# DELHI PUBLIC SCHOOL VISAKHAPATNAM STEEL PLANT <br> Revision Assignment 2023-24 <br> Class: IX 

Subject: ENGLISH

1. Fill in the blanks by choosing the most appropriate option:

Chennai was (a)----first Indian city to have suburban rail established in 1930. Chennai is well connected by (b) train network. In spite of this history, Chennai(c)-----not boast of a strong train culture. The problem lies not in the infrastructure(d)------in access to these stations. Effective transportation (e)----the basis of a successful city.
a) (i) a (ii) the (iii) an (iv) few
b) (i) its (ii) many (iii) their (iv) some
c) (i) did (ii) do (iii) does (iv) will
d) (i) and (ii) but (iii) for (iv) to
e) (i) remain (ii)remained (iii)remaining (iv) remains
2. Read the given conversation and complete the following passage.

Manu: Mohit, where are you going?
Mohit: I am going to the market to do some shopping for my mother.
Manu: What do you have to buy?
Mohit: I have to buy a loaf of bread and some fruit.
Manu met Mohit walking on the road and (a)- $\qquad$ Mohit replied that (b) $\qquad$ to do some shopping (c) $\qquad$ Manu then inquired (d) $\qquad$ to which Mohit replied that(e) $\qquad$ .
3. The following paragraph has not been edited. There is one error in each line. Find the error, and write it along with its correction.

Error Correction
a) Everyone have a mental picture
b) of a volcano. One appearance it
c) look like a cone-shaped mountain.
d) But in the top of the cone it is
e) rather flatter than hollow.
4. Write a descriptive paragraph on 'My Best Friend' in about 100-120 words based on the following clues
Input: name-where he lives-parents/family---nature---qualities---habits---behaviour towards others---your feeling about him.
5. Write a diary entry in about 100-150 words based on the given cues, "Technology helps us connect with the world but separates us from our family and friends". Virtual worlds have taken us away from our near and dear ones.
6 . Write a story starting with the following line in 100-150 words. Give a suitable title.
As soon as Mama and Papa left and I locked the door, the phone rang Trrinng
7.Answer the following in about 40-50 words each.
a) How did Kezia make the pin-cushion for her father's birthday?
b) Why is Einstein remembered as a 'World Citizen'?
c) What does the wind" symbolize in the poem "Wind"?
d) How does Gerrad outsmart the intruder?
e) What choice did the poet have to make? (The Road Not Taken)
f) What was Johnsy's superstitious belief?
g) Why did Mahendra decide to leave the place?
h) What filled Happy Prince's eyes with tears?
8.Answer the following in about 100-150 words.
a) Can the computers replace teachers in new set-up of education? What does 'The Fun They Had' suggest you about this?
b) What similarities do you find in the lives of Santosh Yadav and Mariya Sharapova?
c) A child cannot live without his parents. How has this truth been illustrated in the story The Lost Child'?
d) What role did Olga play in the life of Lushkoff in the story 'The Beggar'?

## Subject: MATHEMATICS

1. If $a=5+2 \sqrt{6}, b=\frac{1}{a}$, then find the value of $a^{2}+b^{2}$.
2. Factorise the polynomial $x^{3}+x^{2}-4 x-4$.
3. If $x^{2}+\frac{1}{x^{2}}=18$, then find the value of $x^{3}-\frac{1}{x^{3}}$.
4. If $(\mathrm{x}-1)$ is a factor of polynomial $2 x^{2}+k x$, then find the value of $k$.
5. Prove that the figure formed by joining the midpoints of rectangle is a rhombus.
6. Draw the graph of linear equation $2 x+3 y-6=0$.
7. Find the coordinates of the points at which the graph of linear equation $3 x-5 y+30=0$ cuts the $x$-axis and $y$-axis.
8. Prove that in a triangle the sum of all the interior angles is $180^{\circ}$.
9. Find the area of triangle whose sides are 225,375 and 300 units.
10. Using Hero's formula find the area of equilateral triangle whose side is 10 cm . each.
11. Expand
(i). $(3 a-5 b)^{3}$
(ii). $\left(\frac{3}{2} x+y\right)^{3}$
12. If $2 x+3 y=12$ and $x y=6$, find the value of $8 x^{3}+27 y^{3}$.
13. If ( $p,-4$ ) lies on $2 x+y=8$ then find the value of $p$.
14. Find the coordinates of the point where the line $2 x-3 y=6$ meets y - axis.
15. The volume of two spheres are in the ratio $64: 27$. Find the ratios of their radius and also find the ratio of their surface areas.
16. $A D$ is an altitude of an isosceles triangle $A B C$ in which $A B=A C$. Show that
(i) AD bisects BC . (ii) AD bisects $L \mathrm{~A}$.
17. Prove that the quadrilateral formed by joining the midpoints of sides of a quadrilateral is parallelogram.
18. Define cyclic Quadrilateral and write its properties.
19. If $a+b+c=0$ then prove that $a^{3}+b^{3}+c^{3}=3 a b c$
20. Rationalise the denominator $\frac{7+3 \sqrt{5}}{6-4 \sqrt{7}}$.

## Subject: PHYSICS

1. If masses of two objects are halved without changing the distance between them, then the gravitational force would become:
(a) F/4
(b) $\mathrm{F} / 2$
(c) 2 F
(d) F.
2. Angelina throws a stone of mass 2 kg on the frozen lake with a velocity of $20 \mathrm{~m} / \mathrm{s}$. The stone comes to rest after travelling a distance of 40 m . Choose the option which correctly describes the force required to stop the moving stone
(a) Frictional force,10N.
(b) Gravitational force, 10N
(c) Inertia of rest, 10 N .
(d) Frictional force,-10N.
3. The stored energy in a clock' oscillating pendulum is.
(a) Potential energy
(b) Kinetic energy
(c) Mechanical energy
(d) Thermal energy.
4. Assertion(A): The displacement - time graph of a body moving uniformly is a straight line

Reason ( R ): A body travelling with uniform velocity covers equal distances in equal intervals of time with changing direction.
5. Represent graphically by two different diagrams in each case
(A) Two sounds waves having the same amplitude but different frequencies.
(B) Two sound waves having the same frequency but different amplitudes.
(C) Two sound waves having different amplitudes and also different wavelengths.

## Subject: CHEMISTRY

1. Explain Rutherford's gold foil experiment with a neat diagram.
2. Identify the physical and chemical changes.
a. Rusting of iron b. melting of iron c. melting of wax $d$. bending of iron $e$. welding of iron $f$. melting of ice g . digestion of food
3. Define the following a. latent heat of fusion $b$. law of conservation of mass 3. Law of constant proportions
4. Write the chemical formulae of the following
a. Sodium chloride b. potassium sulphate c. ammonium chloride d. aluminium oxide e. calcium hydroxide f. silver nitrate g. magnesium bromide h. potassium nitrate
5. Give the differences between true solution, suspension and colloid
6. What are the factors on which the rate of evaporation depends? Explain
7. Explain Thomsons' model of an atom and give its limitations.
8. State bohr's postulates
9. An atom of an element has 7 electrons in its $L$ shell. What is its atomic number. Identify the element and state its valency. Draw its atomic structure.

## Subject: BIOLOGY

I-Choose the correct answers:
1.Iodine solution is used-
a. stain onion peel cells b. stain human cheek cells
c. mount onion peel cells d. mount human cheek cells
2.Plant cells have large vacuoles each surround by a membrane known as-
a. plasma membrane b. cell wall c. leucoplast d. tonoplast
3.Nucleus of neuron is present in-
a. axon b. dendrite c. cell body d. both in axon and cell body
4.The girth of the stem increases due to-
a. shoot apical meristem b. root apical meristem
c. intercalary meristem d. lateral cambium
5.The variety of bee that is commonly used for commercial honey production is-
a. Apis serana indica b.A. dorsata c. A. florae d.A. melifera
6.Weed preventive measures are:
a. timely sowing crop $\quad$ b. intercropping $\quad$ c. crop rotation d. all of these

II-Assertion-Reasoning based questions:
7.Assertion-The plasma membrane is flexible and is made up of organic molecules called lipids and proteins.
Reason-Lipids and proteins help in building the cell membrane in a process called membrane biogenesis.
8.Assertion-Xylem consists of tracheid's, vessels, xylem parenchyma and xylem fibres.

Reason-Phloem is made up of sieve cells, sieve tubes, companion cells, phloem fibres and the phloem parenchyma.
9.Assertion-The signal that passes along the nerve fibre is called a nerve impulse.

Reason-Two bones are connected to each other by tendons.
10.Assertion: Egg laying birds are called broilers.

Reason: The cultivation of marine fish is called mariculture.
III-Read the given paragraph and answer the following questions:
Tissue is a group of cells similar in structure and function. Plant tissues are of two typesmeristematic and permanent. Meristematic tissue is a dividing tissue. Permanent tissues are derived from meristematic tissue. Animal tissues can be epithelial, connective, muscular and nervous tissue.
Answer the following questions:
1.What are the functions of areolar tissue?
2.What is cork?
3.Write any one difference between striated and cardiac muscles.
4.What are complex plant tissues?

IV-Answer the following questions:
1.What is chromatin material?
2.Explain the structure of nucleus?
3.Describe the structure of sclerenchyma. Write its major functions.
4.Explain the structure of three types of muscle fibres with the help of neat labelled diagrams. Also write the locations where they are found in the body.
5 .Write scientific name of two different Indian cattle.

## Subject: SOCIAL SCIENCE

1. What are the factors affecting climate of the India?
2. Discuss the significant difference between the Himalayan and the peninsular rivers?
3. Which are the major physiographic divisions of India? Explain in detail the three major divisions of India from north to south.
4. Discuss the major components of population growth. Distinguish between population growth and population change.
5. Why do the days and nights are almost of equal duration at Kanyakumari?
6. How is human resource different from other resources like land and physical capital?
7. Differentiate between seasonal hunger and chronic hunger
8. Explain some measures which targeted anti-poverty programs undertaken by the government.
9. Which states are more food insecure in India? Describe the role of co-operatives in providing food and related items.
10. Why buffer stock is created by the government of India?
11. Explain the role of Mirabeau and Abbe' Sieyes's in the French Revolution.
12. How was the French society organized? What privileges did certain sections of the society enjoy? Describe.
13. What do you know about 'Nazi schooling'?
14. What were the causes and effects of October Revolution in Russia? Explain.
15. What were the causes and effects of February Revolution in Russia? Explain.
16. What was the Nazis ideology regarding motherhood?
17. The Peace Treaty at Versailles with the Allies was a harsh and humiliating peace. Explain the statement with any three examples.
18. How does democracy enhances the dignity of the citizen?
19. What is the meaning of Rights? Explain the provisions of Fundamental Right against exploitation.
Democracy provides a method to deal with differences and conflicts. Explain.
20. Why is the Prime Minister the most powerful man in the government? Explain?
21. Explain the powers and functions of the President of India.

## Subject: हिंदी (द्वितीय भाषा)

1) पाठ से दस प्रत्यय वाले शब्द चुनकर लिखिए और उनके मूल शब्द और प्रत्यय अलग करके लिखिए।
2) पाठ से दस उपसर्ग वाले शब्द चुनकर लिखिए और उनके उपसर्ग और मूल शब्द अलग करके लिखिए।
3) पाठ से दस अनुस्वार और दस अनुनासिक शब्द लिखिए।
4) स्वर संधि के भेद के नाम दस-दस उदाहरणों के साथ लिखिए।
5) अर्थ की हृष्टि से वाक्य भेद के नाम उदाहरण के साथ लिखिए।
6) विराम चिन्हो के भेदों की परिभाषा लिखिए।
7) निम्नलिखित विषयों पर संकेत बिंदुओं के आधार पर लगभग 100 शब्दों मै अनुछेद लिखिए-

क- भारतीय किसान के कष्ट

- अन्नदाता की कठिनाई • कठोर दिनचर्या • सुधार के उपाय

ख- इंटरनेट का जीवन में उपयोग

- इंटरनेट क्या है? • लाभ-समय की बात • शिक्षा में सहायक • उपयोग के सुझाव

8) आपके मामा जी ने आपको जन्मदिन का उपहार भेजा है। उपहार भेजने के लिए धन्यवाद देते हुए उन्हें लगभग 100 शब्दों में पत्र लिखिए।
9) दो महिलाओं के मध्य बढ़ती महँगाई के विषय मै लगभग 100 शब्दों मै संवाद लिखिए।

## Subject: తెలుగు ( ద్వితీయ భాష )

1. కింది (పతి పదార్దాలు చదివి, రాయుము.

అ) ఇట్టి మహానుభావులకు హింస.....
ఆ) (పల్లదమాడి పెద్దలకు.....
ఇ) మునుమును బుళ్టె...
ఈ) ఫలము ల్మెక్కిడి వారు..... ఉ) మనమున బక్షపాత గతి.....
2. వ్యాసములు చదవండి:

అ) (కీడలు - లాభాలు
ఆ) విద్యార్ఠుల (క్రమశిక్షణ
ఇ) స్వచ్చ భారత్
3. లేఖలు: అ) మీరు చదివిన ఏదైనా ఒక మంచి పుస్తకాన్ని గురించి వివరిస్తూ మీ తాత గారికి లేఖ రాయండి.

ఆ) హెల్మెట్ వలన ఉపయోగాలను (ప్జలందరికీ తెలియజేయమని కోరుతూ ప(తిక సంపాదనకి లేఖ రాయండి.
4. సంధులు: సవర్ణ, గుణ, వృద్ది, అకార, ఇకార, ఉకార సందులను నిర్వచనం, ఉదాహరణలతో చదవండి.

## Subject: संर्कृतम्

1. शेमुषी - पाथ्यांषेषु घटनाक्रमस्य लेखनाभ्यासः|( स्वर्णकाकः -भ्भान्तो बालः - सिकतासेतुः- वाङ्भःः प्राणस्वरूपम्)
2.शेमुषी - (सर्वेषु पाठेषु ) ठ्यञ्जन सन्धेः लेखनाभ्यसः
3.दश अन्ड्गल् - हिन्दी भाषा वाक्यानां संस्कृते अनुवाद लेखवनम् |
2. शेमुषी - (सर्वेषु पाठेषु ) प्रत्यय पदानां लेखनाभ्यसः (कत्वा - तुमुन् - ल्यप् - क्तवतु - शतृ - शानव् - टाप् -ङीप्र) |
5.धातु: - पग्व धातु, वाक्यानि (केवलं परस्मैपदीनाम्) , पन्व शब्द वाक्यानि लिखत।
3. कारक - उपपद विभत्तीनां दश वाक्यानां लेखवन अभ्यासः|
