DELHI PUBLIC SCHOOL GAYA

(Under the aegis of the Delhi Public School Society, New Delhi)

Affiliated to C.B.S.E, New Delhi Affiliation No.330530, School Code – 65572

DURGA PUJA HOLIDAY ASSIGNMENT CLASS-XII (ACADEMIC SESSION: 2024-25)

Are you looking for some interesting fun learning assignment to make your learning session interesting and engaging? Here in this assignment, you will find some very interesting and engaging tasks that will be fun solving.

ENGLISH CORE (301)

1. Your school is planning to conduct an inter-class seminar on the topic-The Importance of Mental Health-to create awareness in adolescents. As the head of the organising committee, write a notice to inform all students about the seminar and invite registrations from classes XI-XII. Include other necessary details. Put your notice in a box.

2. Draft an invitation in not more than 50 words from Vani Gopalan, Chief Project Officer of an NGO, for the launch of the 'Each One Teach One' programme, addressed to school Principals and Coordinators. Mention a compelling highlight of the programme along with other necessary details.

3. Financial literacy is increasingly recognised as a crucial 21st-century skill for young Individuals. Write a letter to the editor of a local daily discussing the benefits of providing financial literacy education to children. Also, suggest effective ways to raise awareness about the importance of this education among parents and guardians. You may use some of the given cues along with your own ideas to draft the letter. You are a counsellor, Chitra Mahapatra from Puri,Odisha.
   • What are the long-term benefits of learning financial independence from a young age?
   • Why is understanding the power of finances beneficial for young learners?
   • Why skills learned during childhood tend to have a lasting impact.

4. In an era of rapid globalisation and technological advancement, the preservation of cultural heritage remains a vital challenge, particularly for the youth. India continues to navigate the complexities of maintaining tradition alongside modernity. Write an article exploring the role of cultural heritage in shaping the identities of today's Indian youth. Provide examples to illustrate your points wherever necessary. You may use some of the given cues along with your own ideas. You are Arti Nirula of Class XII-A.
   • How have global interactions and technologies influenced or changed these traditional practices among today's youth?
   • What are the benefits of preserving cultural heritage for young people? How does it contribute to their sense of identity and community?
   • Suggest ways in which young people and institutions can work together to ensure the preservation of cultural heritage.

MATHEMATICS (041)

1. Let $A = \{1, 2, 3,\}$ and $B = \{1, 2, 4\}$ then $f = \{(1, 1),(1,2),(2, 1),(3, 4)$, is a

(a)   one-one function from A to B (b)   bijection from A to B

(c)   surjection from A to B (d)   none of the above

2.   Write the value of $\tan^{-1}\left(\tan\frac{3\pi}{4}\right)$.

3.   Solve that $\sin^{-1}\left(\frac{8}{17}\right) + \sin^{-1}\left(\frac{3}{15}\right) = \tan^{-1}\left(\frac{77}{36}\right)$

4.   If the matrix $A = \begin{vmatrix} 0 & a & -3 \\ 2 & 0 & -1 \\ b & 1 & 0 \end{vmatrix}$ is skew-symmetric, find the values of a and b.

5.   A total amount ₹ 7000 is deposited in three different saving bank accounts with annual interest rates of 5%, 8% and 8 % respectively. The total annual interest from these three accounts Rs. 550.Equal amounts have been deposited in the 5% and 8% savings accounts. Find the amount deposited in each of the three accounts, with the help of matrices.

6.   Differentiate $\tan^{-1}\left(\frac{cosx+sinx}{cosx-sinx}\right)$ with respect to x.

7.   If $y = a \sin x + b \cos x$, then prove that $y^2 + \left(\frac{dy}{dx}\right)^2 = a^2 + b^2$

8.   An open tank with a square base and vertical sides is to be constructed from a metal sheet so as to hold a given quantity of water. Show that the cost of material will be least when depth of the tank is half of its width. If the cost is to be borne by nearby settled lower income families, for whom water will be provided.

9.   A window is of the form of a semi-circle with a rectangular on its diameter. The total perimeter of the window is 10 m. Find the dimensions of the window at admit maximum light through the whole opening.

10. AB is the diameter of a circle and C is any point of the circle. Show that the area of TABC is maximum, when it is an isosceles triangle.

BIOLOGY (044)

1.   Define health. How does it differ from the mere absence of disease?
2.   What are the common causes of infectious diseases, and how do they spread?
3.   Explain the role of personal and public hygiene in preventing infectious diseases.
4.   Discuss the life cycle of Plasmodium and how it causes malaria.
5.   What are the major symptoms and transmission routes for the following diseases:
      (i)   Typhoid
      (ii)   Pneumonia
      (iii)   Amoebiasis
      (iv)   Ascariasis
6.   Explain the mechanism of innate and acquired immunity. How do they differ?
7.   What is the significance of vaccination in preventing diseases? Explain the principle behind it.
8.   What is AIDS, and how does HIV affect the immune system?
9.   Describe cancer and its types. What causes cancer, and how can it be treated?
10.   What are the harmful effects of drug and alcohol abuse, particularly in adolescents?

11.   Discuss the role of lymphoid organs in the immune system.
12.   What is metastasis, and why is it considered dangerous in the context of cancer?
13.   What are the public health measures you would suggest to safeguard against infectious diseases?
14.   How does the immune system remember a pathogen after the first infection? What is the importance of this memory?
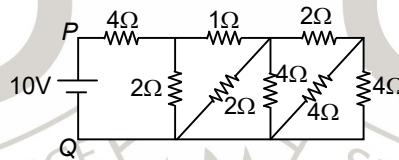15.   What motivates adolescents to try drugs and alcohol, and how can it be prevented?

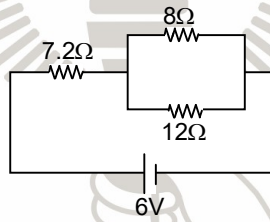---

PHYSICS (042)

CURRENT ELECTRICITY

1.   Five identical resistances are connected in a network as shown. The resistance measured between A and B is 1 Ω. Each resistance is
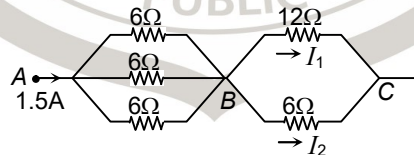

(a)   1/4 Ω   (b)   4/7 Ω
(c)   7/4 Ω   (d)   8/7 Ω
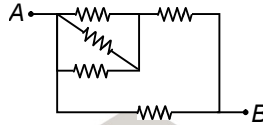
2.   Find the equivalent resistance between P and Q

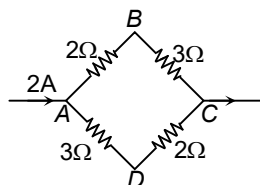(a)   10 Ω   (b)   5 Ω
(c)   15 Ω   (d)   20 Ω
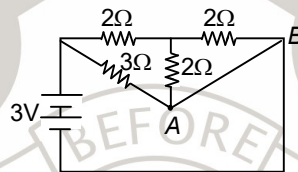
3.   In the circuit shown,

(a)   the pd across 8 Ω is 3.6 V
(b)   the pd across 12 Ω is 2.4 V
(c)   the pd across 7.2 Ω is 5.6 V
(d)   the current drawn from the battery is 1.5 A

4.   In the network shown,

(a) V_{AB} = +3.0 V   (b) V_{CB} = +6.0 V
(c) I_1 = 1.5 A   (d) I_2 = 0.5 A

5.   In the network shown,

(a) $V_{AB} = +2$ V	(b) $V_{DA} = +3$ V
(c) $V_{BD} = +2$ V	(d) $V_{CD} = -3$ V

6. EMF represents
   (a) potential energy
   (b) a force
   (c) work done per unit charge
   (d) potential difference

7. When a cell is undergoing charging process
   (a) there is no voltage drop in its internal resistance
   (b) its terminal potential is less than its EMF
   (c) its terminal potential is more than its EMF
   (d) its terminal potential is zero

8. The specific resistance of a wire
   (a) varies with its length
   (b) varies with its cross-section
   (c) varies with its mass
   (d) does not depend on its length, cross-section and mass

9. The current in branch AB is

   (a) 1.5 A
   (b) 2 A
   (c) 1.33 A
   (d) infinite

10. Three bulbs B_1, B_2 and B_3 are connected to the mains as shown in figure. How will the incandescence of the bulb B_1 be affected, if one of the bulbs B_2 or B_3 is disconnected from the circuit?
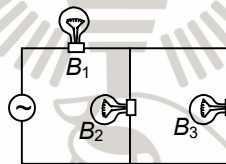
   (a) no change in the incandescence
   (b) bulb B_1 will become brighter
   (c) bulb B_1 will become less brighter
   (d) the bulb B_1 may become brighter or dimmer depending upon wattage of the bulb which is disconnected.

11. The effective resistance between the terminals P and Q in following circuit is
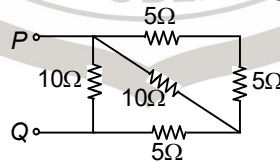
   (a) 5 Ω
   (b) 10 Ω
   (c) 25 Ω
   (d) 30 Ω

12. Five resistances are connected as shown in figure. The effective resistance between the points A and B is
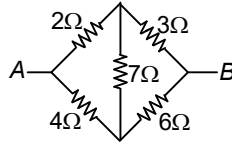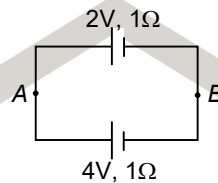
(a) $\dfrac{10}{3}\,\Omega$ (b) $\dfrac{20}{3}\,\Omega$

(c) $15\,\Omega$ (d) $6\,\Omega$

13. There are n exactly identical resistors each having resistance R. The resultant resistance when joined in parallel is λ, then on connecting them is series the resistance will come out be

(a) $\dfrac{\lambda}{n^2}$ (b) $n^2\lambda$

(c) $\dfrac{\lambda}{n^3}$ (d) $n^3\lambda$

14. Find the potential difference between A and B

(a) 6V (b) 2 V

(c) 3 V (d) 1 V

15. A wire has a nonuniform cross-section as shown. A steady current is flowing through it. Then the drift speed of the electrons
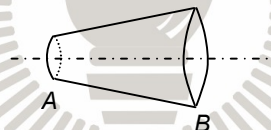
(a) is constant throughout the wire (b) decreases from A to B

(c) increases from A to B (d) varies randomly

16. If in the circuit power dissipation is 150 W. Then R is

(a) 2Ω (b) 6Ω

(c) 5Ω (d) 4Ω
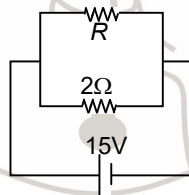
17. A 3 volt battery with negligible internal resistance is connected in circuit as shown in the figure. The current I in the circuit will be
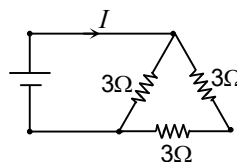
(a) 1.5 A (b) 2 A

(c) 1/3 A (d) 1 A

1. Acetone and carbon disulphide form binary liquid solution showing positive deviation from Raoult's law. The normal boiling point (T_b) of pure acetone is less than that of pure CS_2. Pick out the incorrect statements among the following-
   - (a) Boiling temperature of the mixture is always less than the boiling temperature of acetone
   - (b) Boiling temperature of Azeotropic mixture is always less than the boiling temperature of acetone
   - (c) When a small amount of CS_2 (less volatile component) is added to an excess of acetone boiling point of the resulting mixture increases
   - (d) A mixture of CS_2 and CH_3COCH_3 can be completely separated by simple fractional distillation
2. When mercuric iodide is added to the aqueous solution of potassium iodide, the:
   - (a) Freezing point is raised
   - (b) Freezing point does not change
   - (c) Freezing point is lowered
   - (d) Boiling point does not change
3. The molal elevation constant depends upon:
   - (a) Nature of solute
   - (b) Nature of the solvent
   - (c) Vapour pressure of the solution
   - (d) Enthalpy change
4. Which of the following is incorrect for an ideal solution?
   - (a) $\Delta H_{mix} = 0$
   - (b) $\Delta V_{mix} = 0$
   - (c) $\Delta P = P_{obs} - P_{calculated} = 0$
   - (d) $\Delta G_{mix} = 0$
5. Effect of adding a non-volatile solute to a solvent is:
   - (a) To lower the vapour pressure
   - (b) To increase the freezing point
   - (c) To decrease the boiling point
   - (d) to decrease the osmotic pressure

ASSERTION- REASON TYPE QUESTIONS

DIRECTION: Mark the option which is most suitable:
   - (a) If both Assertion and Reason are correct and reason is the correct explanation of Assertion.
   - (b) If both Assertion and Reason are correct and reason is not correct explanation of Assertion.
   - (c) If Assertion is correct but Reason is incorrect.
   - (d) If Assertion is incorrect and Reason is correct.

6. Assertion: An aqueous solution of NaCl freezes below 273 K.
   Reason: Vapour pressure of the solution is less than that of the pure solvent.
7. Assertion: Isotonic solutions do not show any osmosis when placed side by side.
   Reason: Isotonic solutions have same solute concentration.
8. Assertion: Molarity of the solution changes with temperature.
   Reason: Molarity is a colligative property.
9: Assertion: Cooking time is reduced in pressure cooker.
   Reason: Boiling point of water inside the pressure cooker is lowered.
10: Assertion: 1 M glucose will have a higher boiling point than 2 M glucose.
   Reason: Elevation in boiling point is a colligative property which depends upon the number of particles of solute in the solution.

Electrochemistry

1. The standard reduction potentials for the half reactions are given below: Which is the strongest reducing agent?
   $$Zn^{2+} + 2\,e^{-1} \rightarrow Zn\,(s) - 0.762V,\ Cr^{3+} + 3\,e^{-1} \rightarrow Cr\,(s) - 0.740V,\ Fe^{3+} + e^{-1} \rightarrow Fe^{2+}\,(s)$$
   - (a) Cr^{3+}
   - (b) Fe^{3+}
   - (c) Zn^{2+}
   - (d) H_2

2. For the cell given below:

$Ag \mid Ag+ \mid \mid Cu^{2+} \mid Cu : (Ag^+ + e^- \rightarrow Ag, E^o = x,)(Cu^{2+} + 2e^- \rightarrow Cu, E^o = y)$ is

(a) $x + 2y$ (b) $2x + y$

(c) $y - x$ (d) $y - 2x$

3. When during electrolysis of $AgNO_3$, 9650 C of charge pass through electroplating bath, the mass of silver deposited at the cathode will be: (Molar mass of silver is 108g)

(a) 1.08g   (b) 10.8g

(c) 21.6g   (d) 108g

4. The limiting molar conductivities $\wedge^0$ for NaCl, KBr and KCl are 1.26, 1.52 and 150 $r^{-1}cm^2mol^{-1}$ respectively. The $\wedge^0$ for NaBr is:

(a) $128 Scm^2 mol^{-1}$ (b) $176 Scm^2 mol^{-1}$

(c) $278 Scm^2 mol^{-1}$ (d) $302 Scm^2 mol^{-1}$

5. Resistance of a 0.2M solution of an electrolyte is 50Ω. The specific conductance of the solution is $1.4 Sm^{-1}$. The resistance of 0.5M solution of the same electrolyte is 280Ω. The molar conductivity of 0.5M solution of the electrolyte in Smol−1 is:

(a) 5×10^{-4} (b) 5×10^{-3}

(c) 5×10^{3} (d) 5×10^{2}

6. The metal that cannot be obtained by the electrolysis of an aqueous solution of its salt is:

(a) Ag   (b) Cu

(c) Ca   (d) Cr

7. For the cell reaction given below, $E^0 = 0.24V$ at 298K. The standard Gibbs energy change $(\triangle G^0)$ for the reaction is.....................

$2Fe^{3+}(aq) + 2I^{-1}(aq) \rightarrow 2Fe^{2+}(aq) + I_2(aq)$

(a) $-23.16 kJmol^{-1}$ (b) $46.32 kJmol^{-1}$

(c) $23.16 kJmol^{-1}$ (d) $-46.32 kJmol^{-1}$

8. For a cell involving one electron, calculate the equilibrium constant for the cell at 298K. The standard electrode potential of the cell is given below:

$E = 0.59V$

(a) 1.0×10^{2} (b) 1.0×10^{5}

(c) 1.0×10^{10} (d) 1.0×10^{30}

9. Standard electrode potential for Sn^{4+}/Sn^{2+} couple is +0.15V and that for the Cr^{+3}/Cr couple is -0.74V. If they are connected to make a cell, then the cell potential will be:

(a) +0.89V   (b) +0.18V

(c) +1.83V   (d) +1.199V

10. The conductivity of 0.001028 M acetic acid is $4.95 \times 10^{-5} Scm^{-1}$. Calculate its degree of dissociation if $\wedge o$ for acetic acid is $390.5 Scm^2 mol^{-1}$.

(a) 0.1233   (b) 0.3324

(c) 0.5622   (d) 0.4988

ACCOUNTANCY (055)

1. X and Y are equal partners. Their capitals as on April 01, 2023 were Rs. 200,000 and Rs. 4,00,000 respectively. After the accounts for the financial year ending March 31, 2024 have been prepared, it is observed that interest on capital @ 9% per annum and salary to y @ ₹20,000 per annum, as provided in

the partnership deed has not been credited to the partners' capital accounts before distribution of profits. You are required to give necessary rectifying entries.

2. A Ltd. forfeited 800 shares of ₹10 each issued at 10% premium (₹8 called up) on which a shareholder did not pay ₹3 of allotment (including premium) and first call of ₹2. Out of these480 shares were reissued as fully paid for ₹8 per share and 20 shares to as fully paid up @ ₹12 per share at different intervals of time.

3. Amisha Ltd inviting application for 40,000 shares of ₹ 100 each at a premium of ₹ 20 per share payable; on application ₹ 40 ; on allotment ₹ 40 (Including premium): on firstcall ₹ 25 and Second and final call ₹ 15. Application were received for 50,000 shares and allotment was made on pro-rata basis.Excess money on application was adjusted on sums due on allotment. Rohit to whom 600 shares were allotted failed to pay the allotment money and his shareswere forfeited after allotment. Ashmita, who applied for 1,000 shares failed to pay the two calls and his shares were forfeited after the second call. Of the shares forfeited, 1,200 shares were sold to Kapil for ₹ 85 per share as fully paid, the whole of Rohit's shares being included. Record necessary journal entries.

4. A Ltd. took over the running business of H Ltd. having assets of Rs.88,00,000 and liabilities of Rs.48,00,000 by issuing 80,000, 11% Debentures of Rs. 100 each at 5% discount. You are required to pass the journal entries in the books of A Ltd. if debentures were redeemed at 10% premium.

5. On July 01, 2023, N Ltd. issued 80,000, 9% Debentures of ₹ 100 each at 8% premium and redeemable at a premium of 15% in four equal instalments starting from the end of the third year. The balance in Securities Premium on the date of issue of debentures was ₹ 3,20,000. Interest on debentures was to be paid on March 31 every year. Pass Journal entries for the financial year 2023-24.

6. Give the necessary journal entries at the time of issue of debentures in each of the following cases.
   (a) X Ltd. issued 5,000, 9% debentures of Rs. 100 each at par and redeemable at par at the end of 5 years out of capital.
   (b) X Ltd. issued 1,000, 12% debentures of Rs. 100 each at par. These debentures are Redeemable at 10% premium at the end of 4 years.
   (c) X Ltd. issued 12% debentures of the total face value of Rs. 1,00,000 at premium of 5% to be redeemed at par at the end of 4 years.
   (d) X Ltd. issued Rs. 1,00,000, 12% debentures at a discount of 5% but redeemable at a premium of 5% at the end of 5 years.

BUSINESS STUDIES (054)

1. Answer in one Word:
   (a) Obligation to perform an assign task
   (b) Answerability for outcome of assigned task
   (c) Right to command

2. "Formal training plays an important part in equipping subordinate with skills that help them rise in the organisation but equally important is the experience gained by handling assignments independently "Which concept has been discussed here?

3. Which of the following statement is false about Centralised organisation?
   (a) The flow of information is slow
   (b) Decision is taken by the top management

(c) This increases the speed of decision making and makes it easy for an enterprise to adapt to dynamic environment.

(d) Response also takes time

4. "If we delegate the authority, we multiply it by two; if we decentralise it, we multiply it by many." How?

5. Which of the following is not a feature of informal organisation?

(a) It has no written rules and procedure

(b) It really defines the authority and responsibility of every individual

(c) It is not deliberately created by the management

(d) It is personal means the feeling of individuals are kept in the mind

6. Statement I: Accountability can be delegated.

Statement II: Responsibility can be delegated completely.

7. Statement I: Formal organisation emerges spontaneously due to interpersonal relationships among the employees.

Statement II: Unity of command is maintained in such organisation.

8. The G20 summit was organised in India the government left no stone untold to make G20 summit a success .At the highest level, the work to be performed was identified and grouped to enable people to work most effectively together for accomplishing objectives. This involves building infrastructure, beautification of the City, hospitality, security arrangements etc. Duties were assigned to different job positions which led to establishment of clear relationships. This helped in creating a hierarchical structure and in coordination among all working for the summit.

(a) Identify an explain the function of management discuss in the above para.

(b) Explain any four points of importance of the function identified in part (A).

9. NB limited is India's largest manufacturer of cement its operation are its operations are spread throughout the country with 17 model cement factories. It has a work for 9000 persons. It's inception the company has a trend setter for the cement industry. The companies planning to grow in the long run and wants to double its capacity in the next 3 years. For this the finance manager has to decide about the quantum of finance to be raised from various long term sources. For this he has to identify various available resources of funds and the proportion of funds from each source.

(a) Identify the financing decision to be taken by financial manager.

(b) State any four factors which would affect the decision identified in part (A).

10. Raghav works as a waiter in a 5 star hotel in Mumbai. While serving the customer he over here him at the table saying that he has made profits higher than expected by investing and securities market. So, Raghav also decided to make a nominal investment from a savings in the stock market in pursuit of higher gains. In context of the above case.

As a financial consultant, apprise him of the steps involved in the working of a demat system.

ECONOMICS (030)

ASSERTION- REASON QUESTIONS

In the following questions a statement of Assertion (A) is followed by a statement of Reason (R). Choose the correct alternative among those given below.

Alternatives:

A. Both Assertion (A) and Reason(R) are true and Reason(R) is the correct explanation of Assertion (A).

B.   Both Assertion (A) and Reason(R) are true and Reason(R) is not the correct explanation of Assertion (A).

C.   Assertion (A) is true but Reason(R) is false.

D.   Assertion (A) is false but Reason(R) is true.

1.   Assertion (A): The goods which are used either for resale or for further production in the same year are intermediate goods.

 Reason(R): Intermediate goods are included in National Income.

2.   Assertion (A): Value addition can also take place even when the commodity doesnot go through any transformation.

Reason(R): It happens when a commodity is purchased for resale.

3.   Assertion (A): Gross Domestic Capital Formation can be less than Gross fixedcapital formation.

Reason(R): Change in stock is negative.

4.   Assertion (A): The problem of double counting leads to underestimation of the National Income of the country.

Reason(R): Double counting arises when value of a good is counted more than once while measuring the value of National Income.

5.   Assertion (A): Domestic Income of a country can be more than its National Income.

Reason(R): Factor income paid abroad < factor income received from abroad.

6.   Assertion (A): The problem of double counting leads to under estimation of the national income of the country.

Reason (R): The double counting arises when value of a good is counted more than once while measuring the value of national income.

7.   Assertion (A): Nominal value is money value or value measured in term of prices that prevail at the time of measurement.

Reason (R): GDP is measured at both current prices as well as constant prices.

8.   Assertion (A): Tax is a main source of government revenue which is used to provide services are included in national income.

Reason (R): Tax is a transfer income.

9.   Assertion (A): Compensation to flood victims is not included while national income.

Reason (R): Transfer income does not contribute to current flow of goods and services.

10.   Assertion (A): GDPMP= NDPMP

Reason (R): NIT= 0

11.   Assertion (A): NDPFCis the income earned by the factors of production in the form of wages, profits, rent, interest, etc. within the domestic territory of a country.

Reason (R): Domestic income generated in the production process within the domestic territory of the country gets distributed among the factors of production.

12.   Assertion (A): Part of the output produced by a farmer and used for his own family consumption is not included under product method.

Reason (R): One of the ways to avoid double counting, is to take only value added instead of total output.

13 .   Assertion (A): Gross Domestic Product (GDP) does not give us a clear indication of economic welfare of a country.

Reason (R): GDP may not take into account Non-monetary exchanges like services of housewife, Externalities i.e. benefits and harms which are caused due to economic activities and Distribution of income.

14. Assertion (A) : Real GNP is used for making comparisons of international standards of living and rates of economic growth of various countries.

    Reason(R): Nominal GNP may be increasing due to rise in price level, the quantity of goods and services produced may remain constant.

15. Assertion (A): The change of inventories of a firm during a year = production of the firm during the year- sale of the firm during the year.

    Reason (R): Inventory is a stock variable.

16. Assertion (A) : Intermediate goods are not to be included in the national income Reason (R) : value of only final goods should be added to determine the national income.

17. Assertion (A) :Nominal GDP always equals real GDP.

    Reason (R): National income at current price may give a misleading picture of economic performance.

18. Assertion (A) :Net exports is a domestic concept.

    Reason (R) : NFIA is the difference between factor income received from rest of the world and factor income paid to the rest of the world.

19. Assertion (A) : factor incomes are only earned incomes.

    Reason (R) : factor incomes do not include incomes which is not earned or for which a factor service has not been rendered.

20. Assertion (A) : Transfer payments do not cause any value addition in the economy .

    Reason (R): Retirement pension is an example of transfer payments.

21. Assertion (A): An item that is meant for final use and will not pass through any more stages of production or transformations is called a final good.

    Reason (R): It will not undergo any further transformation at the hands of any producer, but many such final goods are transformed during their consumption.

HISTORY (027)

Part-A

1. What are the phases of the Indus Valley Civilization?
2. What were the dietary practices of the Harappans?
3. What are the features of the Sacred Centre of the Vijayanagar Empire?
4. What was the Khilafat Movement.
5. What was the Jins e kamil?
6. Explain the concern of privacy of the Indus valley people.
7. Who was Colin McKenzie?
8. Mention the main clauses of the Subsidiary Alliance System.?
9. What is the Jajmani System?
10. What are the sects of Sufism? Cite an example.
11. What was the Sun Set Law?
12. Explain the significance of the Fifth Report?
13. What is the PrayagaPrashasti? Who composed it?
14. Why is the sixth century BCE considered a turning point in India's history?
15. Who was James Princep. Mention his contributions?

Part-B

16. Discuss the evidences proving the relevance of agriculture in the Indus valley civilization?
17. Explain the salient features of Labium's description of the caste system in India.
18. When and why was the Non Cooperation Movement suspended?
19. Discuss the relation of the Bhakti saint's with the State with suitable examples?
20. What led to the outrage at Awadh during the course of Revolt of 1857?
21. What are the sources of understanding the Mauryan history?
22. List the names of the prominent travelers to India along with their nationalities and the period of arrival.
23. Explain the popular perception of Gandhiji and the significance of His speech at BHU.

Part-C

24. Define Epigraphy. Trace the major limitations of Epigraphy.
25. Explain the prevalence of authority in the Indus valley civilization with suitable examples?
26. Elaborate the role of women in the Mughal agrarian system.
27. Analyse the factors leading to the Civil Disobedience Movement. Explain its events, effects and consequences.

Part-D

28. (a) On the political outline map of India, name and locate any five centres of the Revolt of 1857
    (b) On the same political map of India, name and locate any five sites of the Indus valley civilization and the Kingdoms of the South.
    (c) On the same political map of India, name and locate any five major inscriptions of Ashoka.

POLITICAL SCIENCE (028)

1. On Political Maps of India and the World locate the following places-
    (a) Nation in which Arab Spring or Jasmine Revolution began
    (b) City in which SAARC was established
    (c) Manipur
    (d) Assam
    (e) Punjab
2. Create a Mind Map on-India Russia relations during the Cold War Era
3. Compare the Merits and Demerits of INC government under former Prime Minister Mrs Indira Gandhi and Prime Minister Morarji Desai.

GEOGRAPHY (029)

1. **Read the given passage and answer the questions that follow:**
   For many decades, a country's level of development was measured only in terms of its economic growth. This meant that the bigger the economy of the country, the more developed it was considered, even though this growth did not really mean much change in the lives of most people.
   The idea that the quality of life people enjoy in a country, the opportunities they have and freedoms they enjoy, are important aspects of development, is not new. These ideas were clearly spelt out for the first time in the late eighties and early nineties. The works of two South Asian economists, Mahbub-ul-Haq and AmartyaSen are important in this regard. The concept of human development was introduced by Dr Mahbub-ul-Haq.
   Dr Haq has described human development as development that enlarges people's choices and improves their lives. People are central to all development under this concept. These choices are not fixed but keep on changing. The basic goal of development is to create conditions where people can live meaningful lives. A meaningful life is not just a long one. It must be a life with some purpose. This

means that people must be healthy, be able to develop their talents, participate in society and be free to achieve their goals.

1.1. Which criterion was used in the early period to measure development?
(a) Industrial growth
(b) Agricultural growth
(c) Economic growth
(d) Population growth

1.2. Who introduced the concept of Human development?
(a) Prof, Amartya Sen
(b) Dr.Mahbub-Ul-Haq
(c) Alexander Von Humboldt
(d) Ratzel

1.3. Which of the following is not an important aspect of development?
(a) The quality of life
(b) Opportunities
(c) Freedom
(d) People's movement

1.4. According to Dr Mehbub-Ul-Haq which of the following is central to all development?
(a) Basic infrastructure
(b) People
(c) Stress on education
(d) Safety and security

1.5. People must be healthy, be able to develop their talents, participate in society and be free to achieve their goals are the features of which of the following?
(a) Meaningful life
(b) Enjoyable life
(c) Terrible life
(d) Rigid life

2. Read the passage given below and answer the questions that follow:

"As many as 33 countries record low levels of human development. A large proportion of these are small countries which have been going through political turmoil and social instability in the form of civil war, famine or a high incidence of diseases. There is an urgent need to address the human development requirements of this groups through well thought out policies. International comparisons of human development can show some very interesting results. Often people tend to blame low levels of human development on the culture of the people. For example, X country has lower human development because its people follow Y religion, or belong to Z community. Such statements are misleading. To understand why a particular region keeps reporting low or high levels of human development it is important to look at the pattern of government expenditure on the social sector. The political environment of the country and the amount of freedom people have is also important. Countries with high levels of human development invest more in the social sectors and are generally free from political turmoil and instability. Distribution of the country's resources is also far more equitable. On the other hand, places with low levels of human development tend to spend more on defence rather than social sectors. This shows that these countries tend to be located in areas of political instability and have not been able to initiate accelerated economic development.

2.1. How many countries are lying in the low ranking HDI group?
(a) 36
(b) 33
(c) 42
(d) 44

2.2. Which of the following reason responsible for low HDI rankings?
(a) high governmental expenditure on social sector
(b) accelerated economic growth
(c) equitable distribution of resources
(d) political turmoil

2. How does the political environment determines the country's high HDI ranking?
(a) The government is not accountable to its people.
(b) The high level of corruption and poor governance.
(c) The government formulates policies for public welfare.
(d) Incompetency of the government schemes

2.4. The countries with high level of human development invest more on which of the following?
(a) Defence sector
(b) Agricultural sector

	(c) Social sector	(d) private sector

2.5. The countries with high level of human development experiences which of the following?
- (a)   political instability and Social turmoil
- (b)   food insecurity and famines
- (c)   high incidences of epidemics
- (d)   accelerated economic development

ASSERTION - REASON BASED QUESTIONS

3. Assertion (A):- Very often, people have the capability and freedom to make basic choices in the areas of low human development.
   Reason (R):- This may be due to their inability to acquire knowledge, their material poverty, social discrimination, inefficiency of institutions and other reasons.
   - (a)   Both A and R are true and R is the correct explanation of A.
   - (b)   Both A and R are true, but R is not the correct explanation of A.
   - (c)   A is true and R is false
   - (d)   A is false and R is true

4. Assertion (A):- Sustainability means continuity in the availability of opportunities.
   Reason (R):- All environmental, financial and human resources must be used keeping in mind the future
   - (a)   Both A and R are true and R is the correct explanation of A.
   - (b)   Both A and R are true, but R is not the correct explanation of A.
   - (c)   A is true and R is false
   - (d)   A is false and R is true

5. Assertion (A):- The level of development has four categories Very high, High, Medium, Low
   Reason (R):- The number of countries in Medium category are 59 as per human development report 2016.
   - (a)   Both A and R are true and R is the correct explanation of A.
   - (b)   Both A and R are true, but R is not the correct explanation of A.
   - (c)   A is true and R is false
   - (d)   A is false and R is true

6. Assertion (A): Human resource is necessary for the progress of any country.
   Reason (R): Investment in education and health of people can result in a high rate of returns in the future for a country.
   - (a)   Both A and R are true and R is the correct explanation of A.
   - (b)   Both A and R are true, but R is not the correct explanation of A.
   - (c)   A is true and R is false
   - (d)   A is false and R is true

7. Assertion (A):- Building people capabilities in the areas of health, education and access to resources is important in enlarging people's choices.
   Reason (R):- If people have the capabilities in these areas, their choices are also get limited.
   - (a)   Both A and R are true and R is the correct explanation of A.
   - (b)   Both A and R are true, but R is not the correct explanation of A.
   - (c)   A is true and R is false
   - (d)   A is false and R is true

8. Assertion (A): First Human Development Report published by United Nations Development Programme (UNDP) in 1990.
   Reason (R): India with a population of over 1.38 billion is ranked 131 among 189 countries of the world in terms of Human Development Index (HDI)
   - (a)   Both A and R are true and R is the correct explanation of A.
   - (b)   Both A and R are true, but R is not the correct explanation of A.
   - (c)   A is true and R is false
   - (d)   A is false and R is true

9. Assertion (A):- The Human Development Index ranks the countries based on their performance in the key areas of health, education and access to resources.
Reason (R) :- These ranking are based on a score between 0 to 1, that a country earns from it scored in the key areas of human development.
   (a) Both A and R are true and R is the correct explanation of A.
   (b) Both A and R are true, but R is not the correct explanation of A.
   (c) A is true and R is false
   (d) A is false and R is true

10. Assertion (A): High level of human development group has 53 countries as per 2020 HDR.
Reason (R): A higher investment in people and good governance has set this group apart from others.
   (a) Both A and R are true and R is the correct explanation of A.
   (b) Both A and R are true, but R is not the correct explanation of A.
   (c) A is true and R is false
   (d) A is false and R is true

MAP WORK (ON WORLD MAP):

11.A. Primary Activities: Areas of subsistence gathering, Major areas of nomadic herding of the world, Major areas of commercial livestock rearing, Major areas of extensive commercial grain faming, Major areas of mixed farming of the World.

11.B. Terminal Stations of Transcontinental Railways: Trans-Siberian, Trans Canadian,

Trans-Australian Railways

11.C. Major Sea Ports:
Europe: North Cape, London, Hamburg
North America: Vancouver, San Francisco, New Orleans
South America: Rio De Janeiro, Colon, Valparaiso
Africa: Suez and Cape Town
Asia: Yokohama, Shanghai, Hong Kong, Aden, Karachi, Kolkata
Australia: Perth, Sydney, Melbourne

11.D. Major Airports:
Asia: Tokyo, Beijing, Mumbai, Jeddah, Aden
Africa: Johannesburg & Nairobi
Europe: Moscow, London, Paris, Berlin and Rome
North America: Chicago, New Orleans, Mexico City
South America: Buenos Aires, Santiago
Australia: Darwin and Wellington

11.E. Inland Waterways: Suez Canal, Panama Canal, Rhine waterways and St. Lawrence Seaways

PSYCHOLOGY (037)

1. **Read the case study and answer the questions that follows :**
When Srikanth Bolla was born, neighbours in the village suggested that his parents smother him. It was better than the pain they would have to go through their life time, some said. He is a useless baby without eyes; being born blind is a sin, others added. Twenty-three years later, Srikanth is standing tall living conviction that if the ''world looks at me and says I look back at the world and say, I can do anything.

Srikanth is the Founder and CEO of Hyderabad-based Bollant Industries, an organisation that employs uneducated and challenged employees to manufacture eco-friendly, disposable consumer packaging solutions, which is worth rs.50 crore. He considers himself the luckiest man alive, not because he is now a millionaire, but because his uneducated parents, who earned rs.20,000 a year, did not heed any of the

'advice' they received and raised him with love and affection. They are the richest people I know, says Srikanth.

1.1 We can see that Srikanth has the ability to adopt, shape and select the environment. Identify the theory of intelligence that would best support our understanding of Srikanth's intelligence.

1.2 Srikanth is standing tall living conviction that if the ''world looks at me and says I look back at the world and say, I can do anything. According to Gardner's multiple intelligence theory which kind of intelligence explains this? Discuss this intelligence in brief.

2.   Read the case study and answer the questions that follows :
Sundar, a college going 20-year-old male, has moved from his home town to live in a big city. He has continuous fear of insecurity and feels that the enemy soldiers are following him. He gets very tense when he spots anyone in a uniform and feels that they are coming to catch him. This intense anxiety is interfering with his work and relationship, and his friends are extremely concerned as it does not make any sense to them. Sundar occasionally laughs abruptly and inappropriately, and sometimes stops speaking mid-sentence, scanning off in the distance as though he sees or hears something. He expresses concern about television and radio in the room potentially being monitored by the enemies. His beliefs are fixed and if they are challenged, his tone becomes hostile.

2.1 Based on the symptoms being exhibited, identify the disorder. Explain the other symptoms that can be seen in this disorder.

2.2 Define delusion and inappropriate affect. Support it with the symptoms given in the above case study.

3.   Read and answer the questions that follows:
Meena's work environment is highly stressfull due to unrealistic expectations by the organisation. She had been trying to balance her job as well as her home front. Since the last few months, she was not feeling well. So, she went for a check-up and was diagnosed with high blood pressure. According to General Adaptation Syndrome, at what stage does this happen?

(a)   Alarm reaction   (b)   Resistance
(c)   Exhaustion   (d)   Adaptation

4.   In the following question, a statement of Assertion (A) is followed by a statement of Reason (R). Select the correct choice from (a), (b), (c) and (d).

Assertion (A): Children from disadvantaged homes, when adopted into families with higher socio-economic status, exhibit a large increase in their intelligence scores.

Reason (R): Environmental deprivation lowers intelligence while rich nutrition, good family background and quality of schooling increases intelligence.

(a)   Both Assertion (A) and Reason (R) are true, and Reason (R) is correct explanation of Assertion (A).
(b)   Assertion (A) is true, but Reason (R) is false.
(c)   Assertion (A) is false, but Reason (R) is true.
(d)   Both Assertion (A) and Reason (R) are true, but Reason (R) is not the correct explanation of Assertion (A).

5.   Development a case profile by using appropriate methods like interview, observation & psychological tests. (Project work)

Note: Kindly use A4 size pages for completing the project work.

1. State True or False:

"In a Python program, if a break statement is given in a nested loop, it terminates the execution of all loops in one go."

2. The code given below accepts a number as an argument and returns the reverse number. Observe the following code carefully and rewrite it after removing all syntax and logical errors. Underline all the corrections made.

```
define revNumber(num):
    rev = 0
    rem = 0
    While num > 0:
        rem ==num %10
        rev = rev*10 + rem
        num = num//10
        return rev
print(revNumber(1234))
```

3. Ms. Shalini has just created a table named "Employee" containing columns Ename, Department and Salary. After creating the table, she realized that she has forgotten to add a primary key column in the table. Help her in writing an SQL command to add a primary key column EmpId of integer type to the table Employee. Thereafter, write the command to insert the following record in the table: EmpId- 999
Ename- Shweta
Department: Production
Salary: 26900

4. Consider the tables PRODUCT and BRAND given below:

Table: PRODUCT

PCode	PName	UPrice	Rating	BID
P01	Shampoo	120	6	M03
P02	Toothpaste	54	8	M02
P03	Soap	25	7	M03
P04	Toothpaste	65	4	M04
P05	Soap	38	5	M05
P06	Shampoo	245	6	M05

Table: BRAND

BID	BName
M02	Dant Kanti
M03	Medimix
M04	Pepsodent
M05	Dove

Write SQL queries for the following:

(a) Display product name and brand name from the tables PRODUCTand BRAND.

(b) Display the structure of the table PRODUCT.

(c) Display the average rating of Medimix and Dove brands.

(d) Display the name, price, and rating of products in descending order of rating.

5. Write a function ETCount() in Python, which should read each character of a text file "TESTFILE.TXT" and then count and display the count of occurrence of alphabets E and T individually (including small cases e and t too).

Example:

If the file content is as follows:

Today is a pleasant day.

It might rain today.

It is mentioned on weather sites.

The ETCount() function should display the output as:

E or e: 6

T or t : 9

INFORMATICS PRACTICES (065)

1. Which SQL statement do we use to find out the total number of records present in the table ORDERS?
    (a)   SELECT * FROM ORDERS;
    (b)   SELECT COUNT (*) FROM ORDERS;
    (c)   SELECT FIND (*) FROM ORDERS;
    (d)   SELECT SUM () FROM ORDERS;

2. Which type of values will not be considered by SQL while executing the following statement?
    SELECT COUNT(column name) FROM inventory;
    (a)   Numeric value
    (b)   text value
    (c)   Null value
    (d)   Date value

3. Consider the given DataFrame 'Stock':

	Name	Price
0	Nancy Drew	150
1	Hardy boys	180
2	Diary of a wimpy kid	225
3	Harry Potter	500

Write suitable Python statements for the following:
    (a)   Add a column called Special_Price with the following data: [135,150,200,440].
    (b)   Add a new book named 'The Secret' having price 800.
    (c)   Remove the column Special_Price

4. Based on table STUDENT given here, write suitable SQL queries for the following:

Roll No	Name	Class	Gender	City	Marks
1	Abhishek	XI	M	Agra	430
2	Prateek	XII	M	Mumbai	440
3	Sneha	XI	F	Agra	470
4	Nancy	XII	F	Mumbai	492
5	Himnashu	XII	M	Delhi	360
6	Anchal	XI	F	Dubai	256
7	Mehar	X	F	Moscow	324
8	Nishant	X	M	Moscow	429

    (a)   Display gender wise highest marks.
    (b)   Display city wise lowest marks.
    (c)   Display total number of male and female students.

5. Predict the output of the following SQL queries:

(a)   Select trim("   ALL THE BEST   ");

(b)   Select power(5,3);

(c)   Select Concat(upper(mid("Start up India",10)), " 2024")

PHYSICAL EDUCATION (048)

1. Explain pitfalls of dieting.
2. Elaborate any 03 methods to prevent asthma.
3. Explain the procedure of 600 m Run/walk test.
4. Explain about the management of fracture.
5. Describe the method of sit and reach test.
6. Draw a fixture of 9 teams participating in the league tournament.
7. Explain in detail the effects of diet on sports performance.
8. Explain the causes of any 05 postural deformities in detail.
9. How SAI Khelo India fitness test is administered?
10. Elaborate the physiological factors determining endurance and strength.

हिन्दी (302)

1. पहाड़ी जीवन/ग्रामीण जीवन/दो कवियों की कविताओं की तुलना/समसामयिक विषय पर आधारित लगभग दो हज़ार शब्दों में एक सचित्र परियोजना तैयार कीजिए ।

2. श्रीरामचरितमानस के अन्तर्गत सभी कांडों का संक्षिप्त परिचय दीजिए ।

HINDUSTANI MUSIC (VOCAL) (034)

1. Write Dhamar taal and its digun & chaugun.
2. Write the Drut kheyal of Raga Bageshri.

PAINTING (049)

1. Draw a flower composition using watercolors.
2. Create and paint a Madhubani art piece on an A4 size sheet.

YOGA (841)

1. Students will prepare a Chart on Stress and their Yogic managements.

OR

Students will prepare a report on obesity and its yogic management.

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