SGJ DAV SEN. SEC. PUBLIC SCHOOL, HARIPURA

Class – 11th (Sci & Com)

Date - 06.01.2025

Instructions: Dear children, The work which is being sent to you, it must be done in a fair notebook and in beautiful handwriting. When the school will reopen this home work will be checked. This work is given for revision purpose.

Subject: English

1.As per the last census, the literacy rate in India was around 74%. In our day-today life, we find people who cannot even read or write. Looking at the gravity of the situation you decide to deliver a speech in your school morning assembly on the topic, Each One, Teach One. Write your speech in 150-200 words. You are Vinitha/Bejo 8, "t iS cruel to put stray dogs to sleep." Write a debate in 150 - 200 words either for or against the motion.

2.'The Internet cannot replace a classroom teacher'. Write a debate in 1 50-200 words either for or against the motion

Subject: Punjabi

ਨੌਜਵਾਨਾਂ ਵਿੱਚ ਪੈਦਾ ਹੋ ਰਹੇ ਆਤਮਹੱਤਿਆ ਦੇ ਰੁਝਾਨ ਬਾਰੇ ਕਿਸੇ ਅਖਬਾਰ ਦੇ ਸੰਪਾਦਕ ਨੂੰ ਪੱਤਰ ਲਿਖੋ।

Subject: Maths

1. The mean of 2,7,4,6,8 and p is 7. Find the mean deviation about the median of these.

2.Find the mean, standard deviation and variance of the first natural numbers.

3.Mean of 5 observations is 6 and their standard deviation is 2. If the three Observations are 5, 7 and 9 then find the other two observations.

5.Calculate the possible values of x if standard deviation of the numbers 2, 3, 2x and 11 is 3.5.

Subject: Physics

a) Define potential energy. Give examples.

(b) Draw a graph showing variation of potential energy, kinetic energy and the total energy of a body freely falling on earth from a height h?

2. Answer the following:

(a) The casing of a rocket in flight burns up due to friction. At whose expense is the heat energy required for burning obtained? The rocket or the atmosphere?

(b) Comets move around the sun in highly elliptical orbits. The gravitational force on the comet due to the sun is not normal to the comet's velocity in general. Yet the work done by the gravitational force over every complete orbit of the comet is zero. Why?

(c) An artificial satellite orbiting the earth in very thin atmosphere loses its energy gradually due to dissipation against atmospheric resistance, however small. Why then does its speed increase progressively as it comes closer and closer to the earth?

(d) In Fig. (i) the man walks 2 m carrying a mass of 15 kg on his hands. In Fig. (ii),

he walks the same distance pulling the rope behind him. The rope goes over a pulley, and a mass of 15 kg hangs at its other end. In which case is the work done greater?

3. A rain drop of radius 2 mm falls from a height of 500 m above the ground. It falls with decreasing acceleration (due to viscous resistance of the air) until at half its original height, it attains its maximum (terminal) speed, and moves with uniform speed thereafter. What is the work done by the gravitational force on the drop in the first and second half of its journey? What is the work done by the ground is?

Subject: Chemistry

Q1. Increase In enthalpy of the surroundings is equal to decrease In enthalpy of the system. Will the temperature of system and surroundings be the same when they are In thermal equilibrium?

Q2 The molar enthalpy of vaporization of acetone is less than that of water. Why? Q3.Which quantity out of ΔrG and $\Delta rG\Theta$ will be zero at equilibrium?

Q4.Heat capacity (Cp) is an extensive property but specific heat (c) is an intensive property. What will be the relation between Cp and c for 1 mol of water?

Q5.The enthalpy of vapourisation of CCl4 is 30.5 kJ mol-1. Calculate the heat required for the vapourisation of 284 g of CCl4 at constant pressure. (Molar mass of CCl4 = 154 g mol-1).

Q6. The enthalpy of reaction for the reaction:

2H2 (g) + O2 (g) \rightarrow 2H2O (I) is ∆rH Θ = – 572 kJ mol–1.

What will be the standard enthalpy of formation of H2O (I)?

Subject: Biology

1. Give the schematic representation of glycolysis.

2. What are the main steps in aerobic respiration? Where does it take place?

3. What are the assumptions made during the calculation of net gain of ATP?

4.Distinguish between the following:

(a) Aerobic respiration and Anaerobic respira-tion.

(b) Glycolysis and Fermentation.

(c) Glycolysis and Citric acid cycle.

5.Discuss "The respiratory pathway is an amphibolic pathway".

6.Define RQ. What is its value for fats?

7. What is the significance of step-wise release of energy in respiration?

8. Give the schematic representation of an overall view of Krebs' cycle.

Subject: Information Technology

Answer the given questions in 20-30 words each

Q1. Mention the steps to wrap text in a spreadsheet.

Q2. List the steps for inserting a hyperlink to a video in a presentation.

Answer the given questions in 30-50 words each

Q3. Differentiate between the following:

(a) Bus and Star Topology (b) Ring and Bus Topology

Q4. Explain the following terms:

a) IDE b) Inspector Window c) Form

Answer the given question in 50-80 words each

Q5. State the difference between the Primary Key, Candidate Key, Alternate Key and Foreign Key.

Subject: Physical Education

TOPOC -TEST, MEASUREMENT AND EVALUATION

Concept of Test, Measurement and Evaluation in Physical Education and Sports? #Classification of Test in Physical Education and Sports.

Subject: Accountancy

Q1. Net profit or loss is transferred to Account.

Q2. A balance sheet is a

Q3. Classify the following expenses as direct or indirect

Wages

Salaries

Wages and Salaries Carriage

Advertising

Rent

Commission

Power

Electricity Expenses

Discount

Printing and Stationery

Postage and Telegram

Charity

Depreciation

Heating and lighting

Q4. In which account direct expenses are recorded?

Q5. On which side of balance sheet liabilities are recorded?

Q6. List down the items of assets and Liabilities in the balance sheet as per permanence order.

Q7. Where are the following items of trial balance recorded while preparing financial statements?

Closing Stock

Sales

Commission received

Outstanding Rent

Prepaid Insurance

Debtors

Bad Debts

Q8. What is the nature of Trading Account?

Q9. Differentiate between Trial Balance and Balance Sheet.

Q10. How is Trading Account prepared?

Subject: Economics

Q1. Suppose, a consumer can afford to buy 6 units of good 1 and 18 units of good 2 if she spends her entire income. The price of 2 goods are ₹6 and ₹8, respectively. How much is the consumer's income?

Q2. A consumer consumes only 2 goods, X and Y and prices of both are Rs. 4 and Rs. 2 respectively. What will be the marginal rate of substitution when the consumer is in equilibrium?

Q3.Defend or refute the following statements with reason

TU remains the same, when MU is positive or negative.

An indifference curve does not touch either of the axis.

If indifference curve , is not convex at the point of equilibrium, then consumer cannot reach the point of stable equilibrium.

Q4. Identify which of the following is not true for the indifference curves? Give valid reasons for choosing your answer.

Lower indifference cover represents lower level of satisfaction.

Two regular convex to origin indifference curves can interest each other.

Indifference curve must be convex to origin at the point of tagency with the budget line at the consumers equilibrium.

Indifference curves are drawn under the ordinal approach to consumer Equilibrium.

Q5. What do you mean by monotonic preferences?

Subject: Business Studies

Q.1 What are the objectives of a public sector enterprise?

Q.2 What is a departmental undertaking?

Q.3 Mention the types of business enterprise which operates in more than one nation.

Q.4 What are the different types of PSEs?

Subject: Financial Markets Management

Learn the basic terms of Investment, Shares and Debentures.

Subject: COMMERCIAL ARTS

Describe following sculptures

- 1)Cymbal player
- 2)Mother and child
- 3)laxmi Narayan Temple