DELHI PUBLIC SCHOOL VISAKHAPATNAM
REVISION ASSIGNMENT
October- November 2024-25

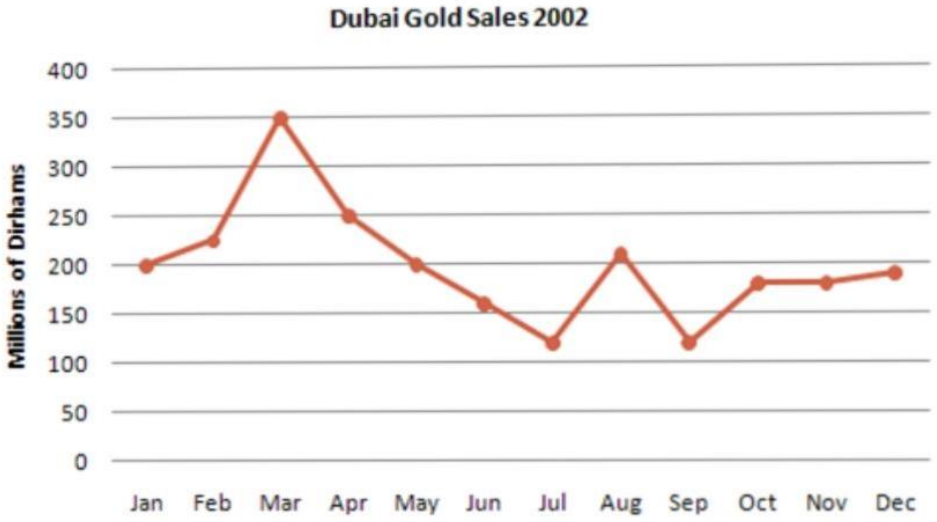
Class: X **Date of Submission: on or before 22.11.2024**

Subject: ENGLISH

1. Solve the questions on pages 162 and 163 from Words and Expressions.(Do it in workbook)
2. Frame two vocabulary-based questions (synonyms/antonyms) and one assertion and reasoning question from the story given on page 160 of Words and Expressions. (In assignment notebook)
3. Note down the words given in the "Look Up and Understand" boxes along with it's meanings in your assignment notebook from Units 9, 10, and 11 of Words and Expressions.
4. Rewrite the following direct speech sentences into indirect (reported) speech.

a) "I will visit the museum tomorrow," she said.
b) "He has finished his homework," the teacher told us.
c) "We are going to the cinema tonight," they mentioned.
d) "I like reading mystery novels," he told me.
e) "Did you complete your homework?" asked the teacher.
f) "Where are you going for your holiday?" my friend asked me.
g) "Will you be attending the event?" they asked.
h) "Why didn't you call me?" she questioned.
i) Mother said "Close the door quietly."
j) Arjun said "Please pass me the book."
k) Geetu said to her friend "Take a seat and relax"
l) My uncle said "Don't forget to bring your umbrella."

5. The graph given shows estimated sales of gold in Dubai in 2002. Write an analytical paragraph describing the line graph in around 120 to 150 words.



Subject: MATHEMATICS

1)A chord is subtending an angle of 90° at the centre of a circle of radius 14 cm. Find the area of the corresponding minor segment of the circle.

2) The government rescued 100 people after a train accident. Their ages were recorded in the following table. Find their mean age.

Age in years	10-20	20-30	30-40	40-50	50-60	60-70	70-80
Number of people rescued	9	14	15	21	23	12	6

3) If α, β are the zeroes of the polynomial $3x^2 - 13x - 10$, then find the value of $(3\alpha + 1)(3\beta + 1)$.

4) If Nidhi were 7 years younger than what she actually is, then the square of her age (in years) would be 1 more than 5 times her actual age. What is her present age?

5) The largest possible hemisphere is drilled out from a wooden cubical block of side 21cm such that the base of the hemisphere is on one of the faces of the cube. Find:
(i) the volume of wood left in the block (ii) the total surface area of the remaining solid

6) Find the value of x such that, 3 $tan^2 60° - x\ sin^2 45° + \frac{3}{4} sec^2 60° = 2\ Cosec^2 30°$

7) E is a point on the side AD produced of a parallelogram ABCD and BE intersects CD at F. Show that $\Delta ABE \sim \Delta CFB$

8) The sum of first m terms of an A.P. is $4m^2 - m$. If its n^{th} terms is 107 , find the value of n. Also find the 21^{st} term of this A.P.

9)The centre of the circle is $(2a.a - 7)$. Find the values of a if the circle passes through the point $(11, -9)$ and has diameter $10\sqrt{2}$) units

10) PQ is a chord of length 8cm of the circle of radius 5cm centered At O.The tangents at P and Q intersect at a point T.Find the length of TP.

11) A chord of circle of a circle of radius 14cm subtends an angle 120° at the centre. Find the area of the correcsponding minor segment of the circle.Use $\pi = \frac{22}{7}$ $\sqrt{3} = 1.73$.

12)The given block is made of two solids : a cone and a hemisphere. If the height and the base-radius of the cone are 24 cm and 10 cm respectively and the diameter of the hemisphere is 10 cm; find the total surface area of the block.

13) A circus tent is in the form of right circular cylinder and right circular cone above it. the diameter and height of cylinderical part of tent are 126 m and 5 m respectively. the total height of the tent is 21 m. find the total cost of tent if the canvas used costs ₹$12/m^2$?

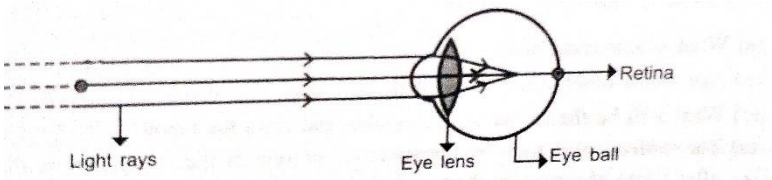
14) Two cubes each of volume 125 cm^3 arejoined end to end form a solid.Find the surface area of the resulting cuboid.

15) Find the value of 'c' for which the quadratic equation :$(c+1)x^2 - 6(c+1)x + 3(c+9) = 0,\ \ c \neq 0$

16) Two circles with centers O and O' of radii 3 cm and 4 cm , respectively intersect at two points P and Q, such that OP and O'P are tangents to the two circles. Find the length of the common chord PQ.

Subject: PHYSICS

1. A square wire of side 3.0 cm is placed 25 cm in front of a concave mirror of focal length 10 cm with its centre on the axis of the mirror and it's plane normal to the axis. The area enclosed by the image of the wire is
   a). 5 cm^2 b) 4 cm^2. c) 6 cm^2 d) 8 cm^2
2. Refractive index of water and glass respect to air are 4/3 and 3/2 respectively. Calculate the refractive index of water with respect to glass.
   a) 8/9. b) 9/8. c) 1/2. d). 2
3. Which part of human eye is responsible for different eye colour?
   a). Cornea. b). Pupil. c) iris. d). retina
4. Assertion: The resistivity of conductor increases with the increasing of temperature.
   Reason: Resistivity is the reciprocal of conductivity.
5. You are given there resistors of 10 ohm, 10 ohm and 20 ohm, a battery of emf 25 V, a key, an ammeter and a voltmeter. Draw a circuit diagram showing the correct connection of all given components such that the voltmeter gives a reading of 2 V. Justify your answer.
6. a). Explain with the help of the pattern of magnetic field lines, the distribution of magnetic field due to a current carrying a circular loop.
   b) Why is it that the magnetic field of a current carrying coil having n turns, is n times as large as that produced by single turn loop
7. An object is placed at a distance of 60 cm from a concave lens of focal length 30 cm.
   a) Use lens formula to find the distance of the image from the lens
   b). List four characteristics of the image formed by the formed by the lens in this in this case.
   Draw ray diagram to satisfy your answer of part (b).
8. Observe the following diagram and answer the questions following it



(i) Identify the defect of vision shown
(ii) List it's two causes
(iii) Name the type of lens used for the correction of this defect.

9. What is atmospheric refraction? List two phenomenon which can be explained on the basis of atmospheric refraction.

Subject: CHEMISTRY

1. In the reaction $CH_3CH_2OH \rightarrow CH_3COOH$, alkaline $KMnO_4$ acts as
a. Oxidising agent b. reducing agent c. dehydrating agent d. catalyst
2. The functional group present in CH_3COCH_3 is
a. aldehyde b. ketone c. carboxylic acid d. ester
3. Assertion: As molecular mass increases in any homologous series, there is a gradation in physical properties.
Reason: The melting and boiling points in any homologous series increase with increase in molecular mass.
4. A hydrocarbon molecule contains 4 carbon atoms. Write the name and molecular formula if it is an a. alkane b. alkene c. alkyne 2m
5. List 2 physical and 2 chemical tests to distinguish an alcohol and a carboxylic acid experimentally. 2m
6. Draw the electron dot structures of a. Ethene b. Ethanoic acid c. sulphur .
Also mention the number and type of bonds present in each of these. 3m
7. A compound P (molecular formula $C_2H_4O_2$) reacts with sodium metal to form compound Q and evolves a gas which burns with pop sound. P on treatment with an alcohol R in presence of an acid forms a sweet smelling compound S. On addition of NaOH to P, it also gives Q and water. S on treatment with NaOH solution gives back Q and R.
Identify P,Q,R and S and write all the reactions involved. 5m
8. Read the following passage carefully and answer the questions given below:
Soaps are molecules in which the two ends have differing properties, one is hydrophyllic, that is, it interacts with water, while the other is hydrophobic, that is, it interacts with hydrocarbons. Inside water, these molecules have a unique orientation that keeps the hydrocarbon portion out of the water. Thus clusters of molecules in which the hydrophobic parts are in the interior and ionic ends are on the surface is called a micelle. Soap in the form of a micelle is able to clean the oil or dirt. The micelles stay in solution as a colloid and will not precipitate because of ion-ion repulsions. Thus the dirt suspended in micelles can easily be rinsed away. The soap micelles are large enough to scatter light so a soap solution appears cloudy.

i) Name the 2 ends of soap molecule. 1m
ii) Why don't micelles come together? 1m
iii) Explain the structure of a micelle and draw a labelled diagram. 2m

OR

Can micelles be formed in solvents other than water? Explain. 2m

Subject: BIOLOGY

1. Which of the following adaptations in herbivores helps in digestions of cellulose?
a) Longer large intestine b) Smaller large intestine
c) Smaller small intestine d) Longer small intestine
2. The amount of liquid passing through in the form of glomerular filtrate is approximately 150-180 litres per day whereas the amount of urine flowing out is 1.5 to 1.8 litres per day. Water is getting reabsorbed. In which part of the nephron could the be getting reabsorbed?
3. Which statement shows interaction of a biotic component with an abiotic component in an ecosystem?
a) A grasshopper feeding on a leaf. b) Rainwater running down into a lake
c) An earthworm making a burrow in the soil. d) A mouse fighting with another mouse for food.

4. What is Placenta? State its function in human female.
5. In organisms, some changes pertain to body cells and are not inherited, whereas some changes pertain to germ cells are inheritable.
   i. Name the two types of variations respectively.
   ii. Explain two ways by which individuals with a particular trait may increase in a population.
6. The pancreas and gonads perform the dual function. Justify the statement.
7. State the changes that take place in the uterus when:
(a) Implantation of the embryo has occurred.
(b) Female gamete/egg is not fertilised.
8. Why did Mendel carry out an experiment to study inheritance of two traits in garden pea?
   (b) What were his findings with respect to inheritance of traits in F_1 and F_2 generation?
   (c) State the ratio obtained in the F_2 generation in the abovementioned experiment.
9. i) Draw the longitudinal section of a flower and label the following:
a) The part that protects the flower in bud
b) The part that attracts insects
c) Male reproductive part
d) Female reproductive part
e) The part containing ovules.
ii) What will happen when part e is removed from flower?

Subject: SOCIAL SCIENCE

1. What was the impact of World War I on Nationalist Movement in India?
2. How did Non – Cooperation movement start with the participation of middle class in cities? Explain its impact on economic front.
3. What was the role of Businessmen at Civil Disobedience Movement?
4. Discuss about Unification of Italy.
5. What was the effects of the spread of print culture for poor people in 19th century India?
6. Discuss about the position and importance of Chemical Industry in India.
7. What are the Factors for the concentration of Jute mill in Hugli basin?
8. Explain different Mode of occurrence/ formation of minerals.
9. Identify the most abundantly available fossil fuel in India. How is it formed? Describe four different types of coal
10. What are Technological and Institutional Reforms taken by the government for improvement of agriculture?
11. Describe any three Rain Water Harvesting practice in India. State the objectives of Rain Water Harvesting
12. Women are still behind men in India despite some improvement since Independence. Discuss.
13. How does Democracy accommodate to social diversity?
14. How is Federalism practice in India?
15. Why do we need the expansion of formal sector of credit in India?
16. In what ways does Reserve Bank of India supervise the function of commercial banks? Why is it necessary?
17. Why is the importance of Tertiary Sector rising last fourty years?
18. Why is the issue of sustainability? Why is important for development?
19. Compare the employment conditions of organized sector with unorganized sector. How can the workers in the unorganised sector be protected?
20. Why do we use averages? Are there any limitations to their use?

Subject: हिंदी (द्वितीय भाषा)

I. हिंदी साहित्य परिषद के अध्यक्ष की ओर से मुंशी प्रेमचंद जयंती की जानकारी देते हुए नगर के साहित्य -प्रेमियों के लिए 80-100 में एक सूचना जारी कीजिए।

II.जूनियर इंजिनियर पद के लिए आवेदन करते हुए सड़क निर्माण विभाग के अध्यक्ष को 100 शब्दों में एक ई-मेल कीजिए।

III. 'मानवता' या 'अब पछताए होत क्या जब चिड़िया चुग गई खेत' विषय पर 100 शब्दों एक लघु कथा लिखिए।

IV .किसी एक विषय पर एक अनुच्छेद लिखिए – 1.जल ही जीवन है 2.मेरा आंखों देखा मैच 3. औषधीय पौधों का महत्व

V. 'परीक्षा पे चर्चा' कार्यक्रम पर प्रसन्नता व्यक्त करते हुए देश के प्रधान मंत्री को एक पत्र लिखिए।

Subject: తెలుగు (ద్వితీయ భాష)

I . ప్రతిపదార్థములు:

1. ఆ – ఏమీ? యొక రాణివాసమును.....
... త్రుంచుకొనేదో? యుద్ధత్య మోర్వన్ జుమీ.
2.అనుచున్ జేవురుమీరు కన్నుగవతో.....
.....మూడ్చి గొనితేరన్ బంచే సొందేవునిన్.
3.తన చూ పంబుధిమీద జాచి.....
.....గుప్పించి లంఘించుచోన్.
4. వేద పురాణ శాస్త్ర పదవీ.....
..... ఘల్లు ఘల్లనన్.
5. ఆ కంఠంబుగ నిపుడు.....
..... శిలోంఛప్రక్రముల్ తాపసుల్!

II. ప్రశ్న జవాబులు:

1. మీ పాఠం ఆధారంగా శివాజీ వ్యక్తిత్వాన్ని విశ్లేషించండి.
2.రామలక్ష్మణులు విశ్వామిత్రుని యాగాన్ని సంరక్షించిన విధం రాయండి.
3.గంగావతరణ ఘట్టాన్ని, అహల్య శాప విమోచన వృత్తాంతాన్ని వివరించండి.
4. కోపం కారణంగా వ్యాసుడు కాశీ నగరాన్ని శపించాలనుకున్నాడు కదా! 'కోపం- మనిషి విచక్షణను నశింపజేస్తుంది' అనే అంశం గురించి రాయండి.
5. మాణిక్య వీణ కవితా సారాంశాన్ని సొంతమాటల్లో రాయండి.
6.కథానికలోని వృద్ధుని పాత్ర స్వభావాన్ని, గొప్పదనాన్ని సొంతమాటల్లో రాయండి.

III. అర్థసందర్భాలు :

1. నీ యాయు సూత్రము లేవ తెంచుకొనేదో? యౌద్ధత్యము మోర్వన్ జుమీ!
2.ఓ జనని! హైందవ భూమి నీ పగిది దుశ్చరిత్రముల్ సాగునే?
3."అదృష్టవంతుడికి కన్నీటితో అభిషేకం జరుగుతున్నప్పుడు"!
4. అవి గోరంత దీపాలే కావచ్చు. ఏనాటికో ఒకనాటికి అవి కొండంత వెలుగునిస్తాయి.
5.చక్కని నొక్కులతో చిక్కని పదాలు పాడుకొన్నాడు.
6. పద్య సంత్రాసంతో చింతలు పారిపోతాయా?
7.మూడు తరముల వెడల వలయు బంచ జనులకు గాశిక పట్టణమున.
8. ఉన్న యూరున్ గన్న తల్లి నొక్క రూపు.

IV. లేఖలు.

1.గుంటూరు జిల్లా తాడికొండ మండలం పొన్నెకల్లు గ్రామంలో ప్రజలు పడుతున్న మంచినీటి సమస్య గురించి జిల్లా అధికారికి ఆ గ్రామ సర్పంచ్ నారాయణ రాయుచున్నట్లు లేఖ.
2. విజయవాడ దానవాయిపేటకు చెందిన రాంబాబు ప్రతిరోజు నడవడం వల్ల వచ్చే ప్రయోజ నాలను వివరిస్తూ విశాఖపట్నం లో నివసిస్తున్న తన స్నేహితుడు సోమునాయుడు కి లేఖ.

Subject: संस्कृतम् (द्वितीय भाषा)

1.संस्कृत अभ्यास प्रश्नपत्रम्-7(Together with book)
2.घटनाक्रमम् – शब्दार्थः – समयः |
3.संधि – समास – प्रत्ययः - अशुध्दिशोधनम् |
4.प्रश्ननिर्माणम् – अव्यय – अनुवादम् – वाच्यम् |
5.अपठित गद्यांशः – चित्रम् – पत्रम् (संपूर्ण पत्रं लेखनीयम्)|