# SGJ DAV SEN. SEC. PUBLIC SCHOOL, HARIPURA Class – 11th (All Subjects Assignment) Date – 29.08.2025

# History-

Instructions: Write these questions on your notebook.

Answer the following questions in 150-180 words.

You have to submit this work after the opening of school to your subject teacher.

- 1. "Roman civilization flourished in the Mediterranean region. It has contributed a lot to the world civilization" With the help of the examples describe the contribution of this civilization. 8 marks
- 2. "The ruling elites were wealthier and more powerful than ever before". Explain the statement with your arguments in eight points. 8 marks
- 3. "After 2000 BCE the royal capital of Mari flourished." Explain the statement in eight points with the context of a trading town in a pastoral zone.

  8 marks
- 4. Locate/label/identify the following on the political map of World.

Red Sea, Persian Gulf, Jerusalem, Yemen and Iran.

5 marks

### **Political Science-**

Instruction: Write these questions on your fair notebook

- \* All are long questions and all are of six marks.
- 1. Explain the role and powers of the president in the Indian parliamentary system.
- 2. Explain the role of the union public service commission in the recruitment process of civil servants in India.
- 3. Describe the structure of the Indian bureaucracy, highlighting the role of all India services, state services and other administrative officers.

# Geography-

All the questions are to be written and learnt properly. Each question carries 5 marks.

1.Question: Discuss the significance of the "Big Bang Theory" in explaining the origin of the universe. How does it differ from other theories of universe formation?

#### Answer:

The Big Bang Theory explains that the universe originated around 13.7 billion years ago from a singularity that expanded rapidly.

It provides a scientific explanation for the expansion of the universe, distribution of galaxies, and cosmic background radiation.

Unlike Steady State Theory, which suggested the universe has no beginning or end, Big Bang emphasizes a definite origin.

Unlike Oscillating Theory, it does not assume multiple cycles of contraction and expansion.

Its evidence (red shift of galaxies, Hubble's law, cosmic microwave background) makes it the most accepted theory.

2.Question: Explain the role of planetesimals in the formation of the Earth.

#### Answer:

The Nebular Hypothesis suggests that after the Sun formed, leftover matter condensed into planetesimals.

These planetesimals collided, merged, and grew into protoplanets through the process of accretion.

Repeated collisions generated heat, leading to differentiation of materials—denser materials sank to form the core, while lighter elements formed the crust.

This process marks the beginning of Earth as a structured planet.

Hence, planetesimals were the building blocks of Earth and other planets.

3. Question: "The Earth's interior is known only indirectly." Justify this statement with suitable evidence.

#### Answer:

Direct sources (mining, drilling) provide information only up to 12 km depth.

Beyond that, knowledge is indirect:

Seismic waves: P-waves and S-waves reveal solid and liquid layers.

Volcanic eruptions: Molten material gives clues about mantle composition.

Meteors: Provide information about materials similar to Earth's interior.

Magnetic field studies: Reveal presence of iron-nickel in the core.

Thus, indirect evidence helps build a model of Earth's structure (crust, mantle, core).

4. Question: Why do S-waves not pass through the outer core? What does it reveal about Earth's structure?

#### Answer:

S-waves are transverse waves; they cannot travel through liquids.

Seismographs record S-wave "shadow zones" beyond 103° from the epicenter.

This proves that the outer core is liquid.

Combined with P-wave refraction studies, it shows the Earth has a liquid outer core and a solid inner core.

Hence, seismic wave behavior is key evidence in understanding Earth's interior.

5. Question: How does volcanism support the idea of convection currents in the mantle?

#### Answer:

Mantle convection currents are believed to drive plate tectonics.

Volcanic activity occurs mainly at plate boundaries (e.g., mid-ocean ridges, subduction zones).

Rising magma at divergent boundaries and subduction-driven volcanism at convergent boundaries prove mantle circulation.

Hot spots like Hawaii also suggest mantle plumes.

Thus, volcanism is direct surface evidence of convection processes within Earth's mantle.

6. Question: Geography is considered both a natural and a social science. Explain with examples.

#### Answer:

As natural science, it studies physical phenomena:

Geomorphology (landforms), Climatology (atmosphere), Biogeography (ecosystems).

As social science, it studies human activities:

Economic geography (trade, industries), Political geography (boundaries, geopolitics), Population geography (migration, settlements).

Example: A flood (natural event) is studied for rainfall patterns (natural science) and its impact on agriculture and displacement (social science).

Thus, geography bridges the physical and human worlds.

7. Question: Differentiate between physical geography and human geography. How does regional geography act as a link between the two?

#### Answer:

Physical Geography: Focus on natural processes (climate, landforms, soils).

Human Geography: Focus on human activities (culture, economy, settlements).

Regional Geography: Combines both by studying specific regions.

Example: The Himalayas (physical aspects like glaciers + human aspects like tourism, agriculture).

Hence, regional geography integrates physical and human geography.

8. Question: How does the study of meteorites contribute to our understanding of the Earth's interior? Answer:

#### Maria

Meteorites are remnants of early solar system material.

Their composition (iron, nickel, silicates) resembles Earth's interior.

Iron meteorites provide clues about the core, while stony meteorites suggest mantle-like composition.

Since direct access to deep Earth is impossible, meteorites act as "natural samples" of early planetary material. Therefore, they are crucial indirect evidence for Earth's structure and evolution.

9. Question: Evaluate the role of geography in addressing environmental problems in the contemporary world. Answer:

Geography provides a spatial perspective to analyze environmental issues.

#### Examples:

Climate change – study of global warming patterns, vulnerability mapping.

Deforestation – remote sensing & GIS used for monitoring.

Urbanization – studies land use, pollution, and sustainability.

Solutions require integrating physical processes with human responses.

Thus, geography aids in planning sustainable development policies.

10. Question: "Earth's early atmosphere was different from the present atmosphere." Explain the evolutionary changes that took place.

#### Answer:

Stage I (Primordial Atmosphere): Hydrogen and helium, which escaped due to weak gravity.

Stage II (Degassing): Volcanic eruptions released water vapor, CO<sub>2</sub>, nitrogen.

Stage III (Cooling & Condensation): Water vapor condensed to form oceans.

Stage IV (Photosynthesis): Emergence of life introduced oxygen into atmosphere.

Present Atmosphere: Balanced mixture of N<sub>2</sub> (78%), O<sub>2</sub> (21%), other gases.

Hence, Earth's atmosphere evolved from a lifeless gaseous cover to a life-supporting envelope

### **Economics-**

### **Instructions:**

Answer all the questions neatly in your Economics Notebook.

- 1. Explain the central problem of 'What to Produce.'
- 2. Explain the central problem of 'choice of technique.'
- 3. Explain the law of demand with the help of demand schedule and curve.
- 4. Explain with the help of diagrams, the effect of following changes on demand for a commodity
- 5. i. a rise in the price of substitute goods
- 6. ii. Fall in income of buyers
- 7. Distinguish between 'change in demand' and change in quantity demanded.'

# Psychology-

Instructions:

- 1. Write the answers in fair notebook.
- 2. All the questions are of 5 Marks.
- Q.1 Write the various challenges of Adolescence.
- Q.2 What are the different factors that influence human development.

#### Maths.

- Q1 If two lines x-2y+3=0, 3x+y-9=0 intersect at point P, find the coordinates of point P.
- Q2 Find the coordinates of the point where the line through (3,-4) and parallel to the line

7x-y+5=0intersects the x-axis.

Q3. Determine the equation of a line passing through (1,2) and intersecting the line 3x + 2y - 6 = 0 at right angles.

Q4 If the 5th term in the expansion of  $(1+kx)^{10}$  is 720  $x^4$ , find the value of k.

### Physics-

Dear students, We are sending your Homework. You have to solve this work in your notebook in a neat and clean way. You have to submit this work after the opening of school to your Subject Teacher.

- 1. A ball is dropped from a height of 90 m on a floor. At each collision with the floor, the ball loses one tenth of its speed. Plot the speed-time graph of its motion between t = 0 to 12 s. (3 Marks)
- 2. A stone is dropped from the top of a cliff and is found to ravel 44.1m diving the last second before it reaches the ground.

What is the height of the cliff? g = 9.8 m/s 2 (3 Marks)

- 3. Define (i) v = u + at (ii) V u = 2as by calculus method. (3 Marks)
- 4. . A car moving along a straight highway with a speed of 126kmh<sup>-1</sup> is brought to a stop within a distance of 200m. What is the retardation of the car (assumed uniform), and how long does it take for the car to stop? (3 Marks)

### Chemistry-

Instructions-(i) Solve all the questions on notebook.

- (ii) Each question carry 3 marks each.
- 1. Explain why PCl<sub>5</sub> is trigonal bipyramidal, whereas IF<sub>5</sub> is square Pyramidal.
- 2. Write the Lewis structure of the following compounds and shows a formal charge on each atom. HNO<sub>3</sub>, NO<sub>2</sub>, H<sub>2</sub>SO<sub>4</sub>
- 3. Why NH<sub>3</sub> has high dipole moment than NF3 though both are pyramidal?
- 4. Dipole moment of BeF<sub>2</sub> is zero. Give a reason.
- 5. CO<sub>2</sub> is linear whereas SO<sub>2</sub> is bend shaped. Give a reason.

# **Biology-**

- 1. Why does hemoglobin act as an efficient carrier of oxygen and not plasma alone?(3Marks)
- 2. During exercise, breathing rate increases. Explain how this is regulated at the level of the brain.(3 Marks)
- 3. Why does fetal hemoglobin have a higher affinity for oxygen than adult hemoglobin?(2 Marks)
- 4. Why is the closed circulatory system of humans more efficient than the open circulatory system of insects?

(3 Marks)

5. Explain why the left ventricle has thicker walls than the right ventricle.(2 Marks)

6. Predict what would happen if the SA node of the heart is damaged.(3 Marks)

### **Physical Education-**

Students of 11th subject physical Education will write the answers of the questions which are given in the assignment date wise on the notebook and also learn it.

- 1. Explain the history of Ancient olympic games (5Marks)
- 2. Write in detail about modern Olympic games,(5Marks)

### **Commercial Arts-**

Solve the following questions on assignment sheets. These questions will be tested after the school re-opens.

- Q1. Mention three important features of Indus Valley seals.(3marks)
- Q2. Name two famous sculptures of the Indus Valley Civilization.(3marks)
- Q3. What materials did the Harappans use for making their terracotta figurines?(3marks)
- Q4. Describe the main features of the sculpture and terracotta art of the Indus Valley Civilization.(5marks)
- Q5. Write a note on the seals of the Indus Valley Civilization and their significance.(6marks)

#### **Business Studies-**

**Instructions:** 

- 1. Do the work in fair notebook.
- 2. All the questions are of 4 marks.
- Q.1 Ram stays in a hostel in the USA and his parents stay in Mumbai. Ram's birthday is in five days and his parents wish to give him a pair of branded shoes. How can they give gifts?
- Q.2 What is outsourcing?
- Q.3 What do you mean by Intra-B Commerce?
- Q.4 Briefly state the scope of e-business on the basis of business function?

# Accountancy-

### **Instructions:**

Answer all the questions neatly in your Accountancy Notebook.

1. Journalize the following transactions on the basis of narration given below in the books of Jiya:

#### **JOURNAL**

| Date   | Particulars                               | 1        | 1.f. | Debit (Rs.) | Credit (Rs.) |
|--------|---|----------|------|-------------|--------------|
| Apr 1  | A/c Dr.                                   |          |      | 1,00,000    |              |
|        | ToA/c                                     |          |      |             | 1,00,000     |
| Apr 4  | (Being additional capital introduced) .   |          |      |             |              |
|        | Dr.                                       |          |      | 5,000       |              |
|        | ToA/c                                     |          |      |             | 5,000        |
| Apr 6  | (Being depreciation charged on Furniture) |          |      | 18,000      |              |
|        | Dr.                                       |          |      |             | 18,000       |
|        | ToA/c                                     |          |      |             |              |
|        | (Being amount received from Rohit on beh  | alf      |      |             |              |
| Apr 10 | of Mohit)                                 |          |      | 20,000      |              |
|        | Cash A/c Dr.                              |          |      |             |              |
|        | A/c Dr.                                   |          |      |             |              |
|        | ToA/c                                     |          |      |             |              |
|        | (Being X becomes insolvent & only 50 pair | sa       |      |             |              |
|        | in a repee recoverd from his estate)      | <u>.</u> |      |             |              |

2. From the following balances provided by Mr. Prashant, record the Opening journal entry and post the balances into Ledger.

Cash in hand — Rs.11,200; Bank overdraft- Rs.31,600; stock- Rs.87,000; Debtors Y- Rs.77,400; creditors- Rs.50,600; Machinery Rs. 1,00,000; furniture & fixtures - Rs.24,000; Loan from Mr. Alok - Rs.50,000.

3. Journalize the following transactions and Prepare A's Account.

Purchased goods from Mr. A at a list price of Rs. 20,000

Goods costing Rs. 1,800 returned to Mr. A.

Paid Rs. 15,000 to Mr A on his account.

4. Journalize the following transactions and Prepare B's Account.

Sold goods from Mr. B amounting Rs. 50,000

Goods amounting Rs. 2,500 returned by Mr.B.

Received Rs. 45,000 from Mr B in full settlement of his account.

- 5. Journalize the following transactions:
  - i. Purchased goods of the list price Rs. 30,000 from Mohan at 10% Trade Discount and 2% Cash Discount and paid 60% of the amount by cheque.
  - ii. Received Rs. 2,000 from Sohan whose account was earlier written off as bad.
  - iii. Received commission from Bharat Hoseiry Company Rs. 4,500.
  - iv. Rent paid Rs. 10,000 including Rs. 2,000 for the next year.
  - v. Goods sold for Rs. 1,00,000 and deposited the amount into bank on the same day.
  - vi. Rent outstanding Rs. 1,000.

# Punjabi-

ਕੱਲ -ਅੰਕ 8

ਤੁਹਾਡੇ ਪਿੰਡ ਵਿੱਚ ਕਲੱਬ ਵੱਲੋਂ ਪੰਚਾਇਤ ਤੇ ਸਹਿਯੋਗ ਨਾਲ ਪੁਸਤਕਾਲਾ ਖੋਲ੍ਹਿਆ ਜਾ ਰਿਹਾ ਹੈ। ਲਾਈਬ੍ਰੇਰੀਅਨ ਵੱਲੋਂ ਪੁਸਤਕਾਂ ਮੰਗਾਉਣ ਲਈ ਭਿੰਨ- ਭਿੰਨ ਪੁਸਤਕ ਵਿਕਰੇਤਾਵਾਂ ਨੂੰ ਪੱਤਰ ਲਿਖੋ, ਜਿਸ ਵਿੱਚ ਕੁਟੇਸ਼ਨਾਂ ਦੀ ਮੰਗ ਕੀਤੀ ਗਈ ਹੋਵੇ।

# **English-**

Note: All work must be done in your class work notebook

- 1. Answer the following in about 40-50 words each.
- 1. Most of the Pyramids excavated till date show that almost all the things that Pharaohs used during their life time were buried along with their mummies. Why do you think the royals carried so much gold to grave? [Discovering Tut the saga continues]2. The tall girl in the middle, holding on to the hands of her girl cousins, was full of joy and exuberance. What Do you learn about the poetess's mother from the photograph? [A photograph]
- 3. How did little Jonathan react to the desperate situation they found themselves in on 5 January?
- 2. Answer the following in about 40-50 words each.
- 4. Why does the narrator mention uncle Khosrove? Which characteristic features of the man are highlighted?
- 5. Who had given the narrator the address, when and under what circumstances?[The Address]

# **Information Technology-**

Instructions - Please write this work on notebook and bring all completed homework on the reopening day. There will a class test of all these questions once the school opens.

### **Cyber Threats and Cyber Security**

### **O1.** Malwares

Malicious software (programmes) created with the purpose of interfering with system performance by harming the system, gaining unauthorised access to the system, or preventing legitimate users from using computing resources are referred to as malware. Malware includes viruses, worms, and Trojan horses.

- **Virus** A virus is a software code that may harm your system by overwriting or corrupting the system files.
- Worm A worm is often received via network, and it automatically keeps on creating several copies of itself on the hard disk thereby flooding the hard disk. When a worm is received as an email attachment, it is automatically forwarded to the recipients leading to network congestion.
- **Trojan Horse** Trojan Horse is a code that appears to be desirable and useful but ends up harming the

system. Trojan horse can attach itself with a safe application. For example, it may be attached to any game downloaded over the Internet. Such an application when executed creates a backdoor in the system through which a hacker can access the system.

# Q2. Eavesdropping

The act of surreptitiously or covertly listening to another person's private discussion or communications without that person's agreement is known as eavesdropping. Telephone lines, cellphone networks, email, and instant messaging are all used for eavesdropping.

### Q3. (a) Denial of Service

A cyberattack known as a denial-of-service (DoS) attack renders a system or network resource inaccessible to its users by temporarily or permanently interrupting services.

# (b) Phishing

The practise of stealing a user's personal information through fraudulent mail is known as phishing. These emails either include embedded forms that request personal information from you or include links to web pages that might ask you for it.

# Q4. Cyber Crime

Cybercrimes are crimes including theft, fraud, and forgery that involve the improper use of computers or the Internet. According to the IT Act, cybercrime is any illegal activity in which a computer is either a tool, a target, or both. These crimes include some of those listed below –

- 1. **Cyber bullying** Harassment or bullying inflicted through the use of electronic or communication devices such as computer, mobile phone, laptop, etc.
- 2. **Cyber stalking** Use of electronic communication by a person to follow a person or attempts to contact a person to foster personal interaction repeatedly despite a clear indication of disinterest by such person.
- 3. **Online Job Fraud** An attempt to defraud people who need employment by giving them a false hope/promise of better employment with higher wages.
- 4. **Vishing** To seek personal information like Customer ID, Net Banking password, ATM PIN, OTP, Card expiry date, CVV etc. through a phone call.
- 5. **SMSing** Use of mobile phone text messages to lure victims into calling back on a fraudulent phone number, visiting fraudulent websites or downloading malicious content via phone or web.
- 6. SIM Swap Scam Getting a new SIM card against a registered mobile number
- 7. **Credit card (or debit card) fraud** An unauthorized use of another's credit or debit card information for the purpose of purchases or withdrawing funds from it.
- 8. **Identity theft** Dishonestly making use of the electronic signature, password or any other unique identification feature of any other person.
- 9. **Spamming** Persuading a recipient to buy a product or service, or visit a website via email, SMS, MMS
  - where he can make purchases.
- 10. **Ransomware** The victim is asked to pay the demanded ransom to get his device decrypts.