन में आने वाली समस्याओं के बारे में पता करके लगभग 100 शब्दों में लिखिए।
3. आप अपने घर में माता-पिता का सहयोग किन-किन कार्यों में करते हैं? लगभग 100 शब्दों में लिखिए।
4. महादेवी वर्मा द्वारा रचित 'मेरा परिवार' पुस्तक की किसी अन्य कहानी को पढ़कर उसका सारांश अपने शब्दों में लिखिए।
5. स्रोत एवं रचना के आधार पर शब्द के भेदों को सोदाहरण दर्शाते हुए एक वृत्त-चित्र बनाइए।

SANSKRIT (122)

भारतीवसन्त-गीतिः

श्लोक---1

A. पूर्णवाक्येन उत्तरत-

- (1)वाणी कीदृशीं वीणां निनादयतु? (2)सा कीदृशीं गीतिं गायतु? (3)अस्मिन् श्लोके कविः वाणी किं कीदृशञ्च गातुं प्रार्थयति ? (4) कवेः अनुसारं सरस्वती (वाणी) का निनादयतु? (5) कविः वाणीं किमर्थं प्रार्थयति?

B. व्याकरणम् (भाषिककार्यम्/निर्देशानुसारम् उत्तरत)

- (1) 'नवीनाम् वीणाम्' अनयोः पदयोः विशेषणपदं किम् ?
 (क) वीणा (ख) नवीनाम्
 (ग) वीणाम् (घ) नवीना
- (2) 'निनादय नवीनामये वाणि! वीणाम्।' अत्र वाक्ये क्रियापदं किमस्ति ?
 (क) वाणि (ख) वीणाम्
 (ग) नवीनाम् (घ) निनादय
- (3) श्लोके 'कोमलाम्' इत्यस्य पदस्य अर्थे किं पदम् आगतम् ?
 (क) मृदुम् (ख) गीतिम्
 (ग) नीति-लीनाम् (घ) वीणाम्
- (4) अत्र श्लोके 'सरस्वती' इत्यस्य पदस्य कः पर्यायः लिखितः ?
 (क) वाणी (ख) वीणा
 (ग) गीतिम् (घ) मृदु

श्लोक---2

A. पूर्णवाक्येन उत्तरत-

- (1)कदा मधुरमञ्जरी पिञ्जरी भूताः ? (2) कीदृशाः रसालाः वसन्ते लसन्ति? (3)वसन्ते कासां कलापाः विलसन्ति? (4) वसन्ते काः पिञ्जरी भूताः ? (5)सरसाः रसालाः कदा लसन्ति ? (6)ललित-कोकिला-काकलीनाम् के विलसन्ति? (7)वसन्ते किं भवति ?

B. व्याकरणम् (भाषिककार्यम्/निर्देशानुसारम् उत्तरत)

- (1) सरसाः रसालाः अनयोः पदयोः विशेषणपदं किमस्ति ?

- | | |
|-----------|------------|
| (क) सरसा: | (ख) रसाला: |
| (ग) सरस: | (घ) रसाल: |
- (2) श्लोके 'लसन्ति' इति क्रियायाः कर्तृपदं किम् ?
- | | |
|------------|------------|
| (क) वसन्ते | (ख) इह |
| (ग) सरसा: | (ग) रसाला: |
- (3) श्लोके 'अत्र (अस्मिन्)' पदस्य कः पर्यायः लिखितो वर्तते ?
- | | |
|------------|-----------|
| (क) वसन्ते | (ख) इह |
| (ग) रसाला: | (घ) सरसा: |
- (4) 'नीरसाः' इत्यस्य पदस्य कः विपर्ययः अत्र लिखितः ?
- | | |
|------------|------------|
| (क) वाणि | (ख) वसन्ते |
| (ग) रसाला: | (घ) सरसा |

श्लोक---3

A. पूर्णवाक्येन उत्तरत-

- (1) कस्याः तीरे समीरः मन्दमन्दं वहति? (2) कासां नतां पङ्क्तिं वाणी अवलोकयतु? (3) कुत्र समीरः मन्दमन्दं वहति ? (4) किम् अवलोक्य वाणी नवीनां वीणां निनादयतु? (5) सनीरः समीरः कथं वहति? (6) कासाम् नतां पङ्क्तिम् वाणीं अवलोकयतु ? (7) कविः भगवतीं भारतीं कस्याः नद्याः तटे मधुमाधवीनां नतां पङ्क्तिम् अवलोक्य वीणां वादयितुं कथयति?

B. व्याकरणम् (भाषिककार्यम्/निर्देशानुसारम् उत्तरत)

- (1) "यमुनायाः" इत्यर्थे अत्र किं पदं प्रयुक्तम् ?
- | | |
|----------------------|----------------|
| (क) निनादयतु | (ख) आत्मजायाः |
| (ग) कालिन्दात्मजायाः | (घ) सवानीरतीरे |
- (2) " पङ्क्तिम्" इति विशेष्य पदस्य अत्र कि विशेषण पदं प्रयुक्तम् ?
- | | |
|-----------|-----------|
| (क) सवानि | (ख) तीरे |
| (ग) नतां | (घ) माधवी |
- (3) वहति इति क्रिया पदस्य कर्तृ पदं किम् ?
- | | |
|-----------|--------------|
| (क) सनीरः | (ख) समीरः |
| (ग) तीरे | (घ) कालिन्दः |
- (4) प्रेक्ष्य' इति पदस्य अत्र पर्यायपदं किम् ?
- | | |
|-------------|--------------|
| (क) अवलोक्य | (ख) आलोक्य |
| (ग) वीक्ष्य | (घ) दृष्ट्वा |

श्लोक---4

A. पूर्णवाक्येन उत्तरत-

(1)लतानां नितान्तं कीदृशम् सुमंचलेत् ? (2) मलिनाम् अलीनां कीदृशीम् ततिम् पश्य? (3) के मलय-मारुताच्चुम्बिताः सन्ति? (4) अलीनां कीदृशीं ततिं प्रेक्ष्य वाणी नवीनां वीणां निनादयतु? (5) पल्लवाः कीदृशाः वर्णिताः सन्ति? (6)कुत्र स्वनन्तीम् अलीनां मलिनां ततिं वाणी प्रेक्षयतु? (7) के मलय-मारुतोच्चुम्बिताः सन्ति?

B. व्याकरणम् (भाषिककार्यम्/निर्देशानुसारम् उत्तरत)

- (1) अलीनाम् मलिनाम्' अनयोः पदयोः विशेषणं किम् ?
 (क) अलीनाम् (ख) मलिनाम्
 (ग) अलीनः (घ) मलीनः
- (2) श्लोके 'वृक्षे' इत्यस्य पदस्य कः पर्यायः आगतः ?
 (क) पादपे (ख) पल्लवे
 (ग) ललितपल्लवे (घ) पुष्पपुञ्जे
- (3) अस्मिन् श्लोके 'दृष्ट्वा' पदस्य अर्थे किं पदम् आगतम् ?
 (क) निनादय (ख) स्वनन्तीम्
 (ग) ततिम् (घ) प्रेक्ष्य
- (4) 'श्वेताम्' इति पदस्य कः विपर्ययः श्लोके आगतः ?
 (क) मलिनाम् (ख) अलीनाम्
 (ग) नवीनाम् (घ) वीणाम्

श्लोक---5

A. पूर्णवाक्येन उत्तरत-

(1)वाण्याः वीणा कीदृशी अस्ति? (2)नदीनां सलिलं कीदृशम् अत्र वर्णितम्? (3)लतानां कीदृशं सुमं चलेत् ? (4)नदीनां कान्तसलिलं कथम् उच्छलेत् ? (5)कासाम् नितान्तं शान्तिशीलम् सुमं चलेत्? (6)कीदृशे पादपे मलिनां अलीनां स्वतन्तीं ततिं पश्यत? (7)नदीनां कान्तसलिलं कथम् उच्छलेत्?

B. व्याकरणम् (भाषिककार्यम्/निर्देशानुसारम् उत्तरत)

- (1) सुमनः' इत्यस्य पदस्य कः पर्यायः अत्र आगतः ?
 (क) नदीनाम् (ख) नितान्तम्
 (ग) सुमम् (घ) शान्तिशीलम्
- (2) श्लोके 'उच्छलेत्' इति क्रियापदस्य कर्तृपदं किमस्ति ?
 (क) कान्तसलिलम् (ख) सलीलम्
 (ग) कान्तम् (घ) सलिलम्
- (3) अत्र श्लोके 'सुमम्' इति कर्तृपदस्य क्रियापदं किम् ?
 (क) कान्त सलिलम् (ख) चलेत्
 (ग) उच्छलेत् (घ) आकर्ण्य
- (4) 'कदाचित्' इत्यस्य पदस्य अत्र श्लोके विपर्ययः कः आगतः ?
 (क) सुमम् (ख) आकर्ण्य
 (ग) अदीनाम् (घ) नितान्तम्

C. अधोलिखितवाक्येषु स्थूलपदमाधृत्य प्रश्ननिर्माणं कुरुत ।

1. ललित पल्लवे पादपे मलिनां अलीनां स्वतन्तीं ततिं पश्यत् ।
2. तव अदीनां वीणाम् आकर्ण्य सुमं चलेत् ।
3. लतानां नितान्तं शान्तिशीलम् सुमं चलेत् ।
4. वाण्याः वीणा अदीना अस्ति ।
5. नदीनां सलिलं कान्तम् वर्णितम् ।
6. निर्धनायाः वृद्धायाः दुहिता विनम्रा आसीत् ।
7. यदा काकः शयित्वा प्रबुद्धः जातः तदा सः स्वर्णगवाक्षात् अवदत् ।
8. ग्रामे एक धनहीना वृद्धा स्त्री अवसत् ।
9. वृद्धायाः एका विनम्रा मनोहरा च कन्या आसीत् ।
10. लुब्धया कन्यया लोभस्य फलं प्राप्तम् ।

D. संस्कृतभाषायां अनुवादं कुरुत ।

1. धन के बिना सुख नहीं मिलता।
2. यह गंगा का जल है।
3. नदी के दोनों ओर खेत हैं।
4. शहद के साथ दूध पियो।
5. वह साधु के लिए अन्न देता है।
6. मुझे संस्कृत अच्छी लगती है।
7. माता पुत्र पर क्रोधित होती है।
8. कृष्ण कंस के लिए काफी है।
9. देवताओं को नमस्कार है।
10. बालक वानर से डरता है।

MATHEMATICS (041)

1. If $x = \frac{\sqrt{5}+3}{2}$, then find the value of
 - (a) $x + \frac{1}{x}$
 - (b) $x^2 + \frac{1}{x^2}$
2. If $a = c^z$, $b = a^x$ and $c = b^y$, then prove that $xyz = 1$.
3. Find 5 rational and 5 irrational numbers between
 - (a) $\sqrt{2}$ and $\sqrt{5}$
 - (b) $\frac{2}{7}$ and $\frac{3}{8}$

4. If 1 and -1 are zeroes of the polynomial $p(x) = ax^3 + x^2 - 2x + b$, then find the values of a and b .
5. Factorise:
 - (i) $3x^2 - 10x + 8$
 - (ii) $x^3 + 6x^2 + 11x + 6$
6. Plot the points given below in Cartesian plane:
 $A(0,6)$, $B(-5,2)$, $C(4,2)$
Find in which quadrant the following points lie.
Also find the area of triangle ABC.
7. Make an art integrated activity on square root spiral .
For reference follow the below link: <https://www.youtube.com/watch?v=ID3vT3xPHas>
Note : Do the above activity on A4 size sheet.
8. Make a model on types of polynomial based on degree.
For reference follow the below link: <https://youtu.be/vHZMFx8rlhY?si=UnmWIjs8vSfpWcSF>

SCIENCE (086)

PHYSICS

Write following experiments in your practical copy.

1. Determination of the density of solid (denser than water) by using a spring balance and a Measuring cylinder. (Pg. 98 - 104)
2. Establishing the relation between the loss in weight of a solid when fully immersed in
 - (a) Tap water
 - (b) Strongly salty water with the weight of water displaced by it by taking at least two Different solids. (Pg. 105 – 111)
3. Verification of the Laws of reflection of sound. (Pg. 92 – 97)

Prepare Mind map of chapter 8 (Motion)

1. Which speed is greater: 30 m/s or 30 km/h?
2. A body is moving with a velocity of 10m/s. If the motion is uniform, what will be the velocity after 10 s?
3. A racing car has a uniform acceleration of 4m/s². What distance will it cover in 10 s after start?

- On a 120km track, a train travels the first 30km at a uniform speed of 30km/h. how fast must the train travel the next 90km so as to average 60km/h for the entire trip?
- A motorcyclist drives from A to B with a uniform speed of 30 kmh⁻¹ and returns back with a speed of 20 kmh⁻¹. Find its average speed.

CHEMISTRY

Write the following Experiments in your chemistry practical file.

- To determine the melting point of ice. (pg.83-85 from lab manual)
 - To determine the boiling point of water (pg.86-91 from lab manual)
- To carry out the following reactions and classify them as physical and chemical change.(pg.54-63 from lab manual)
 - Iron with copper sulphate solution in water.
 - Burning of magnesium in air
 - Zinc with dilute sulphuric acid.
 - Heating of copper sulphate
 - Sodium sulphate with barium chloride in the form of their solutions in water.

Answer the following questions in your class notebook of chemistry.

- Comment on the following statements:
 - Evaporation produces cooling.
 - Rate of evaporation of an aqueous solution decreases with increase in humidity.
 - Sponge though compressible is a solid.
- Why does the temperature of a substance remain constant during its melting point or boiling point?
- Alka was making tea in a kettle. Suddenly she felt intense heat from the puff of steam gushing out of the spout of the kettle. She wondered whether the temperature of the steam was higher than that of the water boiling in the kettle. Comment.
- Fill in the blanks:
 - Evaporation of a liquid at room temperature leads to a _____ effect.
 - At room temperature the forces of attraction between the particles of solid substances are _____ than those which exist in the gaseous state.
 - The arrangement of particles is less ordered in the _____ state. However, there is no order in the state.
 - _____ is the change of gaseous state directly to solid state without going through the _____ state.

- (e) The phenomenon of change of a liquid into the gaseous state at any temperature below its boiling point is called _____.
5. It is a hot summer day; Priyanshi and Ali are wearing cotton and nylon clothes respectively. Who do you think would be more comfortable and why?
6. 5ml of Dettol is added to a beaker containing 500ml of water and stirred. State four observations that you make.

BIOLOGY

1. Why are lysosomes known as 'suicidal-bags' of a cell?
2. Do you agree that "A cell is a building unit of an organism". If yes, explain why?
3. Why does the skin of your finger shrink when you wash clothes for a long time?
4. Why is endocytosis found in animals only?
5. A person takes concentrated solution of salt, after sometime, he starts vomiting. What is the phenomenon responsible for such situation? Explain.
6. Name any cell organelle which is non membranous.
7. We eat food composed of all the nutrients like carbohydrates, proteins, fats, vitamins, minerals and water. After digestion, these are absorbed in the form of glucose, amino acids, fatty acids, glycerol etc. What mechanisms are involved in absorption of digested food and water?
8. If you are provided with some vegetables to cook. You generally add salt into the vegetables during cooking process. After adding salt, vegetables release water. What mechanism is responsible for this?
9. If cells of onion peel and RBC are separately kept in hypotonic solution, what among the following will take place? Explain the reason for your answer.
 - (a) Both the cells will swell.
 - (b) RBC will burst easily while cells of onion peel will resist the bursting to some extent.
 - (c) a and b both are correct.
 - (d) RBC and onion peel cells will behave similarly.
10. Bacteria do not have chloroplast but some bacteria are photoautotrophic in nature and perform photosynthesis. Which part of bacterial cell performs this?
11. Match the following Column-A and Column-B.

Column-A	Column-B
(i) Smooth endoplasmic reticulum	(1) Amoeba

- | | |
|--------------------------------------|------------------|
| (ii) Lysosome | (2) Nucleus |
| (iii) Nucleoid | (3) Bacteria |
| (iv) Food vacuoles | (4) Detoxication |
| (v) Chromatin material and nucleolus | (5) Suicidal bag |

12. Name the organelles which show the analogy written as under

- (i) Transporting channels of the cell—
- (ii) Power house of the cell—
- (iii) Packaging and dispatching unit of the cell—
- (iv) Digestive bag of the cell—
- (v) Storage sacs of the cell—
- (vi) Kitchen of the cell—
- (vii) Control room of the cell—

13. Answer the following questions:

- (i) How is a bacterial cell different from an onion peel cell?
- (ii) How do substances like carbon dioxide (CO₂) and water (H₂O) move in and out of the cell?
- (iii) How does amoeba obtain its food?
- (iv) Name the two organelles in a plant cell that contain their own genetic material and ribosomes.
- (v) Why are lysosomes also known as "scavengers of the cells"?
- (vi) Which cell organelle controls most of the activities of the cell?
- (vii) Which kind of plastid is more common in (a) roots of the plant (b) leaves of the plant (c) flowers and fruits
- (viii) Why do plant cells possess large sized vacuole?
- (ix) How are chromatin, chromatid and chromosomes related to each other?
- (x) What are the consequences of the following conditions?
 - (a) A cell containing higher water concentration than the surrounding medium
 - (b) A cell having low water concentration than the surrounding medium.
 - (c) A cell having equal water concentration to its surrounding medium.

SOCIAL SCIENCE (087)

1. What do you understand by the word 'Revolution'? For what kind of situations can the term Revolution be used?
2. Explain how the growth of new ideas and practices from across the world affected the course of world history since the beginning of French Revolution.
3. Analyse how the French Revolution had an impact on the European countries in the making of nation states in Europe and elsewhere.
4. "The quest for imperialism triggered the First World War". Substantiate the statement.
5. By referring to the Preamble to the Indian Constitution, explain how Indian Constitution helps in strengthening Indian democracy.
6. Analyse the basic features of a democracy and democratic government – and its history in India and across the world. Also compare this form of government with other forms of government?
7. Analyse the different historical processes and forces that have contributed for the promotion of democracy in India.
8. Draw a cartoon to show benefits of democratic government over other forms of Government.
9. Locate physiographic regions of India and the climatic zones of the world on a globe/map.
10. Analyse the inter-relationship between human beings and their physical environment and how that influences the livelihoods, culture, and the biodiversity of the region.
11. Explore and analyse the trading and cultural relationships of India with its neighbouring countries.
12. Use Geo Gebra, Google earth to represent and justify the reasons for the differences in climatic conditions, local and standard time. Show the same in your notebook.
13. Enlist the requirements of production and also explain the interdependence of these requirements. For completing the production process.
14. Do you think that India has succeeded in creating an egalitarian society? Find solutions to foster an equitable society.
15. Visit to a nearby village or local markets and interview different classes of farmers to know about their lifestyles and thereafter present in the class.

COMPUTER APPLICATIONS (165)

1. Ritu is teaching her younger brother about types of keys present on a standard keyboard. Make a chart to describe the keys in brief.
2. Your computer teacher wants to print question papers for the entire school. Suggest him a printer which can be used to print such a large amount of papers in short period of time.
3. John wants to print a three dimensional prototype of a robot. Suggest a printer for this work.
4. Gurpreet wants to write a story book. He does not know which software he should use. Suggest him a software to write stories.
5. Ali made some errors while writing a documentary on "Dashrath Manjhi: The Mountain Man of India". Suggest him a feature of MS Word 2010 to rectify the errors.

6. A. Read the following passage and answer the questions given after the passage. Type the paragraph in MS Word and paste the printout in your notebook once you answered all the questions.

The crow did not lose hope. He saw some pebbles on the ground. The crow started collecting pebbles one by one and dropped them into the pitcher. As more and more pebbles were added to the pitcher, the water rose up. Soon enough, the water came to a level through which the crow could drink water. He drank the water happily and thanked Mother Nature.

- B. Add the following in the beginning of paragraph given above.

There was a thirsty crow who was searching for water all over the fields. He looked everywhere, but there was not a drop to drink. Suddenly, he saw a pitcher in the middle of a garden. He flew straight down to that pitcher to see if water was left in it. And to his surprise, there was some water in the pitcher. The pitcher was high with a narrow neck, and the water level was too low. He tried a lot but could not reach to the water.

- C. Add a suitable title to the story. Change case to “Capitalize Each Word”. The font should be in Monotype Corsiva and font size should be 20.

- D. Add a moral in the end. Make sure to underline the moral of the story.

7. (a) Write the features of a word processing software.
(b) Differentiate between Impact and Non-Impact printers.

