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

WINTER VACATION ASSIGNMENT CLASS-IX (SESSION: 2023-24)

Are you looking for some interesting fun learning assignment 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 solving.

ENGLISH

1. Read the passage carefully and answer the questions that follow:

    Some of us think that writing is only for writers. But writing is for all of us. As Julia Cameron notes in her book The Right to Write: An Invitation and Initiation into the Writing Life, "I believe we all come into life as writers."

    Writing can be beneficial for all of us, because it can be therapeutic. One of the most powerful parts of therapy is cultivating the ability to observe our thoughts and feelings, said Elizabeth Sullivan, a licensed marriage and family therapist in San Francisco. And that's what writing helps us do.

    "Most of us do not think in complete sentences but in self-interrupted, looping, impressionistic cacophony," she said. Writing helps us track our spinning thoughts and feelings, which can lead to key insights (e.g., I don't want to go to that party; I think I'm falling for this person; I'm no longer passionate about my job; I realize how I can solve that problem; I'm really scared about that situation.)

    Writing is "speaking to another consciousness – 'the reader' or another part of the self. We come to know who we really are in the present moment," she said.

    Writing also creates a mind-body-spirit connection, she said. "When you use your hands to pen or type something directly from your brain, you are creating a powerful connection between your inner experience and your body's movement out in the world."

    We hold worries, fears and memories in our bodies, Sullivan said. When we use the body in positive ways – such as dancing or writing — we stay in the present moment, we inhabit our bodies, and we can heal ourselves, she said.

    "Writing is a small movement but it is incredibly powerful when you are writing down what is in your mind."

    Here are three types of writing you can try:

    Free write: Free writing is simply writing what's on your mind. It's letting it all hang out without censoring yourself. According to Sullivan, this could be: "Today I woke up and found the car window smashed and I wondered if the glass replacement guys go out at night and do it."

    Pen Poetry: "Poetry is a natural medicine; it is like a homeopathic tincture derived from the stuff of life itself–your experience," writes John Fox in Poetic Medicine: The Healing Art of Poem-Making.

    Compose a letter: Sullivan suggested writing a short letter to a loved one. Imagine this person has written to you and asked you: "How are you doing, really?" Another exercise is to "write to someone with whom you have 'unfinished business' without sending it." The goal is for you to gain a clearer understanding of your own thoughts and feelings about the person, she said.

    (a) Why does Julia Cameron believe that we all come into life as writers?
    (b) What is the most important therapeutic quality of writing?
    (c) Whose consciousness does a writer touch through his or her writing?
    (d) How does Elizabeth Sullivan describe our thinking? Why does she say so?
    (e) How can a person clear his or her misunderstanding with someone?
    (f) Which word in the passage means 'a coarse unpleasant noise'?
    (g) Which of the following, according to the passage, is not true about writing?
        (i)   Writing is a static activity of the brain.
        (ii)   Writing is a process of self-discovery.
        (iii) Writing is a positive way of using our body.
        (iv)   Writing helps us to streamline our thoughts.

(h) The word 'tincture' can be replaced with the word _____.
   (i) trace (ii) potion
   (iii) touch (iv) flavor

2. You went for a heritage walk to a ruined ancient monument. The place was neglected and encroached upon. Write a description in the diary in 100-120 words of what you saw and what you imagine the place would have been like, in its heydays.

3. Fill in the blanks with the correct options:
   (a) My mother _____ up early in the morning.
      (i) gets (ii) get
      (iii) will get (iv) getting
   (b) It _____ raining since morning when you rang me up.
      (i) has been (ii) had been
      (iii) was (iv) will be
   (c) By next Monday he _____ staying at my uncle's house for three weeks.
      (i) will have (ii) shall have
      (iii) will have been (iv) shall have been
   (d) If you had arrived late, I _____ angry.
      (i) had been (ii) have been
      (iii) would have been (iv) will have been
   (e) While I was reading, the phone_____.
      (i) was ringing (ii) rung
      (iii) rings (iv) rang
   (f) The International Club, as well as the Choral Society and the Rowing Club, _____ to submit a new constitution.
      (i) needs (ii) need
      (iii) needing (iv) have needed
   (g) Not only the students but also their instructor _____ been called to the principal's office.
      (i) have (ii) were
      (iii) has (iv) none of these
   (h) Each and every student and instructor in this building _____ for a new facility by next year.
      (i) hopes (ii) hope
      (iii) are hoping (iv) were hoping
   (i) A large number of voters still _____ along straight-party lines.
      (i) votes (ii) vote
      (iii) has voted (iv) voting
   (j) To an outsider, the economics of this country _____ to be in disarray.
      (i) seem (ii) are seeming
      (iii) seems (iv) have seemed

4. Answer the following question in 80-100 words.
   Bring out Gerrard's intelligence, presence of mind and sense of humour. How did these traits help him outwit the Intruder?

5. Write an application to the principal of your school requesting him to grant you permission to stay-back at school on Mondays and Fridays to do self study in the school library.

हिन्दी

1. अगरबत्ती बनाना / माचिस बनाना / मोमबत्ती बनाना / लिफाफे बनाना, में से किन्हीं दो लघु–उद्योग के विषय में जानकारी एकत्रित कर एक परियोजना तैयार कीजिए।
2. हिंदी महीनों (चैत्र से फाल्गुन) के नाम तथा प्रत्येक महीने में मनाए जाने वाले त्योहारों की सूची तैयार कीजिए।
3. महादेव जी देसाई के समान गांधी जी के जीवन में प्यारेलाल की भी महत्वपूर्ण भूमिका रही है। प्यारेलाल का संक्षिप्त जीवन परिचय प्राप्त कर लगभग 100 शब्दों में लिखिए।

SANSKRIT

1. तत्, एतत्, किम्, अस्मद्, युष्मद्, गुणिन् और विद्वस् शब्दरूप लिंगों के अनुसार लिखें और याद करें।

   **गृहकार्य- पुस्तिका में (Assignment copy) कार्य करें।

MATHEMATICS

1. Find any four different solutions of the equation $2x + 3y = 10$.
2. The hemispherical dome of a building needs to be painted. If the circumference of the base of dome is 17.6 m, find the cost of painting it, given the cost of painting at the rate of ₹250 per 100 cm^2.
3. K,L,M and N are points on the sides AB,BC,CD and DA respectively of a square ABCD, Such that AK=BL=CM=DN. Prove that KLMN is a square.
4. Prove that the angle subtended by an arc at the centre is double the angle subtended by it at any point on the remaining part of the circle.
5. An isosceles triangle has perimeter 30 cm and each of the equal sides is 12 cm. Find the area of the triangle.

ACTIVITY:

6. To explore the similarities and differences in the properties with respect to diagonals of the following quadrilaterals– a parallelogram, a square, a rectangle and a rhombus.

   https://edurev.in/t/217901/Lab-Manual-Comparison-of-Diagonals-in-Different-Qu#:~:text=In%20parallelogram%2C%20diagonals%20are%20not%20equal%2C%20in%20rectangle%20diagonals%20are,each%20other%20at%2090%C2%B0.

PHYSICS

1. The formula to find the work done is
   - (a) W = F+s
   - (b) W = F.s
   - (c) W = F-s
   - (d) W = F/s
2. If a force acting on a body causes no displacement, the work done is——————
   - (a) -1
   - (b) 1
   - (c) 0
   - (d) Infinity
3. Objects in motion possess energy and can do work; this energy is called——————
   - (a) Solar energy
   - (b) Thermal energy
   - (c) Potential energy
   - (d) Kinetic Energy
4. The sum of kinetic energy and potential energy is —————-
   - (a) Mechanical energy
   - (b) Thermal energy
   - (c) Potential energy
   - (d) Kinetic Energy
5. 1 kilowatt =
   - (a) 1 watt
   - (b) 10 watts
   - (c) 100 watts
   - (d) 1000 watts
6. The energy used in one hour at the rate of 1kW is known as —————-
   - (a) 10kWh
   - (b) 1kWh
   - (c) 1W
   - (d) 1kW/h
7. What are the various factors affecting kinetic energy?
   - (a) Mass
   - (b) Momentum
   - (c) Velocity
   - (d) All the above options
8. When two identical bodies are in motion, the body with a higher velocity has —————-
   - (a) Lower Kinetic Energy
   - (b) Higher Kinetic Energy
   - (c) No Kinetic Energy
   - (d) None of the options
9. State true or false: The object must be displaced for the work to be done.
   - (a) True
   - (b) False
10. If the displacement is perpendicular to the force, then the work done is said to be—————.
    - (a) -1
    - (b) 1

(c)	0		(d)	Infinity

CHEMISTRY

1. In each of the following cases, identify the element:
   (a) An element's trivalent anion with ten electrons
   (b) An element's trivalent cation with ten electrons
   What is the name of the relationship between the two ions?
2. What do you mean by canal rays?
3. Write the correct symbol for the atom with the given atomic number(Z) and atomic mass(A).
   (a) Z=9, A=19
   (b) Z= 92, A= 233
   (c) Z=3, A=7
4. Boron occurs naturally as two isotopes with atomic masses of 10.01 and 11.01. Boron has an atomic mass of 10.81. Determine the percentage of each isotope in natural Boron.
5. An atom with the atomic mass number 39 contains 20 neutrons. What is the atom's atomic number?
6. Give the electronic configurations of the following ions:
   (a) H–   (b) S2-
   (c) N-1   (d) N2+
7. An element's atomic mass is equal to twice its atomic number. If the L-shell contains six electrons, then
   (a) Predict its valency
   (b) Find the name of the element.
8. How many nucleons are present in an atom of Americium, $_{95}^{243}Am$? How many electrons are present in the atom? How many nucleons may be considered as neutrons?
9. Why did Rutherford choose gold foil for carrying out the alpha particle scattering experiment?
10. Choose the pair of atoms with the same number of electrons in their outermost shell.
    (a) Na, Mg   (b) Zn, Fe
    (c) Pn, Sb   (d) K, Rb

BIOLOGY

Section-A

1. _____ is the process by which unspecialised structures become modified and specialised for performing specific functions.
2. The study of the structure of tissues and organs is known as _____.
3. Based on ability to divide, plant tissues may be classified as _____ and _____ tissues.
4. Meristematic cells possess the power of cell _____.
5. Permanent tissues are those which have lost the capacity to _____.
6. (Parenchyma/ Collenchyma/ Sclerenchyma)_____ is a widely distributed, simple plant tissue.
7. (Parenchyma/ Collenchyma/ Sclerenchyma)_____ is a strong and flexible mechanical tissue.
8. _____ and _____are the conducting tissues or vascular tissues, also called complex tissues.
9. The cell walls of _____(Parenchyma/ Collenchyma/ Sclerenchyma) tissue are made up of cellulose hemicellulose and pectin.
10. _____ is the parenchyma with large number of chloroplasts.
11. (Xylem/Phloem) _____ is popularly known as wood.
12. Xylem is composed of _____ , _____, _____ and _____.
13. Tracheids are _____ (living/dead) cells.
14. Protective tissues include _____ and _____.
15. Epithelial cells have _____ (little/large) intercellular substances.
16. (Connective/Muscular/Epithelial) _____ tissue serve to 'connect' or 'bind' the cells of other tissues in the body and gives them rigidity and support.
17. (Tendon/Ligament/Cartilage) _____ connects muscles to bones.   .
18. Striated muscles are _____ (voluntary/involuntary) while smooth muscles are _____ (voluntary/involuntary).

Section-B

1. Based on functions performed, list the types of animal tissues.

2. Which tissues are called covering or protective tissues?
3. Where do we find epithelial tissues on animal body?
4. What are the general identifying features of epithelial tissues?
5. Based on layer and shape of cells, how epithelial tissues can be classified?
6. What is the shape of squamous tissue?
7. Where do you find squamous in an animal body?
8. What is the main function of squamous epithelium?
9. What is stratified epithelium? Where do we find these tissues?
10. What is main purpose of stratified epithelium?
11. What is the shape of cuboidal epithelium? Where do we find these tissues?
12. How will you identify Columnar epithelium? Where are these tissues located?
13. What is the main purpose of columnar epithelium?
14. What type of epithelium tissues are found in respiratory tract and in intestinal lining? How are these tissues different from each other?
15. Where do we find glandular columnar epithelia? What are their main roles?
16. What is the common characteristic in different connective tissues?
17. Name different types of connective tissues?
18. What are the constituents of connective tissues?
19. What are constituents of blood tissue?
20. What does plasma contain? Name different types of white blood corpuscles.
21. List the functions of blood cells.
22. Name the two fluid connective tissues.
23. Why type of inter cellular matrix is found in bone tissue? What are its constituents?
24. Identify the location of the following connective tissues. Blood, Lymph, Bone, Cartilage andTendons.
25. Which connective tissue connects two bones?
26. Which connective tissue connects bones to muscles?
27. Name the constituents of matrix found in cartilage.
28. Where do we find Areolar tissue? What are its functions?
29. Name the fat-storing tissues? Where are they located? How do these tissue help?
30. What are different types of muscle tissues? Also list which of these are voluntary or involuntary.
31. What are identification marks of striated muscles when seen under microscope?
32. Identify which type of muscles tissues are associated with the following body actions: Locomotion, Iris movement to control size of pupil, Peristaltic movements of the oesophagus. Heart-beat. Movement of blood in blood vessels.
33. Where do we find cardiac tissues? What are the functions of cardiac tissues?
34. Do all cells respond to stimuli or this ability is possessed by nerve cells only?
35. What is the unit of nervous tissues?
36. Where do we find nerve cells? How long a nerve cell can be?
37. How are muscles tissues related to nerve cells?
38. Name the three distinct parts of a neuron.
39. What is myelin sheath? Where do we find it?
40. Write difference between: Xylem and Phloem, Meristematic tissue and permanent tissue, Parenchyma, Collenchyma and Sclerenchyma, Bones and Cartilage, Striated, non-striated and cardiac muscles.
41. Draw a labeled diagram of nerve cell.
42. Identify which of the following plant tissues are living or dead? Apical Meristem, Parenchyma, Aerenchyma, Collenchyma, Sclereids, Tracheids, Xylem Fibres, Xylem Parenchyma, Phloem fibre, Phloem Parenchyma, Vessel and Sieve Tubes.
43. Where do we find intercalary meristem? What is aerenchyma?
44. Why do meristematic cells lack vacuoles?

SOCIAL SCIENCE

1. India's location in the Indian Ocean Region is unique with advantages benefiting her holistically. Explain

2. British Colonial Laws of restricting Pastoralism in India/Bharat was gravely unjust with multiple dimensions. Explain
3. Nazi rule in Germany was supported by education for youth and purity of women's chastity as mothers and daughters. Examine
4. The Fundamental Rights of Indian Constitution is a symbol of the successful endurance of its democratic edifice. Explain

COMPUTER APPLICATIONS

1. Write the program in Python:
   (a) To print the value of two integers before and after swapping, without using third variable.
   (b) To convert the temperature from Fahrenheit to Celsius degree. The formula is:
   C= (5*(Fahrenheit-32))/9
   (c) To find the area and circumference of a circle.
   (d) To find the simple interest of certain principal amount by using the given formula. SI=(P*R*T)/100

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