

SGJ DAV SEN. SEC. PUBLIC SCHOOL, HARIPURA

Classc – 11th (Sci & Com)

Date – 04.01.2025

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.You have always been proud of being a citizen of the country which shows love and care for elders. However, now this value is found to be disappearing. Write a speech in 150-200 words on 'Difficulties faced by senior citizens. Write a speech in 150-200 words on the topic, Discipline shapes the future of a student'. It is to be delivered in the morning assembly.

2.You are Karuna/Karan. Some people feel that electronic media (TV news) will bring about the end of print media (newspapers). What are your views on the issue? Write a debate in 1 50-200 words either for or against this view.

- use of visuals on TV
- not enough news for 24 hours telecast
- become repetitive and dull
- print media-time tested
- editorial comments
- authentic and fast
- may fabricate news

Subject: Punjabi

ਗੁਆਚੇ ਪਰਸ ਦੀ ਭਾਲ ਤੇ ਇੱਕ ਇਸ਼ਤਿਹਾਰ ਲਿਖੋ।

Subject: Maths

Q1. A coin is tossed three times consider the following event A: No head appears, B: Exactly one head appears and C: At least two heads appears do they form a set of mutually exclusive and exhaustive events.

Q2. A and B are events such that $P(A) = 0.42$, $P(B) = 0.48$, and $P(A \text{ and } B) = 0.16$ determine (i) $P(\text{not } A)$ (ii) $P(\text{not } B)$ (iii) $P(A \text{ or } B)$

Q3. Find the prob. that when a hand of 7 cards is drawn from a well shuffled deck of 52 cards, it contains (i) all king (ii) 3 kings (iii) at least 3 kings

Q4 A book contains 100 pages. A page is chosen at random. What is the chance that the Sum of the digit on the page is equal to 9

Q5 In a class XI of a school 40% of the students study mathematics and 30% study biology. 10% of the class study both mathematics and Biology. If a student is selected at random from the class, find the prob. that he will be studying mathematics or biology.

Q6 A hockey match is played from 3 pm to 5 pm. A man arrives late for the match what is The prob. That he misses the only goal of the match which is scored at the 20Th minute of The match?

Q7 Find the probability that in a random arrangement of the letters of the word UNIVERSITY the two I's come together.

Q8 If 4 digit no. greater than 5,000 are randomly formed the digits 0,1,3,5 and 7 what is The probability of forming a no. divisible by 5 when

(i). The digits are repeated (ii) The repetition of digits is not allowed.

Subject: Physics

1. Give the magnitude and direction of the net force acting on a stone of mass 0.1 kg,

(a) just after it is dropped from the window of a stationary train,

(b) just after it is dropped from the window of a train running at a constant velocity of 36 km/h,

(c) just after it is dropped from the window of a train accelerating with 1 m s^{-2} ,

(d) lying on the floor of a train which is accelerating with 1 m s^{-2} , the stone being at rest relative to the train. Neglect air resistance throughout.

2. A body of mass 0.40 kg moving initially with a constant speed of 10 ms⁻¹ to the north is subject to a constant force of 8.0 N directed towards the south for 30 s. Take the instant the force is applied to be $t = 0$, the position of the body at that time to be $x = 0$, and predict its position at $t = -5$ s, 25 s, 100 s.
3. A truck starts from rest and accelerates uniformly at a . At $t = 10$ s, a stone is dropped by a person standing on the top of the truck (6 m high from the ground). What are the (a) velocity, and (b) acceleration of the stone at $t = 11$ s? (Neglect air resistance.)
4. A man of mass 70 kg stands on a weighing scale in a lift which is moving
 - (a) upwards with a uniform speed of 10,
 - (b) downwards with a uniform acceleration of,
 - (c) upwards with a uniform acceleration of.
 What would be the readings on the scale in each case?
 - (d) What would be the reading if the lift mechanism failed and it hurtled down freely under gravity?
5. Two masses 8 kg and 12 kg are connected at the two ends of a light inextensible string that goes over a frictionless pulley. Find the acceleration of the masses, and the tension in the string when the masses are released.
6. Explain why
 - (a) a horse cannot pull a cart and run in empty space,
 - (b) passengers are thrown forward from their seats when a speeding bus stops suddenly,
 - (c) it is easier to pull a lawn mower than to push it,
 - (d) a cricketer moves his hands backwards while holding a catch.

Subject: Chemistry

- Q1. What is the hybridisation of each carbon in $H_2C = C = CH_2$?
- Q2. Show the polarisation of carbon-magnesium bonds in the following structure.
 $CH_3 - CH_2 - CH_2 - CH_2 - Mg - X$
- Q3. What is the difference between molality and molarity?
- Q4. Calculate the mass percent of calcium, phosphorus and oxygen in calcium phosphate $Ca_3(PO_4)_2$
- Q5. The density of the 3 molal solution of NaOH is 1.110 g mL⁻¹. Calculate the molarity of the solution.

Subject: Biology

1. Some of these terms/chemicals are associated with the C4 Explain.
 - a. Hatch and Slack pathway
 - b. Calvin cycle
 - c. PEP carboxylase
 - d. Bundle sheath cells
2. Where is NADP reductase enzyme located in the chloroplast? What is the role of this enzyme in proton gradient development?
3. ATPase enzyme consists of two parts. What are those parts? How are they arranged in the thylakoid membrane? Conformational change occurs in which part of the enzyme?
4. What is the basis for designating C3 and C4 pathways of photosynthesis?
5. Six turns of the Calvin cycle are required to generate one mole of glucose. Explain.

Subject: Information Technology

Answer the given questions in 20-30 words each

Q1. (a) Which keyword is used to eliminate redundant data in MySQL?

Which MySQL command is used to modify data in a table?

Q2. Write the output of given statement:

```
double c, x=5,y=10;
```

```
int z=51;
```

```
c= x*y+z/2.5;
```

Q3. What is the difference between JComboBox and JListbox. Give one method of each of them?

Answer the given question in 30-50 words each

Q4. Which of the following is an invalid variable name and why ?

3names, Integer, name.india, work_plan, JTextRavi, Kapil:Cricket

Answer the given question in 50-80 words each

Q5. Reema wants to check whether the number is even or not but the code below is giving errors. underline the errors and help her write the correct code.

```
If(int num%2=0);  
{jTextField1.setText("even")  
Else  
jTextField1.setText("odd").
```

Subject: Physical Education

Explain in detail about Olympics - Symbols, Motto, Flag, Oath and Anthem.

How many indian players won in Paris olympics 2024. Write the Players name.

Subject: Commercial Arts

Write short note on Male Torso and Bulls Eye

Subject: Accountancy

Q1. Distinguish between capital and revenue expenditure and state whether the following statements are items of capital or revenue expenditure:

(a) Expenditure incurred on repairs and white washing at the time of purchase of an old building in order to make it usable.

(b) Expenditure incurred to provide one more exit in a cinema hall in compliance with a government order.

(c) Registration fees paid at the time of purchase of a building

(d) Expenditure incurred in the maintenance of a tea garden which will produce tea after four years.

(e) Depreciation charged on a plant.

(f) The expenditure incurred in erecting a platform on which a machine will be fixed.

(g) Advertising expenditure, the benefits of which will last for four years.

Q2. Calculate Cost of goods sold and Gross Profit from the following information:

Net Sales - Rs. 10,00,000; Purchases Rs. 8,51,000; Purchase Return- Rs. 1,000; General Expenses 1,00,000 (including Wages of 60,000); Carriage Inward RS. 50,000; Opening Stock Rs. 60,000 and Closing Stock Rs. 1,00,000.

Q3. Calculate Closing Stock from the following details:

a. Opening Stock- Rs. 50,000; Cash Sales- Rs. 2,00,000; Credit Sales- Rs. 4,00,000; Purchases-Rs. 4,40,000. Rate of Gross Profit on Sales is 40%.

b. Calculate Net Sales form the following information:

i. Gross Profit is 25% on cost

ii. Cost of Goods Sold is Rs. 3,00,000.

Q4. Ascertain the value of closing stock from the following :

Opening stock Rs.1,20,000

Purchases Rs. 9,30,000

Gross sales Rs. 20,40,000

Returns inward Rs.40,000

Returns outward Rs. 30,000

Direct Expenses Rs. 20,000

Rate of gross profit 40% on sale

Q5. Calculate Net Sales form the following information:

i. Gross Profit is 25% on Net sales

ii. Cost of Goods Sold is Rs. 7,50,000.

Subject: Economics

1. "Economics is about making choices in the presence of scarcity." explain

2. Why does the problem of choice arise?

3. Read the following statements carefully

Scarcity exists when certain goods are available at zero price A free medicine given to patients in a hospital is not a scarce commodity. If there were no choices in resource allocation, Economics would not have existed It is a positive statement that Virat kohli is a goods batsman , and he has scored highest number of

centuries in test cricket. Problem of resource allocation would not arise if the resources had no alternate uses. In a free economy, decision relating for whom to produce enhances the gap between rich and the poor. PPC shows increasing slope. Even when resources and technology are constant, an economy may not operate on the PPC. If an economy is operating inside the PPC, it is possible to increase the production of good 1 without a decrease in the production of Good 2.

4. How is production possibility Frontier affected when resources are inefficiently employed in an economy.
5. If more and more resources are constantly explored and new techniques of production are constantly discovered, don't you think a day will come when our central problem will be solved once for all?

Subject: Business Studies

1. State the return given to debenture holders for using their funds.
2. Which term is concerned with the redemption and conservation of capital funds in matching the financial need of a company?
3. In the business sector which organization provides both medium and long term loans and has been set up by both the state and central government.
4. Name the two companies in India offer factoring services.
5. Mention two rights of preference shareholder.

Subject: Financial Markets Management

Learn the basic terms of SEBI and the SEBI Act.