

SGJ DAV SEN. SEC. PUBLIC SCHOOL, HARIPURA

Class – 12th (All Subjects Assignment)

Date – 01.09.2025

History-

Instructions: Write these questions in 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. How did architectural features of Mohenjo-Daro indicate planning? Support the statement with examples. 8 Marks
2. “The Mauryan administration was at the top of that time.” Support the statement in eight points. 8 Marks
3. “The Mahabharata is an invaluable source available to historians to study social practices and norms in early societies”, Justify the statement in eight points. 8 Marks

Political Science-

- Q1. Highlight any six steps taken by China to improve its economy. 6 Marks
- Q2. Highlight any six strengths of the European Union as a centre of power. 6 Marks
- Q3. Japan progressed rapidly after the drastic end of the second world war. Explain. 4 Marks

Geography-

Updated Syllabus for September 2025 Exam is given below. The students are to focus on these chapters only.

Book- Fundamentals of Human Geography – Complete Book from Ch. 1 – 8 will be part of the syllabus.

Book-India People and Economy – (Ch. 1-3 only) Ch. 1 Population Distribution Density Growth and Composition Ch. 2 Human Settlement Ch. 3 Land Resources and Agriculture

Map work – (From both the books only of the completed chapters) Detailed solved map work will be provided in school.

Today's Assignment – Define the following terms in approximately 20 words each.

- 1 – Gross Cropped Area 2- Net Sown Area 3 – Land Degradation 4 – Garrison Towns 5 - The Digital Divide 6 - Hunting 7 - Gathering 8 – Pastoralism 9- Nomadic Herding 10 - Commercial Livestock Rearing 11 – Truck Farming 12 – Quinary Activities 13 - Mediterranean Agriculture 14 – Neo Determinism 15 Possibilism 16 Welfare School of Geography 17 – Radical School of Geography 18 – Demographic Transition 19 – HDI 20 - GNH

Economics-

Instructions:

Answer all the questions neatly in your Economics Notebook.

1. Calculate Domestic Income from the following information:

Particulars	₹ in crores
GNP at MP	12,000
Subsidies	400
Indirect Taxes	600
Factor income to abroad	800
Depreciation	200

2. Calculate NNP at FC from the following information:

Particulars	₹ in crores
GDP at MP	5,500
Subsidies	70
Goods and services Tax	120
Factor income from abroad	150
Depreciation	300
Factor Income to abroad	250

3. Calculate Depreciation, Subsidies and NDP at FC from the following:

Particulars	₹ in crores
GNP at FC	5,500
Indirect taxes	70

NDP at MP	120
NNP at MP	150
GNP at MP	300

4. Calculate NNP at FC from the following information:

Particulars	₹ in crores
GDP at MP	27,710
NDP at MP	24,000
Indirect Taxes	120
Factor income from abroad	400
Depreciation	4,000
Factor Income to abroad	600

5. When will GDP of an economy be equal to GNP?
6. When will the domestic income exceed national income?

Maths-

- Do all the work in Fair Notebook day wise in neat and clean handwriting.

- Evaluate $\begin{vmatrix} x & -7 \\ x & 5x + 1 \end{vmatrix}$
- If the element of a 3×2 matrix is given by $a_{ij} = \frac{1}{2}[3i - 4j]$, find value of a_{23} .
- Let $f: \mathbb{R} \rightarrow \mathbb{R} : f(x) = 3x + 4$ for all $x \in \mathbb{R}$. Show that f is one-one and onto.
- Find the second order derivative of the function $e^x \sin 5x$
- Evaluate $\int \frac{dx}{2x^2 + x - 1}$

Physics-

- A regular hexagon of side 10 cm has a charge $5 \mu\text{C}$ at each of its vertices. Calculate the potential at the centre of the hexagon. (2 Marks)
- Two charges $2 \mu\text{C}$ and $-2 \mu\text{C}$ are placed at points A and B 6 cm apart. Identify an equipotential surface of the system. What is the direction of the electric field at every point on this surface? (2 Marks)
- A spherical conductor of radius 12 cm has a charge of $1.6 \times 10^{-7} \text{ C}$ distributed uniformly on its surface. What is the electric field. (3 Marks)
 - inside the sphere
 - just outside the sphere
 - at point 18 cm from the centre of the sphere?
- A parallel plate capacitor with air between the plates has a capacitance of 8pF ($1\text{pF} = 10^{-12} \text{ F}$). What will be the capacitance if the distance between the plates is reduced by half, and the space between them is filled with a substance of dielectric constant 6? (3 Marks)

Chemistry-

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

(ii) Each question carry 3 marks each.

- Out of o-and p-dibromobenzene which one has a higher melting point and why?
- Which of the compounds will react faster in $\text{S}_{\text{N}}1$ reaction with the " OH^- " ion? ($\text{CH}_3\text{-CH}_2\text{-Cl}$ or $\text{C}_6\text{H}_5\text{-CH}_2\text{-Cl}$)
- Write the structures and names of the compounds formed when compound 'A' with the molecular formula C_7H_8 is treated with Cl_2 in the presence of FeCl_3 .
- Identify the products A and B formed in the following reaction
(a) $\text{CH}_3\text{-CH}_2\text{-CH=CH-CH}_3 + \text{HCl} \rightarrow \text{A} + \text{B}$

Biology-

- Malaria is still prevalent in many parts of India despite preventive measures. Analyze the reasons for its persistence and suggest effective strategies for control. (3Marks)
- A patient suffering from fever, chills, and shivering is suspected of having malaria. Which diagnostic test would you recommend and why? (3Marks)
- Differentiate between innate and acquired immunity with suitable real-life examples. (3 Marks)

4. A person was bitten by a stray dog. What immediate medical intervention is necessary? Explain the biological principle behind it. (3Marks)

5. During the monsoon, cases of dengue rise rapidly. Explain the role of vector control in preventing this disease. (3 Marks)

Physical Education-

1. what are the steps which should be taken to improve women's participation in sports in India (5 Marks)

2. Explain in details the psychological failures affecting women's participation in sports (5 Marks)

Commercial Arts-

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

Q-1. How did the Deccan school of painting come into existence. Explain. (3 marks)

Q-2. Write main features of Deccan school of miniature painting. (3 marks)

Q-3. In which century did the Rajasthani school of painting flourish? (3 marks)

Q-4. Evaluate the artistic grandeur of the following paintings:-

(a) Radha "Bani- thani"

(b) Krishna with Gopis (6marks)

Business Studies-

Instructions:

1. Do the work in fair notebook.

2. All the questions are compulsory.

Q.1 Identify the network of social relationships which arises spontaneously due to interaction at work.

Q.2 What does the term 'span of management' refer to?

Q.3 State any two circumstances under which the functional structure will prove to be an appropriate choice?

Accountancy-

Instructions:

Answer all the questions neatly in your Accountancy Notebook.

1. State whether following statements are True or False
 - i. Rent to a partner is an expense which is charge against profits and not an appropriate profit hence it is transferred to the debit of profit and loss account.
 - ii. Sacrificing ratio is old ratio minus new ratio.
 - iii. Goodwill appearing in the books is distributed among old partners in their sacrificing ratio at the time of admission of a new partner.
 - iv. Accumulated profits are distributed among all Partners at the time of retirement or death of a partner in their old profit-sharing ratio.
 - v. Revaluation account is prepared to record the increase in the value of assets and liabilities at the time of change in profit sharing ratio.
 - vi. Realisation account is prepared at the time of admission of a new partner.
2. A partner withdrew ₹ 20,000 during the year for his household expenses. Calculate interest on drawings if rate of interest is 6%p.a.
3. A partner withdrew ₹ 2,000 at the end of each month during the year for his household expenses. Calculate interest on drawings if rate of interest is 6%p.a.
4. A partner withdrew ₹ 5,000 at the beg of each quarter during the year for his household expenses. Calculate interest on drawings if rate of interest is 6%p.a.
5. R and S are partners. R draws a fixed amount at the beginning of every month. Interest on drawings is charged @ 10% p.a. At the end of the year interest on R's drawings amounts to Rs. 2,860. Calculate the amount withdrawn by R.
6. What are the provisions of interest on capital if
 - i. Partnership deed is silent
 - ii. Partnership deed provides for interest on capital as a charge
 - iii. Partnership deed provides for interest on capital but silent regarding its treatment

Punjabi-

ਕੁੱਲ ਅੰਕ -8

ਆਪਣੀ ਪੱਕੀ ਕਾਪੀ ਉੱਪਰ ਸੁੰਦਰ ਲਿਖਾਈ ਵਿੱਚ ਲਿਖੋ ਅਤੇ ਯਾਦ ਕਰੋ ।

ਤੁਸੀਂ ਪੜ੍ਹੇ ਲਿਖੇ ਨੌਜਵਾਨ ਹੋ ਭਾਰਤੀ ਜੀਵਨ ਬੀਮਾ ਨਿਗਮ ਨੂੰ ਆਪਣੇ ਯੋਗਤਾ ਦੱਸਦੇ ਹੋਏ ਬੀਮਾ ਏਜੰਟ ਬਣਨ ਲਈ ਪੱਤਰ ਲਿਖੋ।

English-

Q1. The internet has become an integral part of modern life, particularly affecting teenagers who are increasingly vulnerable to its negative impact while navigating its benefits. Despite its advantages, excessive internet usage poses significant risk to adolescents' mental, physical, and social well-being. Write an article in 120-150 words for your school magazine on the effects of Internet usage on teenagers. 5 Marks

Q2. You are Anchal /Arun, living at 4/13 Punjabi Bagh, New Delhi. Write a letter to the editor of "The Times of India" about the burden of the heavy bags that young children carry to school. 5 Marks

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. All questions are worth of 1 mark each.

1. An application that can be accessed via a web browser, over a network connection is called a _____.

- a. Web-based application
- b. Server-based application
- c. Both a) and b)
- d. None of the above

2. Which one of the websites has an online reservation system?

- a. www.irctc.co.in
- b. www.redbus.in
- c. www.goibibo.com
- d. All of the above

3. What are the advantages of online reservation?

- a. Convenient
- b. Price comparison
- c. Security
- d. All of the above

4. What are the actions that can be taken to make a password?

- a. Make a password complex, like a mix case, use numbers and special characters.
- b. Never use common name, date of birth and city in the password
- c. Don't share passwords with your friends or relatives.
- d. All of the above

5. Give some examples of search engines.

- a. Google
- b. Yahoo
- c. Bing
- d. All of the above

6. NICNET Stands for _____.

- a. National Satellite Based Computer Network
- b. New Satellite Based Computer Network
- c. National State Based Computer Network
- d. None of the above

8. NICNET is launched in _____.

- a. 1986
- b. 1977
- c. 1987
- d. 1977

9. DISNIC State for _____.

- a. Digital Information System of the National Informatics Center
- b. District Information System of the National Informatics Center
- c. Digital Internet System of the National Informatics Center
- d. None of the above

10. DEITY Stands for _____.

- a. Department of Electric and Information Technology
- b. Department of Electric and Indian Technology
- c. Department of Electronics and Information Technology
- d. None of the above

11. Examples of the Central initiatives for e-governance are _____.

- a. National e-Governance Plan (NeGP)
- b. National e-Governance Division (NeGD)
- c. e-Governance Infrastructure
- d. All of the above

12. Which of the following is the National Portal of India website.

- a. Indiagov.com
- b. Indianportal.com
- c. India.gov.in
- d. None of the above

13. _____ website provides a single window access to information and services being provided by the various Indian Government entities.

- a. india.gov.in
- b. goirectory.nic.in
- c. data.gov.in
- d. None of the above

14. India.gov.in is a Mission Mode Project under the National E-Governance Plan, designed and maintained by _____.

- a. National Informatics Center
- b. DeitY
- c. MoCIT
- d. All of the above

15. _____ portal is a one point source to access all Indian Government websites at all levels and from all sectors.

- a. india.gov.in
- b. goidirectory.nic.in
- c. data.gov.in
- d. None of the above

16. Online shopping is an _____ where the customer can purchase goods over the Internet.

- a. Banking application
- b. e-Commerce application
- c. Government application
- d. None of the above

17. What are the situations where Online Shopping is useful?

- a. The customer does not have enough time to visit a store and purchase goods.
- b. The store where you will get what you need may be very far off.
- c. The product you may require is not available at your market.
- d. All of the above

18. What are the different methods for making payment to the website?

- a. Cash on delivery
- b. Wire transfer
- c. e-Voucher
- d. All of the above

19. Give examples of Online education sites.

- a. www.eagetutor.com
- b. udacity.org
- c. coursera.org
- d. All of the above

20. NCERT portal that provides online learning resources like _____.

- a. e-Book
- b. Question papers
- c. Journals & Children Book
- d. All of the above

21. A web application is a program that is stored on a _____.

- a. Web Server
- b. Voice Server
- d. Data Server
- e. None of the above

22. What characteristics are required for a new project.

- a. A project requires finite resources that are required to complete the project.
- b. A project has a specific time frame
- c. A project is complete when its end objectives are achieved
- d. All of the above

23. What are the different phases in a Web application project?

- a. Requirements Definition Phase
- b. Design Phase
- c. Implementation Phase & Testing Phase
- d. All of the above

24. _____ In this phase we identify the problem statement for which the web application is to be developed. Identify the scope of the problem.

- a. Requirements Definition Phase
- b. Design Phase
- c. Implementation Phase
- d. Testing Phase

25. In the Requirements Definition Phase what are the feasibility required?

- a. Check whether the project is technically feasible
- b. Check whether the project is economically feasible
- c. Both a) and b)
- d. None of the above

26. In the Requirements Definition Phase, The focus is on “What” the application must do. to define the scope of the application _____.

- a. Compile a detailed list with a clear description of application features.
- b. Establish the goals that the solution must achieve.
- c. Recognizing the limitations that are placed on the project.
- d. All of the above

27. What are the different keys required to design the application database?

- a. Identify the database tables that will be required in the application

b. Each table we need to identify the attributes of the tables, their data types and size of the column.

c. Decide the table structures

d. All of the above

28. _____ development means working on server-side software, which focuses on everything you can't see on a website.

a. Front – end

b. Back – end

c. Between – end

d. None of the above

29. _____ phase helps to test applications (Front-End and Back-End) with multiple sample sets of data.

a. Requirements Definition Phase

b. Design Phase

c. Implementation Phase

d. Testing Phase

30. _____ is an example of a B2B e-Commerce website.

a. Supply chain management

b. Legacy computer system

c. Sustainable supply chain

d. Electronic data interchange

FMM-

Instructions:

1. Do the work in fair notebook.

2. All the questions are compulsory.

3. Check index to find out the particular answer.

Q.1 How to analyse a company systematically?

Q.2 What are liquidity ratios?

Q.3 What are capital structure ratios?