

# SGJ DAV SEN. SEC. PUBLIC SCHOOL, HARIPURA

## Class – 11<sup>th</sup> (Sci & Com)

Date – 07.01.2025

**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

Answer of the following two questions, in about 120-150 words.

1. Describe how the narrator and his cousin enjoyed horse riding. (The Summer of the Beautiful White Horse)
2. People like Mrs. Dorling forget the ultimate end of man. For some earthly gain, people discard their values.

Elucidate.

### Subject: Punjabi

ਆਪਣੇ ਦੋਸਤਾਂ ਨੂੰ ਬੋਟੀ ਦੇ ਜਨਮ ਦਿਨ ਤੇ ਆਉਣ ਲਈ ਸੱਦਾ ਪੱਤਰ ਲਿਖੋ।

### Subject: Maths

1. Given that P(3,2,-4), Q(5,4,-6) and R(9,8,-10) are collinear. Find the ratio in which Q Divides PR
2. Determine the points in XY plane which is equidistant from these point A (2,0,3) B(0,3,2) and C(0,0,1)
3. Are the points A (3, 6, 9), B (10, 20, 30) and C (25, -41, 5), the vertices Of a right angled triangle?
4. The centroid of a triangle ABC is at the point (1, 1, 1). If the coordinates Of A and B are (3, -5, 7) and (-1, 7, -6), respectively, find the coordinates of the Point C.
5. Three vertices of a parallelogram ABCD are A(3, -1, 2), B (1, 2, -4) and C (-1, 1, 2). Find the coordinates of the fourth vertex.

### Subject: Physics

1. A rocket is fired from the earth towards the sun. At what distance from the earth's centre is the gravitational force on the rocket zero? Mass of the sun =  $M$  kg, mass of the earth =  $m$  kg. Neglect the effect of other planets etc. (orbital radius =  $r$ ).
2. A rocket is fired vertically with a speed of 5 km from the earth's surface. How far from the earth does the rocket go before returning to the earth? Mass of the earth =  $M$  kg; mean radius of the earth =  $R$  m;  $G =$ .
3. Two stars each of one solar mass ( $=M$ ) are approaching each other for a head on collision. When they are a distance 109 km, their speeds are negligible. What is the speed with which they collide? The radius of each star is 104 km. Assume the stars to remain undistorted until they collide. (Use the known value of  $G$ ).
4. Two heavy spheres each of mass 100 kg and radius 0.10 m are placed 1.0 m apart on a horizontal table. What is the gravitational force and potential at the mid point of the line joining the centers of the spheres? Is an object placed at that point in equilibrium? If so, is the equilibrium stable or unstable?

### Subject: Chemistry

Q1. Which element do you think would have been named by

- (i) Lawrence Berkeley Laboratory
- (ii) Seaborg's group?

Q2. Energy of an electron in the ground state of the hydrogen atom is  $-2.18 \times 10^{-18}$  J. Calculate the ionization enthalpy of atomic hydrogen in terms of  $\text{J mol}^{-1}$ .

Q3 Which of the following pairs of elements would have a more negative electron gain enthalpy?

- (i) O or F
- (ii) F or Cl

Q4. Would you expect the second electron gain enthalpy of O as positive, more negative or less negative than the first? Justify your answer

Q5 Write the general outer electronic configuration of s-, p-, d- and f- block elements.

**Subject: Biology**

Q.1. Define:

- a) Tidal volume
- b) Residual volume
- c) Asthma

Q.2. Write the name and important function of the fluid-filled double membranous layer surrounding the lungs.

Q.3. Which is the prime site for the exchange of gases in our body?

Q.4. Why does smoking cigarette cause emphysema?

Q.5. Explain why the diffusion of carbon dioxide by the diffusion membrane per unit difference in partial pressure is much greater compared to oxygen.

6.Q.1. Define:

- a) Tidal volume
- b) Residual volume
- c) Asthma

Q.2. Write the name and important function of the fluid-filled double membranous layer surrounding the lungs.

Q.3. Which is the prime site for the exchange of gases in our body?

Q.4. Why does smoking cigarette cause emphysema?

Q.5. Explain why the diffusion of carbon dioxide by the diffusion membrane per unit difference in partial pressure is much greater compared to oxygen.

7. Write a note on the mechanism of breathing.

**Subject: Information Technology**

1. How is TELNET used for remote login?
2. List the various security issues concerned with using the Internet. Explain each of them by giving proper examples.
3. List various protective measures that can be taken for network security.
4. Define cybercrime and cyber law.
5. Define Digital Literacy.

**Subject: Physical Education**

TOPIC -Yoga # Meaning and Importance of Yoga.

# Introduction to Ashtanga Yoga.

# Introduction to Yogic Kriyas (Shat Karma).

**Subject: Accountancy**

1. Krishan started his business on 1st April, 2020 with a Capital of 1,00,000. On 31st March, 2021, his assets were:

Cash - Rs. 3,200; Stock - Rs 34,800 ; Debtors - Rs. 31,000; Plant - Rs. 85000. He owed Rs. 12,000 to sundry creditors and Rs 10,000 to his brother on that date. He withdrew Rs. 2,000 per month for his personal expenses. Ascertain his profit

2. A commenced business on 1st April, 2020 with a capital of Rs. 10,000. He immediately bought Furniture and Fixtures for Rs.2,000. On 1st October, 2020, he borrowed Rs.5,000 from his wife @9% p.a. (interest not yet paid) and also introduced further capital of his own of 1,500. A drew Rs. 300 per month at the end of each month for household expenses. On 31st March, 2021 his position was as follows:

Cash in Hand Rs.2,800; Sundry Debtors Rs. 4,800; Stock Rs. 6,800; Bills Receivable Rs. 1,600; Sundry Creditors Rs. 500 and owing for Rent Rs. 150. Furniture and Fixtures to be depreciated by 10%. Ascertain the profit earned or loss incurred by A during the year ended March 31, 2021.

3. What is single entry system? Give two advantages and two limitations of single entry system.

4. Differentiate between single entry system and double entry system.

**Subject: Economics**

Q1. Read the following statements carefully. Write True or false with reason.

Changes in income cause a shift in demand curve, while Change own price of commodity does not. In case of substitute goods, a fall in price of Good X causes a fall in demand for Good Y.

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. DTU 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 curve represents lower level of satisfaction. Two regular convex to origin indifference curves can intersect each other.

Indifference curve must be convex to origin at the point of tangency with the budget line at the consumer's 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 Mention the 5 I's of services?

Q.2 Mention the name of two companies that offer DTH services in India.

Q.3 What are the types of insurance policies?

Q.4 Mention 6 functions of warehousing.

**Subject: Financial Markets Management**

Q.1 Write the difference between Equity Shares and Preference Shares.

Q.2 Write about the various turnover ratios.

**COMMERCIAL ARTS**

Elucidate any five features of Buddha from Gandhara School .