



DELHI PUBLIC SCHOOL
SAIL TOWNSHIP, RANCHI
HALF YEARLY EXAMINATION (2022-23)

Class - XI
Time - 3 Hours

Subject - Accountancy
Maximum Marks-80

General Instruction

1. Attempt all questions
 2. Show working notes where applicable.
 3. Attempt all parts of a questions together.
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1. Accounting cycle starts with [1]
 - a) Recording of transactions in ledger
 - b) Recording of transactions in journal
 - c) Preparing Trial Balance
 - d) Preparing Trading Account
2. Which of the following is not sub field of accounting? [1]
 - a) Financial Accounting
 - b) Book Keeping
 - c) Management Accounting
 - d) Cost Accounting
3. Current assets do not include [1]
 - a) Debtors
 - b) Bank Balance
 - c) Motor Car
 - d) Prepaid Expenses
4. Intangible assets do not include [1]
 - a) Patent
 - b) Trade mark
 - c) Stock
 - d) Prepaid Expenses
5. Current Liabilities do not include [1]
 - a) Bills Payable
 - b) Creditors
 - c) Outstanding Expenses
 - d) Debentures

6. Which of the following is the Capital Expenditure [1]
a) Wages paid for repair of building
b) Wages paid for white washing of building
c) Wages paid for construction of building
d) Wages paid for cleaning of building
7. Livestock includes [1]
a) Stock
b) Goods
c) Animals
d) Life Insurance Policy
8. Wasting Assets do not include [1]
a) Patent
b) Trade mark
c) Land and Building
d) Mines
9. Which equation is incorrect out of the following [1]
a) $\text{Assets} = \text{Liabilities} + \text{Capital}$
b) $\text{Capital} = \text{Assets} - \text{Liabilities}$
c) $\text{Liabilities} = \text{Assets} - \text{Capital}$
d) $\text{Assets} = \text{Liabilities} - \text{Capital}$
10. Vouchers is prepared for [1]
a) Cash received and paid
b) Ledger Account
c) Source Documents
d) All of the above
11. Main elements of accounting equation are [1]
a) Capital Creditors and Bill Payable
b) Assets, Liabilities and Capital
c) Cash, Stock and Debtors
d) Bank Balance, Investments and Bills Receivable
12. As a result of the following transactions the total of accounting equating will be [1]
i) Started business with cash Rs. 200000
ii) Computer purchased Rs. 50000
iii) Goods purchased on credit Rs. 60000
a) Rs. 310000
b) Rs. 250000
c) Rs. 210000
d) Rs. 260000
13. Loss of goods by fire should be credited to [1]
a) Sales Account
b) Loss Account
c) Profit and Loss Account
d) Purchase Account

14. Goods costing Rs. 30000 supplied to Mohan at a profit on 25% on sales price less Trade discount @ 5% will be credited to sales account with [1]
- a) Rs. 35625
 - b) Rs. 38000
 - c) Rs. 37500
 - d) Rs. 34200
15. Paid to Rahul on behalf of Sanjay Rs. 12000 will be debited to [1]
- a) Rahul's personal Account
 - b) Sanjay's Account
 - c) Drawings Account
 - d) Cash Account
16. Goods worth Rs. 7000 given away as charity would be credited to [1]
- a) Sales Account
 - b) Purchase Account
 - c) Charity Account
 - d) Trustee Account
17. Salary due for the month of March will appear in side of cash book [1]
- a) Receipt
 - b) Payment
 - c) Contra
 - d) None of the above
18. Debit Note is the source of writing [1]
- a) A debit entry in an Account
 - b) A sale to a person
 - c) Sales Return Book
 - d) Journal Proper
19. Purchase Book is a part of [1]
- a) The Journal
 - b) The ledger
 - c) The Trading Account
 - d) The Balance Sheet
20. Credit balance Show [1]
- a) Losses and Liabilities
 - b) Liabilities and Incomes
 - c) Assets and Expenses
 - d) All of the above
21. Explain (a) Going Concern Concept [3]
(b) Money measurement Concept
22. "Every transaction has Debit and Credit aspects" Explain [3]
23. What is accounting? Explain any three Characteristics of accounting [4]

24. Journalise the following transactions [4]

- i) Purchased goods for Rs. 10000 from Ajay and supplied it to Vijay for Rs. 15000
- ii) Purchased machinery for Rs. 50000 by cheque and installation charges of Rs. 5000 paid in cash
- iii) Shyam who owed us Rs. 15000 is declared insolvent and 50 paise in a rupee is received as final dividend from his estate
- iv) Receive a cheque from Suman Rs. 5450. Allowed him discount Rs. 150 cheque is immediately deposited into bank.

25. Pass journal entries [4]

- i) Interest on Capital
- ii) Interest on Drawing
- iii) Interest on Fixed Deposit
- iv) Interest on Bank loan
- v) Interest on investment
- vi) Interest allowed by bank
- vii) Interest charged by bank
- viii) Bad Debts

26. Enter the following transactions in the purchase book of Modi Cloth House Ranchi 2022 [4]

June 1	Purchased from Mohit Brothers Ranchi vide invoice No. 101 50 Metre cotton cloth @ Rs. 400 per metre 160 Metre Woolen Cloth @ Rs. 250 per metre Trade discount @ 20%
June 5	Purchased from Mohan Brothers Kanpur UP vide invoice No. 102 100 Metre Silk Cloth @ Rs. 300 per Metre 80 Metre cotton cloth @ Rs. 125 per Metre Trade discount @ 10%
June 10	Purchased from Modern Furniture House Delhi 10 Chairs @ Rs 1000 per chair vide invoice No. 103
June 15	Purchased from Hira Lal & Sons Gujrat vide invoice No. 104 100 Metre woolen cloth @ Rs. 600 per Metre Trade discount @ 15%

27. Record the following transactions in sales book of Mahesh Ranchi 2020 [4]

June 1	Sold goods to Ruchika Electronic Ranchi 3 colour TV Sets @ Rs. 20000 each 10 Washing Machine @ Rs. 10000 each Trade discount @ 20%
June 5	Sold to Garima Electronic Patna 5 Colour TV sets @ Rs. 15000 each 10 Music System @ Rs. 5000 each Trade discount @ 25%

June 15 Sold to Vishal Electronic Kanpur
10 Washing Machine @ Rs. 7000 each
Trade discount @ 10%

28. From the following particulars. Prepare Simple Petty Cash Book for the month of June 2022

[6]

June 1 Balance in hand Rs. 500
June 1 Received for cash payment Rs. 5000
June 2 Paid for postage Rs. 100
June 3 Paid for stationary Rs. 150
June 4 Paid for carriage Rs. 250
June 5 Paid for conveyance Rs. 300
June 6 Paid for courier Rs. 100
June 7 Paid for office cleaning Rs. 150
June 8 Paid for Taxi Fair Rs. 350
June 9 Wages to casual laborers Rs. 300
June 10 Paid for repair of printer Rs. 400
June 11 Paid for refreshment Rs. 450
June 12 Paid for bus fare Rs. 100
June 13 Locks purchased Rs. 450
June 14 Telephone bill Rs. 300
June 15 Paid for cartage Rs. 150
June 16 Paid for repair of chairs Rs. 200
June 17 Paid for auto fare Rs. 100
June 18 Paid for refreshment Rs. 300
June 19 Paid for taxi fare Rs. 200

29. Prepare Accounting Equation from the following information
2022

[6]

June 1 Started business with cash Rs. 100000
June 3 Goods purchased for cash Rs. 50000 and on credit Rs. 100000
June 5 Goods sold for cash Rs. 50000 (profit 25% on cost) and on credit
Rs. 100000 (profit 30% on sales)
June 7 Furniture purchased for cash Rs. 10000
June 9 Cash received from debtors Rs. 50000
June 11 Cash paid to creditors Rs. 20000 discount received Rs. 1000

30. Prepare Trial Balance as at 31.03.2022

Furniture	10000	Capital	100000
Purchase	20000	Debtors	50000
Sales	30000	Computer	40000
Carriage	5000	Wages	10000
Postage	15000	Salaries	30000
Stationery	10000	Advertisement	10000
Creditors	30000	Bank Loan	40000

[6]

31. Record the following transactions in Double Column Cash Book [8]

2022

June 1	Cash in hand Rs. 30000 cash and bank Rs. 10000 (cr)
June 3	A cheque of Rs. 18000 received from debtors and discount allowed to him @ 10%
June 5	Interest charged by bank Rs. 2000
June 7	A cheque of Rs. 10000 Issued to creditors
June 9	Cash deposited into bank Rs. 5000
June 11	Dividend collected by bank Rs. 5000
June 13	Goods sold for cash Rs. 20000
June 15	Goods purchased for cash Rs. 5000
June 17	Paid for Advertisement by cheque Rs. 10000
June 19	Salary paid by cheque Rs. 20000
June 21	Wages paid Rs. 1000
June 23	Income Tax paid Rs. 2000

32. Pass Journal entries :- [8]

2022

June 1	Started business with cash Rs. 100000 Goods Rs. 200000 and building Rs 300000
June 3	Open a current account with SBI Rs. 50000
June 5	Goods purchased Rs. 100000, trade discount 10% cash discount 5%, 20% of purchases are on cash basis
June 7	Goods sold Rs 200000 trade discount 20% cash discount 10%, 50% of sales are on cash basis
June 9	Salaries paid Rs 36000 by cheque after deducting TDS @ 10%
June 11	Cash received from debtors and discount allowed to him @ 20% Rs. 1000
June 13	Cash paid to creditors Rs 9500 and discount received from him @ 5%
June 15	Wages paid Rs. 3000 and wages due Rs. 2000



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HALF YEARLY EXAMINATION (2022-23)

Class - XI
Time - 3 Hours

Subject - Biology
Maximum Marks-70

General instructions

1. All questions are compulsory.
2. The question paper has four sections: Section A, Section B, Section C and Section D. There are 33 questions in the question paper.
3. Section-A has 14 questions of 1 mark each and 2 case-based questions. Section-B has 9 questions of 2 marks each. Section-C has 5 questions of 3 marks each and Section-D has 3 questions of 5 marks each.
4. There is no overall choice. However, internal choices have been provided in some questions. A student has to attempt only one of the alternatives in such questions.

Wherever necessary, neat and properly labelled diagrams should be drawn.

SECTION A

1. What is the unit of classification? [1]
2. Why are Deuteromycetes known as 'Imperfect Fungi'? [1]
3. What are Gemma ? [1]
4. Why are Platyhelminthes known as flatworms? [1]
5. What is a staminode ? [1]
6. Define metabolism. [1]
7. Bryophytes are called amphibians of the plant kingdom. Justify. [1]
8. What does the term 'red-tides' signify? [1]
9. Mention the role of radula in Mollusca. [1]

OR

- What is meant by metagenesis ?
10. What is a perianth ? [1]

DIRECTION (Q. No's 11 - 14)

In each of the following questions, a statement Assertion (A) is given followed by corresponding statement of Reason (R) of the statements, mark the correct answer as

- 1) If both A and R are true and R is the correct explanation of A.
- 2) If both A and R are true, but R is not the correct explanation of A.
- 3) If A is true, but R is false.
- 4) If both A and R are false

11. **ASSERTION (A)** - Slime moulds are called as fungus like animals. [1]

REASON (R) - These do not have cell wall

OR

ASSERTION (A) - Bacteria are prokaryotic

REASON (R) - Bacteria do not possess true nucleus and membrane bound cell organelles [1]

12. **ASSERTION (A)** - Production of two types of spores is a pre-requisite of seed habit. [1]

REASON (R) - In pteridophytes Lycopodium is precursor of seed habit.

13. **ASSERTION (A)** - Aschelminthes are called pseudocoelomates. [1]

REASON (R) - In Aschelminthes mesoderm is present as scattered pouches in between ectoderm and endoderm.

14. **ASSERTION (A)** - Non-living things exhibit growth, but not cell division. [1]

REASON (R) - Cell differentiation occurs exclusively in living organisms.

15. **DIRECTION** - Read the following and answer **any four** of the questions that follow:

Pteridophytes are primitive seedless vascular plants. Haeckel (1860) called these groups of plants as 'Pteridophytes' because of their pinnate or feather like fronds (leaves). These shade loving plants are few centimeters to 20 m long. The plant body of pteridophytes is differentiated into true root, stem and leaves which are either small or large. They also possess well-differentiated vascular tissues, i.e. xylem and phloem. Most of the pteridophytes are homosporous with few exceptional heterosporous species. The sporophyte produces spores and gametophyte bears antheridia and archegonia.

I. Pteridophytes mostly occur in [1]

(a) Cool, damp and shady places

(b) Dry and humid areas

(c) Hot and sunny places

(d) Freezing temperatures

II. Which is wrong about pteridophytes [1]

(a) Gametophytic phase is dominant

(b) Sporophytic phase is dominant

(c) Gametophyte is independent

(d) Rhizoids are attached to pinnae

III. *Selaginella* possesses [1]

(a) Strobili

(b) heterospores

(c) Sporophytic plant body

(d) All of the above

IV. Pteridophytes are also known as [1]

(a) Cryptogams

(b) vascular cryptogams

(c) Amphibious plants

(d) phanerogams

- V. **ASSERTION (A)** - In pteridophytes zygote produces a multicellular sporophytes.
REASON (R) - Sporophyte is the dominant phase in life cycle of pteridophytes. [1]

Choose the correct option.

- (a) If both A and R are true and R is the correct explanation of A.
- (b) If both A and R are true, but R is not the correct explanation of A.
- (c) A is true, but R is false.
- (d) If both A and R are false

16. **DIRECTION** - Read the following and answer **any four** of the questions that follow

The members of kingdom - Fungi are eukaryotic, heterotrophic and achlorophyllous. They are either unicellular or multicellular forms that are made up of hyphae. The network of hyphae forms the mycelium. These cell wall exhibiting organisms reproduce by both sexual asexual modes. On the basis of spore formation, fungi are classified as Phycomycetes, Ascomycetes, Basidiomycetes and Deuteromycetes. Based on the mode of nutrition, fungi are classified as saprophytic and parasitic forms. These are also found in symbiotic association with plants.

- I. Fungal cell wall is composed of [1]
 - (a) Cellulose and pectins
 - (b) Chitin and glycoproteins
 - (c) Chitin, glycoproteins and glucans
 - (d) Pectins, chitin and cellulose
- II. Club-fungi is [1]
 - (a) Phycomycetes
 - (b) Deuteromycetes
 - (c) Basidiomycetes
 - (d) Ascomycetes
- III. The spores that help fungi to undergo asexual reproduction during favourable conditions is [1]
 - (a) Zoospores
 - (b) aplanospores
 - (c) conidia
 - (d) All of these
- IV. Sexual reproduction in Ascomycetes occurs through [1]
 - (a) Somatogamy of zoospores
 - (b) Isogamy of zoospores
 - (c) Ascospores
 - (d) Both (b) and (c)
- V. **ASSERTION (A)** - Mycelium in Deuteromycetes is aseptate [1]
REASON (R) - Phycomycetes possess septate and branched mycelium
 - (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, but R is false
 - (d) Both A and R are false

SECTION B

17. Flower is a modified shoot. Justify. [2]

OR

Stamens of a flower may be united with the other members like petals. Describe the various types of stamens based on their attachment to the floral whorls

18. Pinus and Cycas belong to the same group. But the roots of pinus are different from that of cycas'. Explain how? [2]

19. 'All vertebrates are chordates but all chordates are not vertebrates.' Justify. [2]

20. Brinjal and potato belong to the same genus Solanum but to two different species. What defines them as separate species? [2]

21. What is the importance of pneumatic bones and air sacs in Aves? [2]

22. Fungi are cosmopolitan, write the roles of fungi in your daily life. [2]

OR

How are viruses different from viroid?

23. Endoparasites are found inside the host body. Mention the special structures possessed by them which enables them to survive in the adverse conditions. [2]

24. How are Liverworts different from Mosses? [2]

25. a) Lichens are good pollution indicators. Justify.

b) Draw a labelled diagram of a bacteriophage. [2]

SECTION C

26. Give reasons :

a) Cyanobacteria are used in agricultural fields for crop production

b) Diatoms are called ' chief producers of ocean'.

c) Euglenoids are called 'mixotrophs' [3]

27. Compare the three classes of algae on the basis of:

(i) Major pigments

(ii) Stored foods

OR

Explain the following with reasons:

a) The leaves of gymnosperms are needle like, have thick cuticle and sunken stomata.

b) The spread of living pteridophytes is limited restricted to narrow geographical regions.

c) Bryophytes are of little economic importance but *Sphagnum* is of great economic importance. [3]

28. Describe the different types flowers based on the position of the ovary [3]

29. Name the following

a) A limbless amphibian

b) Excretory organs in arthropoda

c) Free floating form of Cnidaria

d) Stinging organ of jelly fishes

e) Lateral appendages in aquatic annelids

f) An organ which regulates buoyancy [3]

30. Write a note on Archaeobacteria.

[3]

SECTION D

31. What is placentation? Describe the various types of placentations found in the flowering plants.

OR

What is aestivation? Discuss the major types of aestivation seen in a flower. [5]

32. (a) 'The study of the nature of body cavity and coelom in the classification of animals is important'. Support this statement with examples.

(b) 'Mammals are most adapted amongst the vertebrates'. Give four points to justify the statement.

OR

(a) Give three major differences between chordates and non-chordates.

(b) Comment upon the habitats and features of animals belonging to class Amphibia and Reptilia [5]

33. (a) Draw a well labeled diagram of the gametophyte and sporophyte of funaria.

(b) Briefly describe the main features of bryophytes.

OR

(a) Mention the four classes of pteridophytes

(b) Write a note on the economic importance of algae and gymnosperms [5]



DELHI PUBLIC SCHOOL
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HALF YEARLY EXAMINATION (2022-23)

Class - XI
Time - 3 Hour

Subject - Business Studies
Maximum Marks- 80

General Instructions:

1. This question paper contains 34 questions.
 2. Marks are indicated against each question.
 3. Answer should be brief and to the point.
 4. Answers to the questions carrying 3 marks may be from 50 to 75 words.
 5. Answers to questions carrying 4 marks may be about 150 words.
 6. Answers to the questions carrying 6 marks may be about 200 words.
 7. Attempt all parts of the question together.
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1. Identify the programme that was launched by the Government of India on 25th September 2014 to encourage companies to manufacture their products in India and incentivize with dedicated investments into manufacturing.
(a) Skill India
(b) Digital India
(c) Make in India
(d) None of these [1]
2. Tanmay has introduced a new method of packaging which is more user friendly. The objective of business being described in the above lines is ____
(a) Productivity
(b) Social Responsibility
(c) Innovation
(d) None of the above [1]
3. Lack of knowledge relating to the future conditions that the business is going to face in future is known as ____ (Fill in the blank) [1]
4. ____ activities are undertaken to satisfy social and psychological needs.
(Fill in the blank) [1]
5. Transportation removes the hindrance of time. (State True/False) [1]
6. Identify the related feature of a company that specifies, " its Assets and Liabilities are separate from those of its owners."
(a) Artificial Person
(b) Separate legal entity
(c) Perpetual Succession
(d) Common Seal [1]

7. A _____ can immediately start its operations on receiving the Certificate of Incorporation.
(a) Private Ltd. Company
(b) Public Ltd. Company
(c) Joint Hindu Family Business
(d) None of these [1]
8. Government Company is completely owned, managed and controlled by a Government Ministry. (State True/False) [1]
9. Name the two important documents to be prepared by a proposed Government company that needs to be registered like any other public limited company under Companies Act, 2013. [1]
10. Which of the following Public Sector enterprises do not enjoy a Separate Legal Entity?
(a) Departmental Undertaking
(b) Statutory Corporation
(c) Government Company
(d) None of the above [1]
11. The liability of shareholders of a government company is ____
(Fill in the blank) [1]
12. The Government of India has opted for a _____ economy where both private and government enterprises are allowed operate. (Fill in the Blank) [1]
13. Arya owns a business of manufacturing hospital disposables. He has taken a group life insurance policy covering all his staff members. Whenever, a new employee joins the firm his/her name is added to the list of employees covered in the policy. Likewise, when an employee leaves his/her name is removed from the list. Identify the principle of insurance applicable in the above case.
(a) Indemnity
(b) Insurable Interest
(c) Utmost Good Faith
(d) Proximate Cause [1]
14. Ranadheer took an insurance policy for his new car. In an accident his car is totally damaged. Insurance company settles his claim in time. Identify the party which will have a right to claim the amount realized through the sale of scrap of the car.
(a) Ranadheer
(b) Insurance company
(c) Both of them
(d) Neither of them [1]
15. The principle of Indemnity is not applicable to _____ insurance.
(a) Life
(b) Fire
(c) Marine
(d) None of these [1]
16. _____ is a service provided by banks on nominal commission charges to a customer for remittance purposes and it guarantees surety of payment.
(Fill in the blank) [1]
17. Name the two types of cheques that can be drawn to make the payments. [1]

18. Identify the bank account that interlinks the savings account with a deposit account and any amount in excess of a pre-determined amount is automatically transferred to a fixed deposit. [1]
19. Services are intangible in nature, which means that they ____ -
 (a) Involve simultaneous production and consumption
 (b) Are performed exclusively each time
 (c) Are experiential in nature
 (d) Cannot be stored for a future use [1]
20. Marine insurance provides protection against loss by sea perils i.e., enemy attacks, fire and actions of the captains etc. (State True/False) [1]
21. Profit is found to be a leading objective of business but not the only one. Do you agree with the given statement? Give reasons to justify your answer. [3]
22. Give the classification of primary industries and explain the same with the help of suitable examples. [3]
23. What do you mean by Joint Hindu Family Business? State the basis of membership and ownership of the members of the same. [3]
24. If registration is optional, why do partnership firms willingly go through this legal formality and get themselves registered? Explain by giving three suitable reasons. [3]
25. Give a comparative view of the three economic activities on the following basis :
 (i) Mode of establishment
 (ii) Reward or Return
 (iii) Capital Investment
 (iv) Code of conduct [4]
26. Bhavana is running a Sole Proprietorship business. Over the past decade, her business has grown from a small neighbourhood corner shop selling accessories such as artificial jewelry, bags, hair clips and nail art to a big retail house with the branches in different parts of the city. Although she looks after varied functions, management of expanded business has become a challenging task. She is wondering whether she should form a Company form of organisation for better management of the business.
 (a) Explain Two advantages of remaining a Sole Proprietor.
 (b) Explain Two benefits of converting it to a Joint Stock Company. [4]
27. Explain the following:
 (a) Consumer's cooperative societies
 (b) Credit cooperative societies [4]
28. Railways and Post and Telegraph department are the prominent examples of one of the forms of public sector enterprises. Identify and State any three advantages of it. [4]
29. It is a Public Sector Enterprise established under Indian Companies Act and conducts business in competition with companies in Private Sector.
 (a) Identify the type of Public Sector enterprise.
 (b) What is the minimum investment Government has to make in such companies?
 (c) Explain any two advantages of such companies. [4]

30. Amar purchased a new office in Bangalore, and decided to take a double insurance policy for it. He got his office insured with Company A for Rs. 2 crores and with Company B for Rs. 3 crores. Due to negligence of the security guards, a theft occurred in his office, and many laptops and other electronic gadgets were stolen. The amount of loss was estimated to be Rs. 50 lakhs. Amar has decided to file a claim with both the insurance companies for Rs. 50 lakhs each.
- In context of the above case:
- (a) How do you think he will be compensated for the loss in this case by the two insurance companies?
 - (b) Calculate the relative share of each of the two companies in settling the claims of Amar.
 - (c) In case Company A decides to pay Rs. 50 lakhs to Amar, how much amount of the claim will be due from Company B to Company A?
 - (d) Identify the related principle of insurance applicable in the given case and explain the same. [4]
31. Answer the following briefly:
- (a) What do you mean by Business Risk?
 - (b) State the types of business risk.
 - (c) Explain the various causes of business risks briefly. [1+1+4 = 6]
32. What do you mean by a Private Limited Company? State any four privileges of a Private Limited Company as against a Public Limited Company. [6]
33. The Reserve Bank of India was established under a special Act of the Parliament, that lays down the objects, powers and functions of the corporation. It was established on 1st April, 1935 in accordance with the provisions of RBI Act, 1934. RBI formulates , implements and monitors the monetary policy and its main objective is to maintain price stability while keeping in mind the objective of growth. How will you classify RBI as a form of Public Sector Enterprise? Explain any three merits and two limitations of this type of Public Sector Enterprise. [6]
34. What do you mean by Banking? Explain the following briefly:
- (a) Bank Overdraft
 - (b) Cash Credit
 - (c) Savings bank account
 - (d) Fixed Deposit account
 - (e) Recurring Deposit Account [6]
-



DELHI PUBLIC SCHOOL
SAIL TOWNSHIP, RANCHI
HALF YEARLY EXAMINATION (2022-23)

Class - XI
Time - 3 Hours

Subject - Chemistry
Maximum Marks- 70

GENERALINSTRUCTIONS:-

- (i) Question paper comprises of four sections A, B, C and D.
- (ii) There are 33 questions in the question paper and all questions are compulsory.
- (iii) Section A: Q1 to Q2 are case based questions having four MCQ or Reason-Assertion type based on given passage, each carrying 1mark.
- (iv) Section A: Q3 to Q16 are MCQ questions, carrying 1mark each.
- (v) Section B: Q17 to Q25 are short answer questions and carry 2 marks each.
- (vi) Section C: Q26 to Q30 are short answer questions and carry 3 marks each.
- (vii) Section D: Q 31to Q33 are long answer questions carrying 5 marks each.
- (viii) There are no overall choices. However internal choices have been provided.

SECTION-A

1. Read the passage given below and answer the questions:

Binary solutions can be nine different types depending upon the nature of the solute and nature of the solvent whether solid, liquid or gas. They may be further classified as solid, liquid or gaseous solutions based on the component which acts as solvent. However, the liquid solutions are the most important. Both solids and gases dissolve in liquids resulting in homogenous mixture i.e., solutions. The solubility is governed by no. of factors such as nature of solute and solvent, temperature, pressure etc. The concentration of the solutions can be expressed in different ways such as molarity, molality, mole fraction etc. Out of these molality and mole fraction are better as they do not change with the change in temperature.

The following questions are multiple choice questions with single correct answer.

[1x4=4]

- i) One molal solution contains one mole of solute in
 - a. 1000 gm of the solvent
 - b. One litre of the solvent
 - c. One litre of the solution
 - d. 22.4 litre of the solution

ii) The mole fraction of solute in 2 molal aqueous solution is:

- a. 1.77
- b. 1.87
- c. 0.347
- d. 0.0347

iii) A concentration of 1ppm means that:

- a. each kilogram of a solution contains 1mg. of the solute.
- b. each gram of solution contains 1gm of the solute.
- c. each kilogram of solution contains 1gram of solute.
- d. each kilogram of solution contains 1 ml solute.

iv) Molality of sucrose solution changes if:

- a. temperature is increased
- b. some water is added.
- c. in both a and b cases.
- d. in none of the above cases.

2. Read the passage given below and answer the following questions:

[1x4 =4]

An electron in atom can be fully described in terms of certain constants known as quantum numbers. These are the four out of which principal, azimuthal, magnetic quantum numbers have been derived from Schrodinger wave equation. However, the spin quantum number arises from the spin of the electron around its own axis which may be clockwise or anticlockwise in nature.

In the following questions, a statement of assertion followed by a statement of reason is given. Choose the correct answer out of the four choices:

- a. Assertion and Reason both are correct statements and reason is correct explanation for assertion.
- b. Assertion and Reason both are correct statements but reason is not the correct explanation for assertion.
- c. Assertion is correct statement but reason is wrong statement.
- d. Assertion is wrong statement but reason is correct statement.

i) **Assertion:** An orbital can not have more than two electrons and their spin must be opposite.

Reason: No Two electrons in an atom can have same set of all the four quantum numbers

ii) **Assertion:** The quantized energy of an electron is largely determined by the principal quantum number.

Reason: The principal quantum number is a measure of the most probable distance of finding the electron around the nucleus of an atom.

iii) **Assertion:** Angular momentum of the electron in 4p orbital is greater than that of in the 3p orbital.

Reason: Energy of 4th orbit is greater than that of the third orbit.

iv) **Assertion:** No two orbitals have the same number of radial nodes.

Reason: No. of radial nodes of any orbital depends upon the value of principal and azimuthal quantum numbers.

Following questions (Q3-Q16) are multiple choice questions carrying 1 mark each with single correct answer:

3. Which is the best example of law of conservation of mass?
 - a. When 6 gm of carbon is heated in vacuum, there is no change in mass
 - b. 6 gm of Carbon combines with 16 gm of oxygen to form 22 gm of CO_2
 - c. 6 gm of water is completely converted in steam
 - d. A sample of air is heated at constant pressure when its volume increases but there is no change in mass.
4. CH_4 is burnt in the availability of oxygen. If 5 moles of each of the component is present then which one is the limiting reactant?
 - a. CH_4
 - b. O_2
 - c. Both a and b
 - d. Neither a nor b
5. A sample of Ammonium phosphate $(\text{NH}_4)_3\text{PO}_4$ contains 6 moles of hydrogen atoms. The no. of mole of oxygen atoms in the sample is:
 - a. 1
 - b. 2
 - c. 4
 - d. 6
6. The ratio of masses of oxygen in the various oxides of nitrogen prove the law of:
 - a. Reciprocal proportion
 - b. Multiple proportion
 - c. Constant proportion
 - d. Conservation of mass
7. According to the Bohr theory, which of the following transition in the hydrogen atom will give rise to the least energetic photon?
 - a. $n=6$ to $n=1$
 - b. $n=5$ to $n=4$
 - c. $n=6$ to $n=5$
 - d. $n=5$ to $n=3$
8. In Cu (Atomic no. 29):
 - a. 13 electrons have spin in one direction and 16 electrons in other direction
 - b. 14 electrons have spin in one direction and 15 electrons in other direction
 - c. One electron has spin only in clockwise direction
 - d. None of the above is correct

9. $\Psi^2 = 0$ represents:
- A node
 - An orbital
 - Angular wave function
 - Wave function
10. Which one is a set of isoelectronic species?
- $\text{N}_2, \text{CO}_2, \text{CN}^-$
 - $\text{N}, \text{H}_2\text{S}, \text{CO}$
 - $\text{N}_2, \text{CO}, \text{CN}^-$
 - $\text{Ca}, \text{Mg}, \text{Cl}$
11. The IUPAC symbol for the element with atomic number 119 would be
- Uue
 - Unh
 - Uun
 - Uue
12. The first ionization enthalpy of the following elements are in the order
- $\text{C} < \text{N} < \text{Si} < \text{P}$
 - $\text{P} < \text{Si} < \text{N} < \text{C}$
 - $\text{P} < \text{Si} < \text{C} < \text{N}$
 - $\text{Si} < \text{P} < \text{C} < \text{N}$
13. An element with atomic number 21 is
- Transition element
 - Alkali metal
 - Halogen
 - Representative element.
14. Which of the following element has the maximum negative electron gain enthalpy?
- Oxygen
 - Chlorine
 - Fluorine
 - Nitrogen.
15. The screening effect of d electron is
- Much less than s- electrons
 - Much more than s- electrons
 - Equal to s -electrons.
 - Equal to p- electrons.
16. The most non metallic element among the following is :
- Be
 - B
 - Mg
 - Al

Section – ‘B’

The following questions Q 17- Q25 are short answer type questions and carry 2 marks each. [2x9 =18]

17. State Avogadro's law. How does this law help in calculating atomicity of oxygen ?
18. state the law of multiple proportion with suitable example.
19. Write two differences between molality and molarity.
20. Explain why the uncertainty principle is significant only for the motion of subatomic particles and is negligible for macroscopic object.

OR

What is the wavelength of the light emitted when the electron in a hydrogen atom undergoes transition from the energy level with $n=4$ to the energy level $n=2$. ($R = 109678 \text{ cm}^{-1}$)

21. What are the main differences between electromagnetic wave theory and Planck's quantum theory?
22. Write electronic configuration of Cr (24). Why are the half - filled orbitals more stable?
23. What is screening effect? How does it influence ionization enthalpy?
24. How will you justify the presence of 18 elements in 5th period and 32 elements in 6th period of modern periodic table?
25. Write differences between electron gain enthalpy and electronegativity

Section C

The following questions Q.26 to Q.30 are short answer type questions carrying 3 marks.

[3x 5 =15]

26. What are the postulates of Dalton's atomic theory? How do the law of chemical combinations follow from it?
27. Conc HCl used in laboratory is 38 % by mass in aqueous solution. What should be the molarity of such sample of the acid, if the density of the solution is 1.19 gm cm^{-3} . What volume of conc HCl is required to make 1.0 litre of 0.10 M HCl?

OR

Conc sulphuric acid is 98% H_2SO_4 by mass and has a density 1.84 gm cm^{-3} , what volume of conc acid is required to make 5.0 litre of 0.50M sulphuric acid solution?

28. Derive deBroglie's equation. How do de Broglie's wave differ from electromagnetic wave ?
29. Table tennis ball has a mass 10gm and a speed of 90 m /s .If speed can be measured within the accuracy of 4% ,what will be the uncertainty in speed and position ?
30. Give reason for the following.
 - (i) Noble gases have positive electron gain enthalpy.
 - (ii) Radius of anion is more than that of the atom.
 - (iii) Halogens act as good oxidizing agent.

Section D

Direction :Q. 31 to Q. 33 are long answer type questions, carrying 5 marks each.

31. (a) Write the basic difference between the empirical formula and molecular formula. Explain with suitable example.
- (b) Butyric acid contains only carbon, hydrogen and oxygen. A 4.24 mg of sample of Butyric acid is completely burnt, it gives 8.45 mg of CO_2 and 3.46 mg of H_2O . What is the percentage mass of each component in butyric acid ? If the molecular mass of Butyric acid is 88 u. What is the molecular formula ?

[2 + 3]

OR

- (a) What do you understand by the term Formula Mass ? How does it differ from Molecular Mass?
- (b) From 200 mg of CO_2 , if 10^{21} molecules are removed. How many moles of the gas are left ?
32. (a) Show that the circumference of Bohr's orbit for the H-atom is an integral multiple of the de- Broglies wavelength of electron revolving around the orbit.
- (b) A bulb emits light of wavelength 4500 \AA . The bulb is rated as 150 watt & 8 % energy is emitted as light. How many photons are emitted by the bulb per second ? [1 watt = J sec^{-1} ; $h = 6.626 \times 10^{-34} \text{ J Sec.}$]

OR

- (a) What is photo electric effect ? What are the main observations of photoelectric effect ?
- (b) When a photon of frequency $1.0 \times 10^{15} \text{ S}^{-1}$ was allowed to hit a metal surface ; an electron having $1.988 \times 10^{-19} \text{ J}$ of kinetic energy was emitted. Calculate the threshold frequency of this metal. Show that an electron will not be emitted if a photon with a wavelength equal to 600 nm hits this metal surface.

[2 + 3]

33. (i) What do you mean by successive electron gain enthalpies ? Why is the second electron gain enthalpy of an atom positive ? Explain with example.
- (ii) Define covalent radius. How does it vary in group &period ?

[3 + 2]

OR

- (i) What are transition elements ? Why are they so called ? Write few properties of such elements.
- (ii) What do you mean by diagonal relationship ? What is the cause for it ?



DELHI PUBLIC SCHOOL

SAIL TOWNSHIP, RANCHI

HALF YEARLY EXAMINATION (2022-23)

Class - XI
Time - 3 Hours

Subject - Computer Science
Maximum Marks-70

General Instructions:-

- The question paper is divided into 4 sections-A,B,C and D.
 - Section A, consists of 10 multiple choice questions. Each question carry 1 mark.
 - Section B, consists of 10 questions. Each question carries 2 marks.
 - Section C, consists of 8 questions. Each question carries 3 marks.
 - Section D, consists of 1 question, carry 4 marks.
-

SECTION-A (Multiple Choice questions) [10x1=10 Marks]

1. Which of the following falls under utilities?
 - (a) Text editor
 - (b) Backup
 - (c) Disk defragmenter
 - (d) All of these
2. ROM is a
 - (a) Volatile Memory
 - (b) Non-Volatile memory
 - (c) Both (a) and (b)
 - (d) None of these
3. Which smaller unit of CPU directs and coordinates all activities within it and determine the sequences in which instructions are executed, sending instruction sequence to other smaller units?
 - (a) CU
 - (b) ALU
 - (c) Processor
 - (d) All of these
4. Which numbering system uses numbers and letters as symbols?
 - (a) Decimal
 - (b) Binary
 - (c) Octal
 - (d) Hexadecimal

5. Which of the following are the fundamental building blocks of a Python program?
- (a) Identifiers
 - (b) Constants
 - (c) Punctuator
 - (d) Tokens
6. Python language is _____
- (a) Free
 - (b) Open Source
 - (c) Free and Open Source
 - (d) Proprietary
7. Write the output of the following code:
- ```
A=2
A=5
A=A+A
print(A)
```
- (a) 4
  - (b) 7
  - (c) 10
  - (d) Error
8. Which of the following symbol is used to write comment in python?
- (a) ?
  - (b) //
  - (c) #
  - (d) \*\*
9. Which gates return true if both inputs are similar otherwise false.
- (a) NAND
  - (b) NOR
  - (c) XOR
  - (d) None of the above
10. The expression of NAND gate is \_\_\_\_\_
- (a)  $A.B$
  - (b)  $A'B+AB'$
  - (c)  $(A.B)'$
  - (d)  $(A+B)'$

**SECTION-B [13X2=26 Marks]**

11. What is an application software? Why is it required?
12. What do you mean by ROM? What are PROM and EPROM?
13. Convert the following hexadecimal numbers to decimal:
- (a) A6
  - (b) A13C



14. Convert the following hexadecimal numbers to octal:  
 (a) 38AC (b) 7FD6.4B
15. Convert the following binary numbers to octal:  
 (a) 1100111011 (b) 111010111.10101
16. Convert the following decimal numbers to binary:  
 (a) 1365.25 (b) 766.75
17. Add the following binary numbers:  
 (a) 10110111,1110010 and 1100101 (b) 1110.110 and 11010.011
18. Draw a logical circuit diagrams for (both L.H.S and R.H.S), of the following Boolean Expression:  $(X.Y+Y.Z+Y'.Z) = (X.Y+Z)$ .
19. Identify the invalid variable names from the following and specify the reason also.  
 (a) m\_n  
 (b) unit\_day  
 (c) 24Apple  
 (d) #sum  
 (e) for  
 (f) s name
20. Evaluate the following expressions:  
 (a)  $(15 > 9 \text{ and } 34 > 56 \text{ or } 90 > 60 \text{ and not } 21 > 10 \text{ and } -8 > -10)$   
 (b)  $12 \% 4 + 6 + 4 // 3$
21. What do you mean by dynamic typing? Explain with examples.
22. Define the following term:  
 (a) Token  
 (b) Keywords  
 (c) Operand  
 (d) String
23. Write the output of the following:  
`>>>x , y = 3, 5`  
`>>>x, y = y, x + 6`  
`>>>print(x,y)`

**SECTION-C [10X3=30 Marks]**

24. What do you mean by operating system? Explain any four functions of an operating system?
25. What do you mean by booting? Explain the types of booting.
26. Explain the following term:  
 (a) Bus (b) Registers (c) BIOS
27. State DeMorgan's Law of Boolean Algebra and verify them using truth table.
28. Name the law shown below and verify it using a truth table:  
 $A+B.C=(A+B).(A+C)$

29. Write a program to calculate the electricity bill (accept number of units from user) according to the following criteria :

| Unit            | Price          |
|-----------------|----------------|
| First 100 units | no charge      |
| Next 100 units  | Rs 5 per unit  |
| After 200 units | Rs 10 per unit |

(For example if input unit is 350 than total bill amount is Rs2000)

30. Design a menu driven program to perform the following operations:

1. Volume of cylinder
2. Volume of cone
3. Volume sphere
4. Volume hemisphere

31. Write a program to find the largest number and smallest number, out of three unequal integers, provided by the user.

32. Write a program to check whether an inputted year (in 4 digits), is leap year or not.

33. Write a program to accept two numbers and mathematical operators and perform arithmetic (+,-,\*,/,%,) operation accordingly.

#### SECTION-D [1X4=4 Marks]

34. (a) Write a Program to accept the marked price from the user and calculate the Net amount as (Marked Price - Discount) to pay according to following criteria: [2 Marks]

| Marked Price         | Discount |
|----------------------|----------|
| >10000               | 20%      |
| >7000 and<br><=10000 | 15%      |
| <=7000               | 10%      |

(b) Write a program to enter any three numbers and swap their values without using fourth variable. [2 Marks]



**DELHI PUBLIC SCHOOL**  
**SAIL TOWNSHIP, RANCHI**  
**HALF YEARLY EXAMINATION (2022-23)**

**Class - XI**  
**Time - 3 Hours**

**Subject - Economics**  
**Maximum Marks- 80**

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**General Instructions**

1. Question Paper consists of two sections, carrying equal weightage.
  2. Internal options have been provided in some questions.
  3. Q1 to Q10 in Section A and Q18 to Q27 consists of 1 mark each.
  4. Q11 and Q12 in Section A and Q28 and Q29 consist of 3 marks each.
  5. Q13 to Q15 in Section A and Q30 to Q32 consists of 4 marks each.
  6. Q16 and Q17 in Section A and Q33 and Q34 consist of 6 marks each.
  7. Marks distribution has been mentioned wherever required.
  8. Solve numericals clearly, with proper steps.
  9. Write in points wherever possible.
  10. Handwriting should be legible.
  11. Use graph paper wherever needed.
- 

**MICROECONOMICS (40 Marks)**

1. The opportunity cost of 100 kg of rice produced on a land which can also produce 80 tonnes of wheat is:  
(a) 100 kg of wheat  
(b) 80 tonnes of wheat  
(c) 8000 tonnes of wheat  
(d) None of these [1]
2. Concavity of PPC implies:  
(a) Increasing slope  
(b) Decreasing slope  
(c) Constant slope  
(d) None of these [1]
3. Law of Diminishing Marginal Utility states that when more and more units of a commodity are consumed, marginal utility:  
(a) Begins to increase  
(b) Remains constant  
(c) Begins to decrease  
(d) Becomes constant [1]

**OR**

When total utility is maximum, marginal utility becomes:

- (a) Zero
- (b) Unity
- (c) Positive
- (d) Negative [1]

4. A shift in the budget line, when prices are constant, is due to:

- (a) Change in demand
- (b) Change in income
- (c) Change in preferences
- (d) Change in utility [1]

5. Marginal Rate of Substitution of X for Y is calculated as:

- (a)  $P_x/P_y$
- (b)  $P_y/P_x$
- (c)  $\Delta Y/\Delta X$
- (d)  $\Delta X/\Delta Y$  [1]

6. The production possibility curve will shift to the right when there is a/ an:

- (a) Advancement of technology for the production of only commodity X
- (b) Increase in availability of resources
- (c) Decrease in availability of resources
- (d) None of these [1]

7. State whether True or False:

Marginal Utility can never be negative. [1]

8. If  $MU_x/P_x < MU_y/P_y$ , then the consumer should buy \_\_\_\_\_ (less/more) of commodity X and \_\_\_\_\_ (less/more) of commodity Y. [1]

9. Budget Line is also known as \_\_\_\_\_ (price/ expense) line. [1]

10. In case of consumer's equilibrium with two commodities when the price of commodity y rises:

- (a) Consumer starts to buy less units of commodity X
- (b) Consumer starts to buy more units of commodity Y
- (c) Consumer does not make any change in the purchase of X and Y
- (d) Consumer starts to buy less units of commodity Y [1]

11. Explain the central problem of 'how to produce'. [3]

**OR**

Explain the central problem of 'what to produce'. [3]

12. Suppose a consumer's income is Rs. 20. Price of Good X is Rs. 4 per unit and the price of Good Y is Rs. 2 per unit. State the bundles which the consumer can purchase if he spends his entire income. On this basis, also draw the budget line. [3]

13. A consumer consumes commodity X. The price of commodity X is Rs. 4. The Marginal Utility of Money is 2 utils. Given the following Marginal Utility Schedule, find out the position where the consumer will be at equilibrium. [4]

| Units of Good X | Marginal Utility of Good X |
|-----------------|----------------------------|
| 1               | 20                         |
| 2               | 18                         |
| 3               | 16                         |
| 4               | 8                          |

14. Calculate marginal opportunity cost from the following table and plot the production possibility curve: [4]

| Production possibilities | Shirts | Pens |
|--------------------------|--------|------|
| A                        | 0      | 20   |
| B                        | 1      | 18   |
| C                        | 2      | 14   |
| D                        | 3      | 8    |
| E                        | 4      | 0    |

15. (a) Diagrammatically, show that higher indifference curve offers higher level of satisfaction. [2]  
 (b) Diagrammatically, show that two indifference curves can never intersect each other. [2]

**OR**

Explain the relationship between Total Utility and Marginal Utility, using schedule and diagram. [4]

16. Define an indifference curve. Use a schedule and diagram to show an IC. Explain the reason behind downward sloping and convex to the origin Indifference Curve. [6]

**OR**

A consumer consumes two goods X and Y. Given below is a schedule. Find out the conditions of consumer's equilibrium under the Law of Equimarginal Utility. Also, explain the changes that will take place when the consumer is not in equilibrium.

Given: Price of Good X = Rs. 3

Price of Good Y = Rs. 4

Marginal Utility of Money = 9

Income = Rs. 20

| Units | MU of Good X | MU of Good Y |
|-------|--------------|--------------|
| 1     | 36           | 40           |
| 2     | 33           | 36           |
| 3     | 30           | 32           |
| 4     | 27           | 28           |
| 5     | 24           | 24           |
| 6     | 21           | 20           |

[6]

17. What are the conditions for consumer's equilibrium under ordinal approach? Show consumer's equilibrium with the help of indifference curve analysis. [6]

**STATISTICS (40 Marks)**

18. In the plural sense, which of the following is not a characteristic of Statistics?

- (a) Aggregates of data
- (b) Only expressed in words
- (c) Affected by multiplicity of causes
- (d) Collected in a systematic manner

[1]

19. Which of the following is a merit of a good questionnaire?

- (a) Difficulty
- (b) Less number of questions
- (c) Not in proper order
- (d) Invalid questions

[1]

20. From the given data, calculate the number of workers earning more than Rs. 160

| Wages          | 140-150 | 150-160 | 160-170 | 170-180 | 180-190 | 190-200 |
|----------------|---------|---------|---------|---------|---------|---------|
| No. of workers | 5       | 10      | 20      | 9       | 6       | 2       |

- (a) 47
- (b) 17
- (c) 37
- (d) None of these

[1]

21. A series in which every class interval excludes items corresponding to its upper limit is called:
- (a) Exclusive series
  - (b) Inclusive series
  - (c) Both (a) and (b)
  - (d) None of these
- [1]
22. False base line is used when there is a big difference between the smallest value and \_\_\_\_\_.  
(highest value/ zero)
- [1]
23. Histogram and Ogive can be obtained on the graph when the series is:
- (a) Individual series
  - (b) Discrete series
  - (c) Continuous series
  - (d) None of the above
- [1]
24. The price rise of a particular commodity over a period of time can be better presented on a:
- (a) Bar diagram
  - (b) Histogram
  - (c) Time series graph
  - (d) Frequency polygon
- [1]

**OR**

A curve obtained by joining midpoints of adjacent rectangles of the histogram by straight lines is called:

- (a) Frequency curve
  - (b) Frequency polygon
  - (c) Ogive
  - (d) None
- [1]
25. The arithmetic mean of the observations 9, 8, 27, 36 and 45 is:
- (a) 18
  - (b) 25
  - (c) 36
  - (d) None
- [1]
26. The mean value of the marks obtained by 20 students in a class is 25 marks. If 10 marks added to every student, then new mean is:
- (a) 25
  - (b) 35
  - (c) 40
  - (d) None
- [1]
27. Sum of deviations of different values from arithmetic mean is always equal to:
- (a) Zero
  - (b) One
  - (c) Less than one
  - (d) More than one
- [1]

28. What is systematic or quasi-random sampling? Explain with suitable example. [3]

**OR**

Name any two methods of collecting primary data. Discuss two merits and two demerits of any one of them. [3]

29. Convert the following more than distribution into a less than distribution. [3]

| Marks        | No. of students |
|--------------|-----------------|
| More than 0  | 55              |
| More than 5  | 51              |
| More than 10 | 43              |
| More than 15 | 28              |
| More than 20 | 16              |
| More than 25 | 6               |
| More than 30 | 0               |

30. Prepare histogram and frequency polygon on a graph paper from the following data: [4]

| Marks           | 0-10 | 10-20 | 20-30 | 30-40 | 40-50 | 50-60 |
|-----------------|------|-------|-------|-------|-------|-------|
| No. of students | 5    | 8     | 15    | 11    | 6     | 4     |

**OR**

Represent the following data related to exports and imports of India (hypothetical figures) graphically: [4]

| Year                   | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 |
|------------------------|------|------|------|------|------|------|------|
| Exports (in Rs.Crore)  | 300  | 350  | 400  | 380  | 450  | 280  | 250  |
| Imports (in Rs. Crore) | 420  | 460  | 600  | 480  | 550  | 450  | 400  |

31. Calculate Arithmetic Mean, using Step-deviation method: [4]

| Marks           | 10-20 | 20-30 | 30-40 | 40-50 |
|-----------------|-------|-------|-------|-------|
| No. of students | 24    | 40    | 36    | 20    |



32. Graph the following data in the form of less than ogive and more than ogive: [4]

|                        |     |      |       |       |       |       |       |       |
|------------------------|-----|------|-------|-------|-------|-------|-------|-------|
| <b>Marks</b>           | 0-5 | 5-10 | 10-15 | 15-20 | 20-25 | 25-30 | 30-35 | 35-40 |
| <b>No. of students</b> | 4   | 6    | 10    | 10    | 25    | 22    | 18    | 5     |

33. Present the following information in a suitable tabular form:

- (i) In 2016, out of 3000 union members, 2500 were females. The number of non-union workers was 700, of which, 250 were men.
- (ii) In 2017, out of 2000 workers, 1550 were members of trade union. The number of women workers was 250, out of which 200 did not belong to any trade union.
- (iii) In 2018, the number of union members was 1,725 of which 1600 were men. The number of non-union workers was 380, among which 155 were women. [6]

34. (a) On the basis of the given data, prove that "The sum of the squares of the deviations from arithmetic mean is the least". [3]

|          |   |   |   |   |   |
|----------|---|---|---|---|---|
| <b>X</b> | 1 | 2 | 3 | 4 | 5 |
|----------|---|---|---|---|---|

- (b) The mean salary paid to 1000 workers of a factory was found to be Rs. 180.4. Later on it was discovered that the wages of two workers were wrongly taken as 297 and 165 instead of 197 and 185. Find the correct mean. [3]

**OR**

(a) Find the missing frequency, if the mean is 28. [3]

|                  |      |       |       |       |       |       |
|------------------|------|-------|-------|-------|-------|-------|
| <b>C.I.</b>      | 0-10 | 10-20 | 20-30 | 30-40 | 40-50 | 50-60 |
| <b>Frequency</b> | 12   | ?     | 27    | 20    | 17    | 6     |

(b) Calculate Combined Mean: [3]

| <b>Section</b> | <b>Mean Marks</b> | <b>No. of students</b> |
|----------------|-------------------|------------------------|
| A              | 75                | 50                     |
| B              | 60                | 60                     |
| C              | 55                | 50                     |



# DELHI PUBLIC SCHOOL SAIL TOWNSHIP RANCHI

## Half-yearly Examination

### Class XI

(Session 2022-23)

### English Core

Time : 3 Hours

Max. Marks : 80

#### GENERAL INSTRUCTIONS

- This paper is divided into three sections A, B and C. All the sections are compulsory.
- Separate instructions are given with each section and question, wherever necessary. Read the instructions very carefully and follow them faithfully.
- Do not exceed the prescribed word-limit while answering the questions.

#### Section – A (Reading) [26]

- I. Read the passage given below and answer the questions that follow. [1x10=10]**
- (1) Like Celine Dion’s Academy Award-winning Titanic theme song, ‘My Heart Will Go On’, the mystery around what led to the sinking of the superliner on 14 April, 1912, it seems, will continue forever. So even one hundred years after the incident happened, we have yet another theory bobbing to the surface. To recount the old official tale, RMS Titanic was on its way from Southampton to New York when it struck an iceberg just off the coast of Newfoundland. The massive blow hit the 100-metre long starboard section of the hull, creating a huge fissure in its hull. Seawater rushed inside its six supposedly watertight compartments. Soon all the cabins were flooded and within the next three hours, the ship went down. More than 1,500 people lost their lives in disaster. According to some hypotheses, Titanic was doomed from the start by the design so many lauded as state of the art.
- (2) But not many bought this theory and a legion of stories about the legend began to come out. The latest has been floated by science writer Richard Corfield who says that the rivets that held the ship’s hull together were not according to their specifications in composition or quality and gave way when the ship hit the iceberg. A quick web search, however, reveals that the fascinating thing called the human mind is capable of much more; while one pinned the accident down to a fire inside the ship’s coal bunkers, another one talked about the curse of the Pharaohs because a traveler had with him a sarcophagus containing the mummy of an ancient Egyptian priestess. Other than these glamorous theories, there are the ordinary ones: the helmsman making a steering blunder and the ship moving too fast to win the Blue Riband, a prestigious prize awarded to a ship for making the fastest North Atlantic crossing.
- (3) So, what makes the Titanic story tick? From the very beginning, its story was tailor-made to be fascinating copy. Investigating it made good business too: from books to research grants to underwater expeditions, not to mention a mega budget movie. In other words, the Titanic story has been done to death. May be the hundredth year is a good time to leave the ship in its watery grave once and for all.

#### Attempt the questions given below by selecting the most appropriate option.

- (i) According to Richard Corfield, the cause of sinking of the Titanic was.....
- (a) The cursed mummy being carried in the ship.
  - (b) The helmsman moving the ship too fast
  - (c) The poor quality of the rivets
  - (d) A fire inside the ships coal bunkers.
- (ii) The prize for the fastest ship to cross the North Atlantic was the .....
- (a) Sarcophagus Prize
  - (b) Blue Riband
  - (c) North Atlantic Prize

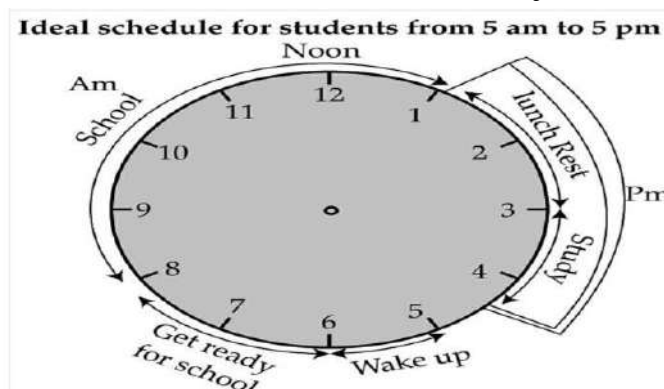
- (d) None of these
- (iii) Investigation to the Titanic story led to good business in .....
  - (a) Ship construction
  - (b) Underwater fishing
  - (c) Tailor-made stories
  - (d) Publishing books
- (iv) The word.....in paragraph 2 means 'large number'.
  - (a) Legion
  - (b) Together
  - (c) Numerous
  - (d) Fastest

**Attempt the questions given below by answering them as briefly as possible .**

- (v) How can Celine Dion's Academy Award-winning theme song be compared with the mystery around what led to the sinking of the Titanic?
- (vi) What blunder did the helmsman make and why?
- (vii) Who were the people who profited from the Titanic disaster?
- (viii) When did the Titanic sink?
- (ix) Why Titanic was doomed from the start?
- (x) How many people lost their lives in the disaster?

**II. Read the passage given below carefully and answer the questions that follow. [1x8=8]**

- (1) Keep your watch accurate. For some people moving up the time on their watch will help them get up earlier. For others, they will remember that the time on the watch is wrong and will disregard it altogether. It may be helpful to set your watch just two minutes ahead instead of five or ten.
- (2) Keep a clock, phone, computer or anything that displays time in each room of your house. One of the easiest ways to run late is simply by not realising that the time is passing as quickly as it is.
- (3) Set all your clocks and watches to the same time. Don't be too optimistic. Things usually take longer than what you would expect, even without major delays. If you have a dinner appointment at 7:30 p.m., don't think you can work till 7:00 p.m., then take a bath, dress and reach on time. Realistically, calculate the time you will take at each step and then add 10 minutes more to allow for unexpected delays, or you cannot get to your job done in time.
- (4) Wake up when you are supposed to wake up. Don't hit the snooze button, keep on lying in bed, and watch TV at the very start of your day. Maybe you can try even setting your alarm-clock ten minutes earlier than you need. If you have difficulty with this, move your alarm clock to somewhere away from your bed; that way, you will have to get up to turn it off. Commit yourself to being 15 minutes early for everything. If you have to reach your place of work at 8:00 am, don't even tell yourself this. Just tell yourself (and everyone else who listens - but don't annoy them or make them think that they are late or early!) "I have to be at work at 7:45." If you do this, you will be on time even with little unforeseen delays. You will be on time even with a traffic jam.



**Attempt the questions given below by selecting the most appropriate option.**

- (i) It is good to commit yourself \_\_\_\_\_ for everything
  - (a) To be late
  - (b) To delay
  - (c) To being 15 minutes early
  - (d) To search to the last moment
- (ii) The writer suggests to keep the watch \_\_\_\_\_ .
  - (a) Ahead of time
  - (b) Accurate
  - (c) Inaccurate
  - (d) None of these
- (iii) The given chart shows that students should get up \_\_\_\_\_ .
  - (a) Before 5 a.m.
  - (b) After 5 p.m.
  - (c) Between 5 a.m. to 6 a.m.
  - (d) At 7 a.m.
- (iv) A student spends maximum time in \_\_\_\_\_ during the day time.
  - (a) Taking meals
  - (b) Taking rest
  - (c) School
  - (d) Sleep

**Attempt the questions given below by answering them as briefly as possible.**

- (v) What has been described as one of the easiest ways of running late by the author?
- (vi) Which word from the second paragraph means ‘to become conscious of something’?
- (vii) Mention one of the various ways suggested by the author to wake up on time.
- (viii) How much liberty should we take for keeping our watch accurate?

**III. Read the passage given below carefully and answer the questions that follow. [5+3=8]**

- (1) The nine letter word “interview” can cause the most knowledgeable and strong person to perspire. That may be one reason, political leaders and corporate giants normally do not agree for an interview. But the popular ones, or those who want to make an impact, willingly give interviews. In modern times, whether you like interview or not, your prospects depend on its success. So you must know what an interviewer expects from you.
- (2) First an academic question. What is an interview? It is a discussion in which an interviewer faces a candidate for a short while and asks questions to probe his knowledge and awareness on the subject. This is done to assess the personality of the interviewee. It is a very formal means of interaction with one person facing a group of persons, each of whom is a specialist in his or her field.
- (3) Knowledge is an important component of success in an interview. It has two aspects: range and depth. The former implies that you should know a lot beyond your own specialization and the latter means an awareness of the various aspects of the topics under discussion. An in-depth knowledge is gained through reading and listening. Listening is more important than reading. Be a keen listener, store major facts in your mind and use them at the appropriate time.
- (4) Next comes appearance, which means your dress for the interview. You must be elegantly attired for the occasion. Wear a simple outfit that suits your physique and features. Women should wear sarees or any other sober dress. Casuals like kurta-pyjama should not feature in your selection of dresses.
- (5) Conducting yourself in an apt way is equally significant. The way you move yourself, sit on the chair, place your hands and your brief-case and talk to the members reflect your behaviour. Walking sloppily, talking loudly or inaudibly, getting irritated easily, and showing documents insistently are symptoms of bad behaviour. A better way is to enter the room smartly, move forward with dignity, greet the board, sit when asked to, and thank at the end before you leave.

- (6) Expression is the most important aspect of the interview. It conveys your views and opinions. For good expression, what you need is clarity of mind and speech. Show your balanced thinking to convey your views clearly.
- (7) Convey your views effectively. In an interview, you may be asked questions where you have to either agree or disagree. Whatever your approach, convince the board that it is unbiased. The board may not agree with your view. Even if you disagree, let not your face show it. Create an impact through your expressions. Give an impression of being a leader. Show that you can cooperate and get cooperation that you can share views and get people to accept your authority to reach decisions and implement them.
- (8) Finally, never consider yourself to be a perfect man. Being a human being makes you susceptible to flaws. However, try to conform to the highest standards and reach as close to perfection as possible.

- (a) On the basis of your reading of the above passage, make notes on it, using headings and subheadings. Use recognizable abbreviations (minimum four) and give an appropriate title. [5]
- (b) Write a summary of the passage in about 80 words based on your notes.[3]

### Section-B (Writing and Grammar)[23]

**IV. Answer ANY SEVEN out of EIGHT questions [from (a) and (b)] given below. [1X7=7]**

**(a) Fill in the blanks with the correct form of the verb (mixed tenses) given in brackets.**

I (i).....(halt) on the road. As soon as I saw the elephant, I (ii) ..... (know) with perfect certainty that I ought not (iii) ..... (shoot) him. But at that moment I (iv) ..... (glance) round at the crowd that was following me and was eager for fun and meat. Now I was in a tricky situation which tried limits of my patience.

**(b) Read the words and phrases given below and rearrange to form meaningful sentences.**

- (i) providence/Vivekananda/in/of/believed/the/God
- (ii) began to/the station/cards/the train/when/play/whistled off/we/from
- (iii) fear/farmers/displacement/from/economic zones/special/large-scale
- (iv) the/gives/freedom/sense/enjoy/of/it/me/I

**V. CREATIVE WRITING SKILL [3+3+5+5=16]**

**(A) You are S.K. Bhagat of Shakti Nagar, Delhi. You are a Chartered Accountant and are capable of handling accounts and managing company finances, having six years of experience. Draft a Classified Advertisement for 'The Times of India' seeking a job (full time/part time). [word-limit – 50] [1x3=3]**

**OR**

**You wish to open a show-room for 'Adidas' and are looking for a suitable place to purchase. Draft a Classified Advertisement for it to be published in 'The Tribune', New Delhi, giving all relevant details. [word-limit – 50]**

**(B) Ministry of Social Justice and Empowerment needs a poster for its 'Prevention of Drug Abuse' campaign on the occasion of International Day Against Drug Abuse (26<sup>th</sup> June every year). Draft a poster to raise public awareness against this evil in not more than 50 words. [1x3=3]**

**OR**

**In a recent survey, it was found that your city has the highest rate of pollution in the country. Innumerable vehicles on the road and lack of green cover have made the air unfit to breathe.**

On behalf of MVN Public School, draft a poster in about 50 words, creating awareness about the need to keep your city clean and green. You are Rakshita/Rohit. [word-limit – 50]

(C) As the Head Boy/ Girl of your school, you have found some students reaching school late in the morning, coming late to their classrooms after recess, and returning lazily to the theory class after doing practicals in the laboratory. Write a speech in 120-150 words that you will deliver on the importance of discipline and punctuality in life. [5]

(D) India has completed 75 years of independence and is emerging as a global power. Yet, youth is getting increasingly concerned about standard of education, problem of corruption and environmental issues in the country. Write a speech in not more than 120-150 words on your vision of India in 2040 to be delivered in the morning assembly. [5]

### Section – C (Literature) [31]

VI. Read the extracts given below and answer ANY ONE out of TWO for each question.

(A) All three stood still to smile through their hair [1x3=3]

At the uncle with the camera. A sweet face,  
My mother's, that was before I was born.  
And the sea, which appears to have changed less,  
Washed their terribly transient feet.

- (i) Who is the poet of these lines?
  - (a) Shirley Toulson
  - (b) Sirley Tolson
  - (c) Shirley Tolson
  - (d) None of the above
- (ii) Which poetic-device is used in the phrase “transient feet”?
- (iii) A deep and significant contrast has been drawn in the last two lines between the sea and the humans by using the phrases ..... and .....

OR

Then sleek as a lizard, and alert, and abrupt,  
She enters the thickness, and a machine starts up  
Of chitterings, And a tremor of wings, and trillings –  
The whole tree trembles and thrills.

- (i) ‘She’ in the second line is .....
- (ii) The whole tree trembles because of the lizard. (True/False)
- (iii) Which of the following poetic devices has been used in the first line?
  - (a) Personification
  - (b) Metaphor
  - (c) Simile
  - (d) Transferred Epithet

**(B) She hobbled about the house in spotless white with one hand resting on her waist to balance her stoop and the other telling the beads of her rosary. Her silver locks were scattered untidily over her pale, puckered face, and her lips constantly moved in inaudible prayer. Yes, she was beautiful. She was like the winter landscape in the mountains, an expanse of pure white serenity breathing peace and contentment.** [1x3=3]

- (i) Who is being described in the given extract and by whom?
- (ii) Which word used in the extract is a synonym of 'satisfaction'?
- (iii) What does the author mean by 'an expanse of pure white serenity breathing peace and contentment'?

**OR**

**In July 1976, my wife Mary, son Jonathan, 6, daughter Suzanne, 7, and I set sail from Plymouth, England, to duplicate the round-the-world voyage made 200 years earlier by Captain James Cook. For the longest time, Mary and I — a 37-year-old businessman — had dreamt of sailing in the wake of the famous explorer, and for the past 16 years we had spent all our leisure time honing our seafaring skills in British waters.**

- (i) Whose 'round the world voyage' was duplicated by the narrator?
  - (a) Gordon Cook
  - (b) Jonathan Cook
  - (c) James Cook
  - (d) Alan East
- (ii) 'The narrator and his wife Mary were passionate about round-the world voyage.' How is that evident?
- (iii) Explain the expression 'honing our seafaring skills'.

**(C) Every family has a crazy streak in it somewhere, and my cousin Mourad was considered the natural descendant of the crazy streak in our tribe. Before him was our uncle Khosrove, an enormous man with a powerful head of black hair and the largest moustache in the San Joaquin Valley, a man so furious in temper, so irritable, so impatient that he stopped anyone from talking by roaring, It is no harm; pay no attention to it.** [1X4=4]

- (i) Name the two members of the Garoghalanian tribe who were considered the crazy streaks.
- (ii) 'It is no harm; pay no attention to it.' - was Mourad's pet dialogue. True/False
- (iii) What superlative feature did uncle Khosrove have?
- (iv) Which from the following is an antonym of 'descendent'.
  - (a) primogenitor
  - (b) offspring
  - (c) successor
  - (d) crazy

**OR**

**My fingers grew warm from rubbing. I followed the lines of the pattern. Somewhere on the edge there should be a burn mark that had never been repaired.**

**'My mother'll be back soon,' said the girl. ' I've already made tea for her. Will you have a cup?' 'Thank you.'**

**I looked up. The girl put cups ready on the tea-table. She had a broad back. Just like her mother. She poured tea from a white pot. All it had was a gold border on the lid, I remembered. She opened a box and took some spoons out.**

- (i) Who is being referred to as 'mother' in the lines?
- (ii) What did the narrator remember about the table-cloth that once belonged to her mother?

- (iii) What character trait of the 'the girl' is being reflected in the lines?
- (iv) For whom 'my' has been used in the line, 'My fingers grew warm from rubbing'?
  - (a) Mrs. Dorling
  - (b) Mrs. S
  - (c) Ms. Marga Minco
  - (d) Mrs. Dorling's daughter

**VII. Attempt ANY TWO out of FOUR questions given below in not more than 40-50 words.**

**[3x2=6]**

- A.** "I was sure my grandmother would be upset." What was Khushwant Singh sure about? Was he right?

**OR**

"I had no time to worry about bumped heads", says the narrator. What problem do you think deserved his immediate attention? [We're not Afraid to Die if We can All be Together]

- B.** In "A Photograph", what does the poetess mean when she says "Both wry with the laboured ease of loss"?

**OR**

Why is the image of the engine evoked by Ted Hughes?

**VIII. Attempt ANY ONE out of TWO questions given below in not more than 40-50 words.**

**[3x1=3]**

- (i) "A man could be the father of his son's flesh, but that did not mean that he was the father of his spirit." What does William Saroyan mean by this assertion?
- (ii) Under what circumstances did Mrs. S. allow their valuable possessions to be carried away by Mrs. Dorling?

**IX. Attempt ANY ONE out of TWO questions given below in not more than 120-150 words.**

**[6x1=6]**

- (i) Animals recognize and value a relationship established with human beings. Explain this, keeping in mind the relationship established by Khushwant Singh's grandmother with animals.
- (ii) In words of the captain of *Wavewalker*, the crew was 'cheerful and optimistic under direst stress,' and was able to bring the ship out of crisis. Elaborate how the optimism of crew-members helped them to be through the disastrous storm.

**X. Attempt ANY ONE out of TWO questions given below in not more than 120-150 words.**

**[6x1=6]**

- (i) How does the story "The Summer of the Beautiful White Horse" convey the message of honesty and integrity. How do the characters maintain it irrespective of their desire to keep the horse with themselves?
- (ii) Betrayal of trust is an evil which may afflict people and leave them traumatized forever. Discuss this statement in the context of the chapter 'The Address'.





# DELHI PUBLIC SCHOOL

SAIL TOWNSHIP, RANCHI

HALF YEARLY EXAMINATION (2022-23)

Class - XI  
Time - 2 Hours

Subject - Fine Art Graphics/Painting  
Maximum Marks- 30

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**Section: First**

**(1x6=6)**

**General Instructions: Answer to be written for each question in a word or sentence.**

1. What is the differences between painting and graphics?
2. \_\_\_\_\_ is added with hematite to make it permanent in Rock art.
  - (a) Cow dung
  - (b) Fat
  - (c) Gum Arabic
  - (d) Water
3. Harappa is situated on the bank of which river?
  - (a) Ravi
  - (b) Sutlej
  - (c) Ganga
  - (d) Yamuna
4. Lion Capital was adopted as \_\_\_\_\_ of the Indian Government on 26 Jan.1950.
5. 'Chauri Bearer' sculpture was excavated in \_\_\_\_\_ year.
6. Which of the following site of the Indus Valley Civilization is not located in India?
  - (a) Harappa
  - (b) Lothal
  - (c) Banawali
  - (d) Dholavira

**Section: Second**

**(2x3=6)**

**General Instructions: Answers to be written for each are about 30 words. (Any three)**

1. What is the significance of Bhimbetka Rock art?
2. Write about the Cave paintings of the Paleolithic and Neolithic periods.
3. Write about the discovery of Indus Valley Civilization.

**Section: Third**

**(3x2=6)**

**General Instructions: Answer to be written for each question in about 100 words. (Any two)**

1. Describe the characteristic features of the 'Chauri bearer' , a famous sculpture of the Maurya dynasty.
2. What is a seal? What were the purposes of seals? Write short notes on seals found at Indus Valley Civilization.
3. Write a note on any Rock paintings of Bhimbetka given in your syllabus.

**Section: Forth**

**(6x1=6)**

**General Instructions: Answer to be written in about 200 words. (Any one)**

1. Why the sculpture 'Chaurai Bearer' is important in the history of Indian Art. Explain.
2. Describe the method, material, subject, purpose of Prehistoric Cave Paintings.

**Section: Fifth**

**(6x1=6)**

**General Instructions: Essay to be written for in not more than 350 words (Any one)**

1. How can you say that the Harappan art was highly developed? Write about the sculptures found at Indus Valley Civilization.
  2. Which were the four events in the life of the Buddha which have been depicted in 'Lion Capital'. Describe the sculpture 'Lion Capital' in detail.
-



**DELHI PUBLIC SCHOOL**  
**SAIL TOWNSHIP, RANCHI**  
**HALF YEARLY EXAMINATION (2022-23)**

**Class - XI**  
**Time - 1 Hour**

**Subject - General Studies**  
**Maximum Marks- 50**

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**PART A**

**I. SELECT THE BEST OPTION**

**(1X10=10)**

1. Which of the following statements is/are correct?

- I. On February 18th, 2022, India and the United Arab Emirates signed the Comprehensive Economic Partnership Agreement or CEPA.
- II. India and Australia have signed a Free Trade Agreement in goods and services on April 2, 2022.
- III. These are the first free trade agreements finalised by the Narendra Modi-led government since it came to power in 2014.

- (A) Only I
- (B) Only I and III
- (C) Only III
- (D) All I, II and III

2. Which of the following countries faced severe economic crisis during March-April 2022?

- (A) Argentina
- (B) Sri Lanka
- (C) Pakistan
- (D) South Korea

3. Which of the following pairs is /are matched correctly?

- I. Dudhgarh Dam-Haryana
- II. Phina Singh Multipurpose Project- Himachal Pradesh.
- III. Sita Rama Lift Irrigation Project-Telangana.
- IV. Khaira Bandhan Irrigation Project-Odisha

Correct code is-

- (A) Only I, II and III
- (B) Only II, III and IV
- (C) Only I, III and IV
- (D) All I, II, III and IV

4. Consider the following facts about international trade of wheat-

- I. India exported record 75 lakh tonnes wheat in the FY 2021-22.
- II. The Russia-Ukraine conflict in 2022 has disrupted supplies of wheat in many countries.
- III. India has emerged as the best option for many developing countries to import wheat in view of its competitive prices.
- IV. Indian wheat prices are quoted at around \$ 350 a tonne free-on-board (f.o.b), as compared to the US (\$ 410 per tonne) and Argentina (\$ 396 a tonne) f.o.b.

Correct code is

- (A) Only I and II
- (B) Only III and IV
- (C) Only I, II and III
- (D) All I, II, III and IV

5. Consider the Assertion (A) and Reason (R) and choose the correct code given below

Assertion (A): Shooting, archery and wrestling were dropped from the Commonwealth Games programme 2026.

Reason (R): It's the prerogative of the host nation to choose disciplines among the 22-strong list of core sports

- (A) Assertion (A) and Reason (R) both are correct and Reason (R) is the correct explanation of Assertion (A)
- (B) Assertion (A) and Reason (R) both are correct and Reason (R) is not the correct explanation of Assertion (A)
- (C) Assertion (A) is correct and Reason (R) is incorrect
- (D) Assertion (A) is incorrect and Reason (R) is correct

6. Which of the following shows the correct arrangement of the continents in the descending order of their areas?

- (A) Asia, Africa, North America, Europe
  - (B) Africa, Asia, Europe, North America
  - (C) North America, Africa, Asia, Europe
  - (D) North America, Asia, Africa, Europe
7. On the surface of the sun, which of the gases is found abundantly besides hydrogen?
- (A) Helium
  - (B) Argon
  - (C) Neon
  - (D) Oxygen
8. The Tropic of Cancer does not pass through
- (A) Myanmar
  - (B) Nepal
  - (C) Bangladesh
  - (D) China
9. Dornier-228s-First Made -in -India Commercial Flight on April 12 took off on its maiden commercial flight from eastern Assam's Dibrugarh to Arunachal Pradesh's Pasighat was manufactured by
- (A) Hindustan Aeronautics Limited
  - (B) Embraer
  - (C) Aeronautic Defense and Space Company
  - (D) Siemens Aircraft Manufacturer
10. PM Narendra Modi recently announced the launch of a special category of ..... visa to promote medical tourism in India
- (A) Ayush
  - (B) Transit
  - (C) H-1B
  - (D) Shanghai

**II. Answer the following questions in 120-130 words (Any 3)**

**(10X3=30)**

1. As paucity of jobs is there in our country, advocacy for innovative startups should be encouraged among young technocrats. Support the concept.
2. "When the Covid pandemic subsides the gap between high and low achieving students will become larger." Do you agree with this statement of a famous Psychiatrist, Aaron Beck. Comment.
3. Central University Entrance Test (CUET), for admission to different programmes, aims to provide a single window opportunity to the students to seek admission in prestigious colleges and university, indirectly filtering the importance of board examination. What is your view on this new system of admission procedure.
4. What impact does social networking and its sites have on modern society, especially students. Give some suggestive measures as a responsible student.

**III. Answer the following question in 120-130 words.**

**(1X10=10)**

1. Now a days students lean heavily on Theoretical Learning giving backseat to, 'Working on hands and Learning by Doing'. Is this method followed by students a correct one. Justify your answer.
-



# DELHI PUBLIC SCHOOL

## SAIL TOWNSHIP, RANCHI

HALF YEARLY EXAMINATION (2022-23)

Class - XI  
Time - 3 Hours

Subject - Geography  
Maximum Marks-70

### GENERAL INSTRUCTIONS-

- Question paper is divided into 4 Sections - A, B, C and D
- In Section A, question numbers 1 to 15 are Objective type questions carrying 1 mark each.  
Attempt any 14 questions.
- In Section B, Question numbers 16 and 17 are Source Based questions carrying 3 marks each.  
**Answer any three questions out of 4.** Each of these sub-questions carries 1 mark.
- In Section C, Question numbers 18 to 22 are **short answer questions** carrying 3 marks each.  
Answers to these questions should not exceed 60-80 words.
- In Section C, Question numbers 23 to 27 are **long answer questions** carrying 5 marks each.  
Answers to these questions should not exceed 120-150 words.
- In Section D, Question numbers 28 and 29 are related to location and labelling and Identification of geographical features on maps respectively, carrying 5 marks each.
- Outline map of India and World provided to you must be attached with your answer book.

### SECTION A (OBJECTIVE TYPE QUESTIONS)

#### ATTEMPT ANY 14 QUESTIONS

1. Who among the following said that 'Geography is concerned with the description and explanation of the areal differentiation of the earth's surface'. [1]
- (A) Herodotus  
(B) Eratosthenes  
(C) Richard Hartshorne  
(D) Alexander Von Humboldt

2. Match the following and choose the correct option given below: [1]

| Column A        | Column B              |
|-----------------|-----------------------|
| a. Geology      | 1. Cultural Geography |
| b. Hydrology    | 2. Geomorphology      |
| c. Pedology     | 3. Oceanography       |
| d. Anthropology | 4. Soil Geography     |

Options:

(A) a. 2, b. 4, c. 3, d. 1

(B) a. 3, b. 2, c. 4, d. 1

(C) a. 2, b. 3, c. 4, d. 1

(D) a. 4, b. 3, c. 2, d. 1

3. Fill in the blanks of the following table with suitable information:

[ $\frac{1}{2} + \frac{1}{2} = 1$ ]

|     | Period | Life / Major Events                 |
|-----|--------|-------------------------------------|
| (A) | _____  | Homo Sapiens                        |
| (B) | _____  | First trace of life on land: Plants |

4. Life on the earth appeared around how many years before the present?

[1]

(A) 13.7 billion

(B) 4.6 billion

(C) 3.8 million

(D) 3.8 billion

5. What is the thickness of the earth's crust in the Himalayan region?

[1]

(A) 70 km

(B) 75 km

(C) 60 km

(D) 65 km

6. Which one of the following describes the lithosphere?

[1]

(A) upper and lower mantle

(B) crust and upper mantle

(C) crust and core

(D) mantle and core

7. Tillite is the sedimentary rock formed out of

[1]

(A) deposits of volcanoes

(B) deposits of gold

(C) deposits of glaciers

(D) deposits of sand

8. Who amongst the following was the first to consider the possibility of Europe, Africa and America having been located side by side?

[1]

(A) Alfred Wegener

(B) Abraham Ortelius

(C) Antonio Pellegrini

(D) Edmond Hess

9. The easternmost longitude of India is

[1]

(A)  $97^{\circ} 25' E$

(B)  $68^{\circ} 7' E$

(C)  $77^{\circ} 6' E$

(D)  $82^{\circ} 32' E$



10. Fill in the blanks of the following table with suitable information:

[ $\frac{1}{2} + \frac{1}{2} = 1$ ]

**Largest countries of the World in Area (sq.km)**

|     | <b>Country</b> | <b>Position</b> |
|-----|----------------|-----------------|
| (A) | -----          | Second          |
| (B) | -----          | Fifth           |

11. The Eastern and the Western Ghats meet each other at the [1]

- (A) Anaimalai Hills
- (B) Nilgiri Hills
- (C) Garo Hills
- (D) Mahendragiri Hills

12. Arrange the hills from north to south: [1]

- i. Mizo Hills
- ii. Manipur Hills
- iii. Patkai Bum
- iv. Naga Hills

Choose the correct option -

- (A) (iv), (iii), (i), (ii)
- (B) (i), (iii), (ii), (iv)
- (C) (ii), (iv), (i), (iii)
- (D) (iii), (iv), (ii), (i)

13. Which one of the following is known as the 'Dakshin Ganga'? [1]

- (A) The Narmada
- (B) The Tapi
- (C) The Godavari
- (D) The Krishna

14. Choose the correctly matched pair from the following: [1]

| <b>River</b>    |    | <b>Origin</b>        |
|-----------------|----|----------------------|
| (A) Brahmaputra | -- | Mapchachungo Glacier |
| (B) Ghaghara    | -- | Chemyungdung Glacier |
| (C) Gandak      | -- | Nepal Himalayas      |
| (D) Narmada     | -- | Mahabaleshwar        |

15. Match the following and choose the correct option given below:

[1]

| River       | Tributary     |
|-------------|---------------|
| a. Indus    | 1. Penganga   |
| b. Godavari | 2. Shyok      |
| c. Krishna  | 3. Kabini     |
| d. Kaveri   | 4. Tungbhadra |

Options:

- (A) a. 2, b. 1, c. 4, d.3
- (B) a. 3, b. 2, c. 4, d. 1
- (C) a. 2, b. 3, c. 4, d. 1
- (D) a. 2, b. 4, c. 1, d. 3

### SECTION B (SOURCE BASED QUESTIONS)

16. Read the text given below and answer the following questions.

[1×3=3]

All natural earthquakes take place in the lithosphere. An instrument called 'seismograph' records the waves reaching the surface. A curve of earthquake waves is recorded on the seismograph. The curve shows three distinct sections each representing different types of wave patterns. Earthquake waves are basically of two types – body waves and surface waves. Body waves are generated due to the release of energy at the focus and move in all directions travelling through the body of the earth. Hence, the name body waves. The body waves interact with the surface rocks and generate new set of waves called surface waves. These waves move along the surface. The velocity of waves changes as they travel through materials with different densities. The denser the material, the higher is the velocity. Their direction also changes as they reflect or refract when coming across materials with different densities.

**Answer any three questions**

- a. The shadow zone of P-waves appears as a band around the earth between \_\_\_\_\_ away from the epicentre.
  - (A) 105° and 135°
  - (B) 115° and 145°
  - (C) 125° and 135°
  - (D) 105° and 145°

- b. Which one of the following earthquake waves is more destructive?
- (A) P-waves
  - (B) S-waves
  - (C) Surface waves
  - (D) None of the above
- c. The shadow zone of S-waves is not only larger in extent but it is also a little over \_\_\_\_\_ per cent of the earth surface.
- (A) 25
  - (B) 30
  - (C) 40
  - (D) 35
- d. Consider the following statements:
- i. The P-waves travel through gaseous, liquid and solid materials.
  - ii. The S-waves can travel only through solid materials.
  - iii. S-waves vibrate parallel to the direction of the wave.

Which of the above statements are correct?

- (A) i, ii and iii
- (B) i and ii
- (C) i and iii
- (D) ii and iii

**17. Read the text given below and answer the following questions. [1x3=3]**

The North and Northeastern Mountains consist of the Himalayas and the Northeastern hills. The Himalayas consist of a series of parallel mountain ranges. Some of the important ranges are the Greater Himalayan range, which includes the Great Himalayas and the Shiwalik. The general orientation of these ranges is from northwest to the southeast direction in the northwestern part of India. Himalayas in the Darjiling and Sikkim regions lie in an eastwest direction, while in Arunachal Pradesh they are from southwest to the northwest direction. In Nagaland, Manipur and Mizoram, they are in the northsouth direction. The approximate length of the Great Himalayan range, also known as the central axial range, is 2,500 km from east to west, and their width varies between 160-400 km from north to south.

**Answer any three questions**

- a. In which part of Himalayas do we find the Karewa formation?
- (A) North-eastern Himalayas
  - (B) Eastern Himalayas
  - (C) Himachal-Uttarakhand Himalayas
  - (D) Kashmir Himalayas
- b. Which part of the Himalayas lies approximately between the Ravi in the west and the Kali in the east?
- (A) Kashmir Himalayas
  - (B) Himachal and Uttarakhand Himalayas
  - (C) Darjiling and Sikkim Himalayas
  - (D) Arunachal Himalayas

c. Match the following

| <b>List I</b>                         | <b>List II</b>          |
|---------------------------------------|-------------------------|
| 1. Kashmir Himalayas                  | a. Mussoorie            |
| 2. Himachal and Uttarakhand Himalayas | b. Kanchenjunga         |
| 3. Darjiling and Sikkim Himalayas     | c. Shifting Cultivation |
| 4. Arunachal Himalayas                | d. Banihal Pass         |

- Codes:**
- |       |   |   |   |
|-------|---|---|---|
| 1     | 2 | 3 | 4 |
| (A) d | c | b | a |
| (B) b | a | d | c |
| (C) c | b | d | a |
| (D) d | a | b | c |

d. Which of the following is/are features of the Himalayas?

1. Old, weak and flexible geological structure
2. Interplay of exogenic and endogenic forces
3. Tectonic in origin

Choose the correct option -

- (A) Only 1  
(B) Only 1 and 2  
(C) Only 2 and 3  
(D) 1, 2 and 3

### SECTION C (SHORT ANSWER & LONG ANSWER QUESTIONS)

18. How is Geography considered as an integrated discipline? [3]

**OR**

'Geography as a discipline is related to space and takes note of spatial characteristics and attributes'. Analyse the statement.

19. Explain the various stages involved in the development of planets. [3]

20. 'The size of India has endowed her with great physical diversity'. Explain. [3]

21. How are Andaman and Nicobar Islands different from Lakshadweep Islands? [3]

**OR**

Distinguish between the Western coastal plains and the Eastern coastal plains.

22. How did the Peninsular Drainage System evolve? [3]

23. How is Geography linked with different natural and social sciences? Explain. [5]

24. Explain the evolution of atmosphere. [5]

**OR**

How did the oceans come into being?

25. Describe the various sources of information related to the interior of the earth. [5]

**OR**

Explain the major types of volcanoes.

26. What facts have been revealed by the mapping of the ocean floor and palaeomagnetic studies of rocks from oceanic regions? [5]

27. Distinguish between the Himalayan rivers and Peninsular rivers. [5]

**SECTION D (MAP BASED QUESTIONS)**

28. On the given map of India locate and label **any five** of the following: [1x5=5]

- (A) Tropic of cancer
- (B) Capital of Nagaland
- (C) Karakoram Range
- (D) Shipki La Pass
- (E) Khasi Hills
- (F) Luni River
- (G) Tapi River

29. With the help of the following key, identify the areas marked as **A, B, C, D and E** on the given outline map of the World. Write the correct name of the place in the blank space given on the map. [1x5=5]

- (A) A Minor Plate
  - (B) A Trench
  - (C) A Minor Plate
  - (D) A Major Plate
  - (E) A Minor Plate
-







**DELHI PUBLIC SCHOOL**  
**SAIL TOWNSHIP, RANCHI**  
**HALF YEARLY EXAMINATION (2022-23)**

**Class - XI**  
**Time - 3 Hours**

**Subject - History**  
**Maximum Marks- 80**

**General Instructions**

1. Answer all the questions. Some questions have internal Choice. Marks are indicated against each question. This Question paper contains six sections.
2. Section A: Question numbers 1 to 16 are objective type questions carrying 1Mark and should be answered in one word or one sentence each (Attempt any 15)
3. Section B: Question number 17 to 19 are case based questions having multiple choice questions. Each question has 4sub -parts. Attempt any three sub parts from each question.
4. Section C: Answer to questions carrying 3 Marks (question number 20-23) should not exceed 100 words each
5. Section D: Answer to questions carrying 8 marks (question number 24-26) should not exceed 350 words each.
6. Section E: Question numbers 27-29 are source based questions carrying 5marks each
7. Section F : Question number 30 is a Map question that includes the identification and location of significant test items. Attach the map with the answer book.

**Section A**

[1x15=15]

1. Which was known as 'The city' in mesopotamia?
2. Match the following

|   |                  |     |                           |
|---|------------------|-----|---------------------------|
| A | Homo Erectus     | I   | Southern Ape              |
| B | Homo Sapiens     | II  | The tool maker            |
| C | Homo Habilis     | III | The wise and thinking man |
| D | Australopithecus | IV  | The Upright man           |

3. What does Rasul mean ?
4. What does Mesopotamia mean ?



5. Which of the following nomadic communities were in power in Mari ?
  - A. Akkadians
  - B. Amorites
  - C. Assyrians
  - D. Aramaeans
6. What does Ghengis Khan means?
7. Which of the following were the biggest urban centres that lined the shores of the Mediterranean?
  - A. Carthage, Alexandria and anacdotal
  - B. Carthage anacdotal and antioch
  - C. Carthage, Alexandria and Antioch
  - D. All of the above
8. What does Spectacula mean?
9. Name the gold coin introduced by Constantine. Mention its measurement of gold ?
10. Who was the founder of Islam?
11. Arrange the following Khalifas in chronological order
  - A. Khalifa Ali
  - B. Khalifa Umar
  - C. Khalifa Abu bakr
  - D. Khalifa Uthman
12. Name the most prominent pilgrimage centre of the Arabian tribes in the seventh century.
13. Who was Gilgamish?How many tablets were used to write the Gilgamish epic ?
14. What was the original name of Ghengis Khan
15. Assertion (A) : The monetary system of the late empire broke with the silver based currencies of the first three centuries  
 Reason (R) : The Spanish silver mines were exhausted  
**Codes**
  - 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 but R is not true
  - D. A is not true But R is true
16. Recognise the following Roman emperor



## Section B

**17. Read the following excerpt carefully and answer any three questions.**

### **On the Treatment of Slaves**

Soon afterwards, the City Prefect, Lucius Pedanius Secundus, was murdered by one of his slaves. After the murder, ancient custom required that every slave residing under the same roof must be executed. But a crowd gathered, eager to save so many innocent lives; and rioting began. The senate-house was besieged. Inside, there was feeling against excessive severity, but the majority opposed any change (...) [The senators] favouring execution prevailed. However, great crowds ready with stones and torches prevented the order from being carried out. Nero rebuked the population by edict, and lined with troops the whole route along which those condemned were taken for execution.'

Tacitus (55-117), historian of the early empire.

**i. Choose the correct option.**

#### **Codes**

Assertion (A) All the slaves under the same roof of the slave who killed the city prefect was taken for execution

Reason (R): A crowd tried to prevent it.

- 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 but R is not true
- D. A is not true But R is true

ii. This is about the system of \_\_\_\_\_

- A. Dynastic succession
- B. Successive repression
- C. Slavery
- D. Both B and C

iii. Who wrote this excerpt?

- A. Pliny
- B. Tacitus
- C. Thebes
- D. Olympiodorus

iv. The incident happened under which Roman emperor?

- A. Tiberius
- B. Nero
- C. Trajan
- D. Augustus

**18. Read the following excerpt carefully and answer any three questions.**

### **The Warka Head**

This woman's head was sculptured in white marble at Uruk before 3000 BCE. The eyes and eyebrows would probably have been made taken lapis lazuli (blue) and shell (white) and bitumen (black) inlays, respectively. There is a groove along the top of the head, perhaps for an ornament. This is a world famous piece of sculpture, admired for the delicate modelling of the women's mouth, chin and cheeks. And it was modelled in hard stone that would have been imported from a distance.

- i. Where did they get the Warka head ?
  - A. From Uruk
  - B. From the city
  - C. From Ur
  - D. Both A and B
- ii. What was /were the most admired feature of the Warka head ?
  - A. Mouth
  - B. Chin
  - C. Cheeks
  - D. All of the above
- iii. What was used for eyes and eyebrows ?
  - A. Lapis Lazuli
  - B. Shell
  - C. Bitumen
  - D. All of the above
- iv. How old must have been the Warka head
  - A. Around 3000 years old
  - B. Around 5000 years old
  - C. 3000 years
  - D. None of the above

**19. Read the following excerpt carefully and answer any three questions**

**Islamic Calendar**

The Hijri era was established during the caliphate of Umar, with the first year falling in 622 CE. A date in the Hijri calendar is followed by the letters AH.

The Hijri year is a lunar year of 354 days, 12 months (Muharram to Dhul Hijja) of 29 or 30 days. Each day begins at sunset and each month with the sighting of the crescent moon. The Hijri year is about 11 days shorter than the solar year. Therefore, none of the Islamic religious festivals, including the Ramazan fast, Id and hajj, corresponds in any way to seasons. There is no easy way to match the dates in the Hijri calendar with the dates in the Gregorian calendar (established by Pope Gregory XIII in 1582 CE). One can calculate the rough equivalents between the Islamic (H) and Gregorian Christian (C) years with the following formulae:

$$(H \times 32/33) + 622 = C$$

$$(C-622) \times 33/32 = H$$

- i. When was the Hijri year established?
  - A. 622 CE
  - B. 722 CE
  - C. 822CE
  - D. 1922 CE
- ii. The Hijri year is a
  - A. Lunar year
  - B. Solar year
  - C. Universal year
  - D. Planet year

- iii. How many days are there in Hijri year
- 354
  - 365
  - 365 ½
  - 353
- iv. Who established the solar calendar mentioned in this
- Pope Gregory
  - Christians
  - Muslims
  - Prophet Muhamad

### Section C

20. How is the division of labour believed to be the main factor behind the growth of urbanisation? Why trade was important for the development of the River valley civilisation of Mesopotamia [1.5+1.5=3]
21. Explain the courier system of Genghis Khan [3]
22. What was the religion of the people of Roman empire? Explain [3]
23. How were the fossils of Homo named? Explain with examples [3]

### Section D

24. What in your opinion could be the uses of Writing in early civilizations? [8]
25. Explain the social hierarchies of the the Roman Empire  
OR  
Explain Late antiquity in the Roman context [8]
26. Explain the major teachings of Islam [8]

### Section E

- 27. Read the following passage carefully and answer the questions that follow:**

The Discovery of Australopithecus, Olduvai Gorge, 17 July, 1759

The Olduvai Gorge was first 'discovered' in the early twentieth century by a German butterfly collector. However, Olduvai has come to be identified with Mary and Louis Leakey, who worked here for over 40 years. It was Mary Leakey who directed archaeological excavations at Olduvai and Laetoli and she made some of the most exciting discoveries. This is what Louis Leakey wrote about one of their most remarkable

That morning I woke with a headache and a slight fever. Reluctantly, I agreed to spend the day in camp. With one of us out of commission, it was even more vital for the other to continue the work, for our precarious seven-week season was running out. So Mary departed for the diggings with Sally and Toots [two of their dogs] in the Land Rover la jeep-like vehicle), and I settled back to a restless day off.

Some time later-perhaps I dozed off-I heard the Land-Rover coming up fast to camp. I had a momentary vision of Mary stung by one of our hundreds of resident scorpions or bitten by a snake that had slipped past the dogs.

The Land-Rover rattled to a stop, and I heard Mary's voice calling over and over: "I've got him! I've got him! I've got him!" Still groggy from the headache, I couldn't make her out. "Got what? Are you hurt?" I asked. "Him, the man! Our man," Mary said. "The one we've been looking for 23 years. Come quick, I've found his teeth "

1. What is this source tells us about? [1]
2. What does Australopithecus mean? [2]
3. Who discovered the first fossils of Australopithecus? [2]

28. Read the following passage and answer the questions that follow:

### **The Capture of Bukhara**

Juwaini, a late-thirteenth-century Persian chronicler of the Mongol rulers of Iran, carried an account of the capture of Bukhara in 1220. After the conquest of the city, Juwaini reported, Genghis Khan went to the festival ground where the rich residents of the city were and addressed them: "O people know that you have committed great sins, and that the great ones among you have committed these sins. If you ask me what proof I have for these words, I say it is because I am the punishment of God. If you had not committed great sins, God would not have sent a punishment like me upon you'... Now one man has escaped from Bukhara after its capture and had come to Khurasan. He was questioned about the fate of the city and replied: They came, they [mined the walls], they burnt, they slew, they plundered and they departed.'

### **Questions**

- (i) By whom is the above passage written? What does he describe in it [2]
- (ii) What do you know about Genghis Khan? [1]
- (iii) What did Genghis Khan say to the conquered people? [2]

29. Read the following passage and answer the questions that follow:

In India, early stone seals were stamped. In Mesopotamia until the end of the first millennium BCE, cylindrical stone seals, pierced down the centre, were fitted with a stick and rolled over wet clay so that a continuous picture was created. They were carved by very skilled craftsmen, and sometimes carry writing; the name of the owner, his god, his official position, etc. A seal could be rolled on clay covering the string knot of a cloth package or the mouth of a pot, keeping the contents safe. When rolled on a letter written on a clay tablet, it became a mark of authenticity. So the seal was the mark of a city dweller's role in public life.

### **Questions**

- (i) Which type of material was used to make seals? [1]
- (ii) What were the various types of seals? [2]
- (iii) Who carved these seals? Write a few features of these seals (Mesopotamian seals) [2]

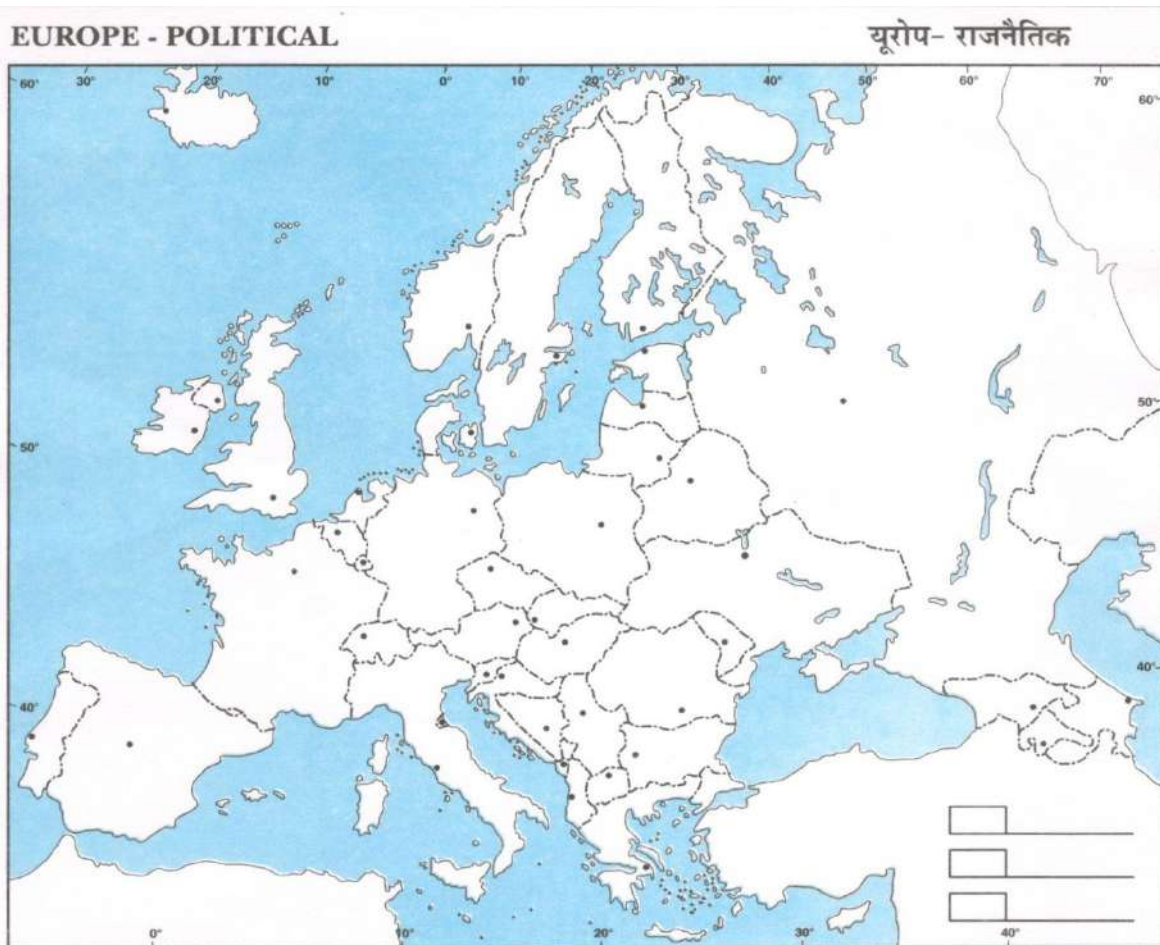
## Section F

### 30. Map question

[1x5=5]

Mark in the given out line map of Europe the following places

1. Capital of Roman Empire
2. Altamira
3. Neander Valley
4. Heidel Berg
5. Gaul





# DELHI PUBLIC SCHOOL

## SAIL Township, Ranchi

### Half Yearly Examination 2021

**Class: XI**

**Subject: Informatics Practices (065)**

**Max Marks: 70**

**Time: 3 Hours**

#### **General Instructions:**

- There are 2 Groups (A, B) and each group has 2 sections (I, II)
- Group-A: Section-I contains 20 marks, Objective Type, 20 questions are to be attempted.
- Group-A: Section-II contains total 16 marks questions of 1 or 2 marks each
- Group-B: Section-I contains total 10 marks questions of 2 marks each
- Group-B: Section-II contains total 24 marks questions of 3 marks each
- Always keep margin at the left side of your answer script & clearly write the Question Numbers
- Try to maintain the order of the questions in each group during answering.
- Keep spaces and mark 'line-of-separation' in between two answers.

#### **Group – A: SECTION-I**

**[Attempt any 20 Question]**

**Q1. Answer the following questions (Objective type):**

**[20X1=20]**

- 1) RAM works until power is\_\_\_\_\_.
- 2) When you assign a value to a variable then existing value gets\_\_\_\_\_  
(i) Replaced (ii) Updated (iii) Deleted (iv) Gets added
- 3) Rhombus symbol in flowchart works to \_\_\_\_\_  
(i) Make decision (ii) Control data flow (iii) None of i, ii (iv) Both i, ii
- 4) The: (colon) is put \_\_\_\_\_ (i) Before if...else (ii) After while (iii) Before for (iv) None
- 5) The \_\_\_\_\_ operator gives TRUE output when both of the conditions are correct.
- 6) Indent sets\_\_\_\_\_ (i) Block (ii) Space (iii) Data flow (iv) Statement
- 7) The only language which the computer understands is\_\_\_\_\_:  
(i) Assembly Language (ii) Binary Language (iii) BASIC (iv) C Language
- 8) Which of the following is correct in terms of range() function? \_\_\_\_\_  
(i) It begins from 1 (ii) 3 arguments are must (iii) Runs up to final-value minus 1 (iv) All
- 9) Algorithm depicts the \_\_\_\_\_ representation of the programming logic.
- 10) print(x[ :-2]) gives the output\_\_\_\_\_ to \_\_\_\_\_ elements of a list x.
- 11) List is: (i) Mutable (ii) Heterogeneous (iii) Has +ve & -ve index (iv) All
- 12) Traversing/looping of String prints in: (i) Horizontal order (ii) Vertical order  
(iii) Whole Text (iv) None
- 13) \_\_\_\_\_ terminates the block and goes to next statement:  
(i) Break (ii) Continue (iv) Both i & ii (v) None i & ii

- 14) Difference between while() and for() loop in terms of placement(s) of statement(s) is/are:  
 (i) initialization (ii) increment/decrement (iii) Both i & ii (iv) None i & ii
- 15) \_\_\_\_\_ and \_\_\_\_\_ operators give Boolean output.
- 16) FAT keeps the records of \_\_\_\_\_  
 (i) Data of the memory (ii) Files in disk (iii) Number of tracks (iv) Numbers of sectors
- 17) System software has two categories \_\_\_\_\_:  
 (i) Language Processor & Application Software (ii) Application Software & Operating System  
 (iii) Operating System & Language Processor (iv) None of those
- 18) The difference between = & == respectively are:  
 (i) Equality & Similarity (ii) Assignment & Equality (iii) Both i & ii (iv) None i & ii
- 19) The difference between / & // respectively are:  
 (i) Give decimal & integer quotient (ii) Give integer & decimal quotient  
 (iii) Give quotient & remainder (iv) All are wrong
- 20) In print() function %d prints:  
 (i) The value of the variable (ii) DataType of the value  
 (iii) Both i , ii (iv) None i , ii
- 21) In print() function end=" " prints the output:  
 (i) Horizontally (ii) Vertically  
 (iii) Horizontally with one white space (iv) Vertically with one white space

### **Group – A: SECTION-II**

**[Attempt Questions 22 & 23]**

**[16 marks]**

- 22) Answer the following questions on a Software-Development-Project based case studies, where you are supposed to write notes of the followings for PPT presentations to train employees:**
- (i) In the project, you have been asked to write the Difference between Primary Memory and Secondary memory with proper diagram. **[1]**
- (ii) Your project manager assigned to write Disk Memory Management System with diagram. **[1]**
- (iii) Now you have been assigned to write a note on: how do Memory Unit, Central Processing Unit and Control Unit of a computer system work together. **[1]**
- (iv) Your project manager asked you to explain to your junior: (i) How does Cache-Memory work with RAM and CPU. (ii) Difference between Data & Information. **[1]**
- (v) One of your juniors of your project requested you to help him to write on various types of software and to explain the function of Language Processor. **[1]**
- (vi) Present the basic safety measures to handle a computer safely. **[1]**



**23) Answer the following questions on writing logic for a Software Development program:**

- i) Write an algorithm to calculate the Total and Average Marks of a class out of 5 subjects (to be entered by the user) of Full marks 100 each. [1]
- ii) Write an algorithm to Input two numbers (using 3<sup>rd</sup> variable) from the user and Swap & print. [1]
- iii) Draw a flowchart to find the greater number of any two entered numbers. [1]
- iv) Draw a flowchart to enter age and check whether he is eligible (age 18 or above) to caste vote. [1]
- v) Draw a flowchart to find the sum of even and odd numbers separately within 50, but in the same single program. [2]
- vi) Draw a flowchart to find that an entered number is Prime or not. [2]
- vii) Show the steps to find the final output (T/F) of the following statement, if x=10, y=20 & z=30. [2]  
! ((x>=y) OR (y! =z)) AND (!(z==x) OR (y<z))

**Group – B: SECTION-I**

[10 marks]

- 24) Write a Python program to enter age and display the Group according to the following list: [2]

| Age range  | Group  |
|------------|--------|
| 1-20       | Red    |
| 21-40      | Blue   |
| 41-55      | Green  |
| 56 & above | Yellow |

- 25) Write a Python program to find  $S = 1/2 + 2/3 + 3/4 + \dots$  Nth term. [2]
- 26) Write a Python program to find the following output: [2]

```
*
* *
* * *
```

- 27) Re-write a Python code to the following using while loop, and also write the output: [2]

```
n=5
f=1
for i in range(n):
 f=f*(i+1)
print(f)
```

- 28) Write a Python code to find  $S=1+4+27+256+\dots$  Nth term [2]

**Group – B: SECTION-II**

[24 marks]

- 29) Write a Python code to create a String say: *str= "Indo-Aryan Culture"* and display as given: [1X3=3]
- (i) Traverse the string i.e. show all the elements one by one.
  - (ii) Display "Culture" from the string.
  - (iii) What is the output of the command: `print(str[0:4])`

- 30)** Write a Python code to create a list  $L=[10,20,30,40,50,60,70,80,90,100]$  and perform the followings: **[1X3=3]**
- (i)** Display 20,30,40,50, from the list using +ve index.
  - (ii)** Display last 5 elements from the list.
  - (iii)** What is the output of: `print (L [-5 : -1])`
- 31)** Write program to enter a value and check whether it is present in the following list:  
 $L=[10,20,30,40,50,60,70,80,90,100]$  **[3]**
- 32)** Write a Python program to find  $s = (1) + (1+2) + (1+2+3) + \dots$  Nth term. **[3]**
- 33)** Write a Python program to enter a number and find reverse of the same. **[3]**
- 34)** Write a Python program to find  $s=1! + 2! +3! + \dots$  Nth term. **[3]**
- 35)** Write a Python program to find  $s=1+1+2+3+5+8+\dots$  Nth term. **[3]**
- 36)** Write a Python program to create the following output: **[3]**

```

*
* * *
* * * * *
```

**###**



**DELHI PUBLIC SCHOOL**  
**SAIL TOWNSHIP, RANCHI**  
**HALF YEARLY EXAMINATION (2022-2023)**

**CLASS XI**  
**Time: 3 Hrs.**

**SUBJECT: MATHEMATICS**  
**M.M: 80**

**General Instructions:-**

- This question paper contains two parts A and B.
- Each part is compulsory.
- Part A carries 24marks and Part B carries 56 marks
- Part-A has Objective Type Questions.
- Part -B has Descriptive Type Questions.
- Both Part A and Part B have choices.

**Part - A:**

- It consists of two sections- I and II.
- Section I comprises of 16 questions of very short answer type.
- Section II contains 2 case studies.
- Each case study comprises of 5 case-based MCQs. An examinee is to attempt any 4 out of 5 MCQs.
- Internal choice is provided in 2 questions of section - I.

**Part - B:**

- It consists of three sections- III, IV and V.
- Section III comprises of 10 questions of 2 marks each.
- Section IV comprises of 7 questions of 3 marks each.
- Section V comprises of 3 questions of 5 marks each.
- Internal choice is provided in 2 questions of Section -III, 2 questions of Section- IV and 1 question of Section-V. You have to attempt only one of the alternatives in all such questions.

**PART-A (SECTION - I) (16 × 1 =16)**

**All questions are compulsory. In case of internal choices attempt anyone.**

1. Write the following set in the roster form.  $A = \{x \mid x \text{ is a positive integer less than 10 and } 2x - 1 \text{ is an odd number}\}$ .
2. If  $B' \subset A'$ , show that  $A \subset B$ .
3. If X and Y are 2 sets such that  $n(X) = 17$ ,  $n(Y) = 23$  and  $n(X \cup Y) = 38$ , find  $n(X \cap Y)$ .  
OR  
Given  $U = [-5, 5]$  and A is  $(-3, 5]$ , then find  $A'$
4. Find the domain of the function  $f(x) = \frac{x^2+2x+1}{x^2-8x+12}$
5. Is the given relation a function? Give reasons for your answer if  $S = \{(n, n^2) : n \text{ is a positive integer}\}$
6. Let f and g be real functions defined by  $f(x) = 2x + 1$  and  $g(x) = 4x - 7$ . For which real number x,  $f(x) = g(x)$ ?

7. Write  $\frac{13\pi}{4}$  in degrees.

OR

Convert  $40^\circ 20'45''$  into radian measure.

8. Find the value of  $\sin 75^\circ \cos 15^\circ + \cos 75^\circ \sin 15^\circ$

9. Find the value of  $\frac{\tan 69^\circ + \tan 66^\circ}{1 - \tan 69^\circ \tan 66^\circ}$

10. Express the following as sum or difference:  $2 \sin 5\theta \sin 3\theta$

11. Prove that  $\frac{\sin x - \sin 3x}{\sin^2 x - \cos^2 x} = 2 \sin x$

12. Find the Range of the polynomial function  $f(x) = 3x^2 - 4x + 9$ ?

13. Give a rough sketch of the function  $f(x) = x - [x]$ .

14. Solve the inequality,  $3x - 5 < x + 7$ , when  $x$  is a whole number

15. Solve the inequality  $x + \frac{x}{3} < 11 - \frac{x}{2}$

16. If  $|x - 1| > 5$ , then find the value of  $x$ .

## PART - A (SECTION- II)

(2 x 4 =8)

**Case study-based questions are compulsory. Attempt any 4 sub-parts of each question. Each sub-part carries 1 mark.**

17. Method to find the sets when Cartesian Product is given.

For finding these two sets, we write first element of each ordered pair in first set say  $A$  and corresponding second element in second set  $B$ (say).

If there are  $p$  elements in set  $A$  and  $q$  elements in set  $B$ , then there will be  $pq$  elements in  $A \times B$ .

Based on the above topic answer the following questions.

I. If  $A \times B = \{(a,1),(b,3),(a,3),(b,1),(a,2),(b,2)\}$ . Then  $A$  &  $B$  are

a)  $\{1,3,2\}, \{a, b\}$

b)  $\{a, b\}, \{1,3\}$

c)  $\{a, b\}, \{1,3,2\}$

d) None of these

II. If the set  $A$  has 3 elements and set  $B$  has 4 elements, then find the number of elements of  $A \times B$ .

III.  $A$  &  $B$  are two sets given in such a way that  $A \times B$  contains 6 elements. If three elements of  $A \times B$  are  $(1,3), (2,5)$  &  $(3,3)$  then find  $A$  &  $B$ .

IV. Find the remaining elements of  $A \times B$  in the above question III.

V. The cartesian product  $P \times P$  has 16 elements among which are found  $(a,1)$  &  $(b,2)$  then find  $P$ .

18. The school organized a cultural event for 100 students. In the event, 15 students participated in dance, drama & singing. 25 students participated in dance & drama; 20 students participated in drama & singing; 30 students participated in dance & singing. 8 students participated in dance only; 5 students in drama only and 12 students in singing only.

Based on the above information, answer the following questions.

- I. Find the number of students who participated in dance?
- II. Find the number of students who participated in drama?
- III. Find the number of students who participated in singing?
- IV. Find the number of students who participated in dance & drama but not in singing?
- V. Find the number of students who did not participated in any events?

**PART - B (SECTION -III)**

**(10 x 2 = 20)**

**All questions are compulsory. In case of internal choices attempt anyone**

19. A and B are two sets such that:  $n(A - B) = 14 + x$ ,  $n(B - A) = 3x$  and  $n(A \cap B) = x$ , draw a Venn diagram to illustrate the given information and if  $n(A) = n(B)$  then find the value of  $x$ .
20. Two finite sets have  $m$  and  $n$  elements. The total number of subsets of the first set is 56 more than the total number of subsets of the second set. Find the values of  $m$  and  $n$ .

OR

Let  $T = \left\{ x: \frac{x+5}{x-7} - 5 = \frac{4x-40}{13-x} \right\}$ . Is T an empty set? Justify your answer

21. Find the domain and range for the following function  $f(x) = \frac{1}{\sqrt{9-x^2}}$
22. The function  $f(x)$  is defined by  $f(x) = \begin{cases} 1-x, & x < 0 \\ 1, & x = 0 \\ 1+x, & x > 0 \end{cases}$ . Draw the graph of  $f(x)$ .
23. A train is travelling on a curve of 700 m radius at 14 km/h, Through what angle will it turn in one minute?

OR

A wheel makes 270 revolutions in one minute. Through how many radians does it turn in one second?

24. Find the value of  $2 \sin^2 \frac{3\pi}{4} + 2 \cos^2 \frac{3\pi}{4} - 2 \tan^2 \frac{3\pi}{4}$
25. Find the value of  $\tan 720^\circ - \cos 270^\circ - \sin 150^\circ \cos 120^\circ$ .
26. Express each of the following as a product:  $\sin 32^\circ + \sin 54^\circ$
27. If  $A = \{x: x \in W, x < 2\}$ ,  $B = \{x: x \in N, 1 < x < 5\}$ ,  $C = \{3, 5\}$   
find (i)  $A \times (B \cap C)$  (ii)  $A \times (B \cup C)$
28. Solve  $\frac{1}{|x|-3} \leq \frac{1}{2}$

**PART-B (SECTION- IV)**

**(7 x 3 =21 )**

**All questions are compulsory. In case of internal choices attempt anyone.**

29. Let  $U = \{x \in N : x \leq 8\}$ ,  $A = \{x \in N : 5 < x^2 < 50\}$  and  $B = \{x \in N : x \text{ is prime number less than } 10\}$ . Draw a Venn diagram to show the relationship between the given sets. Hence list the elements of the following sets (i)  $A'$  (ii)  $B'$  (iii)  $A - B$  (iv)  $A \cap B'$ .

30. Let  $U = \{1, 2, 3, 4, 5, 6, 7, 8, 9\}$ ,  $A = \{1, 2, 3, 4\}$ ,  $B = \{2, 4, 6, 8\}$  and  $C = \{3, 4, 5, 6\}$ .  
find (i)  $A'$  (ii)  $(A \cap C)'$  (iii)  $(A')'$  (iv)  $(B - C)'$
31. If  $\sin x = \frac{3}{5}$ ,  $\cos y = \frac{-12}{13}$  and  $x$  &  $y$  both lie in the second quadrant,  
find the value of  $\sin(x + y)$
32. Prove that  $\cot x \cot 2x - \cot 2x \cot 3x - \cot 3x \cot x = 1$
33. Prove that  $\frac{\sin A - \sin 3A + \sin 5A - \sin 7A}{\cos A - \cos 3A - \cos 5A + \cos 7A} = \cot 2A$ .  
OR  
Prove that  $\frac{\cos 8A \cos 5A - \cos 12A \cos 9A}{\sin 8A \cos 5A + \cos 12A \sin 9A} = \tan 4A$ .
34. Show that  $\tan 3x \tan 2x \tan x = \tan 3x - \tan 2x - \tan x$
35. Draw the graph of  $f(x) = 1 - |x - 2|$ ,  $x \in \mathbb{R}$ . What are the domain and range of  $f(x) = 1 - |x - 2|$ ?  
OR  
Reduce the function  $f(x) = |x - 2| + |2 + x|$ ,  $-3 \leq x \leq 3$  & draw the graph for the given function.

## PART-B (SECTION-V)

(3 x 5 = 15)

All questions are compulsory. In case of internal choices attempt anyone.

36. In a survey it was found that 21 persons liked product  $P_1$ , 26 liked product  $P_2$  and 29 liked product  $P_3$ . If 14 persons liked products  $P_1$  and  $P_2$ ; 12 persons liked product  $P_1$  and  $P_3$ ; 14 persons liked product  $P_2$  and  $P_3$ , and 8 liked all the three products.
- Find how many liked only one product?
  - Find how many liked only 2 products?
  - Find the number of persons who liked  $P_1$  &  $P_2$  but not  $P_3$ .
37. Prove that  $\sin 10^\circ \sin 30^\circ \sin 50^\circ \sin 70^\circ = \frac{1}{16}$
38. A manufacturer has 600 liters of a 12% solution of acid. How many liters of a 30% acid solution must be added to it, so that acid content in the resulting mixture will be more than 15% but less than 18%.  
OR

Solve the following system of inequations:

$$\frac{5x}{4} + \frac{3x}{8} > \frac{39}{8} \quad \& \quad \frac{2x - 1}{12} - \frac{x - 1}{3} < \frac{3x + 1}{4}, x \in \mathbb{R}.$$


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**DELHI PUBLIC SCHOOL**  
**SAIL TOWNSHIP, RANCHI**  
HALF YEARLY EXAMINATION (2022-23)

Class - XI  
Time - 2 Hours

Subject - Hindustani Music Vocal  
Maximum Marks - 30

**खंड - अ**

निम्नलिखित में से किन्ही 15 (पंद्रह) प्रश्नों के सही उत्तर दीजिए। सभी प्रश्नों के अंक समान हैं।

[1×15=15]

1. भारत में संगीत की मुख्य कितनी पद्धतियाँ प्रचलित हैं?

- i) 5
- ii) 4
- iii) 3
- iv) 2

2. हिंदुस्तानी संगीत पद्धति में थाटों की संख्या कितनी है?

- i) 8
- ii) 10
- iii) 12
- iv) 20

3. राग भीमपलासी किस थाट का है?

- i) भैरव
- ii) काफ़ी
- iii) कल्याण
- iv) पूर्वी

4. श्रुतियां कितने होते हैं?

- i) 10
- ii) 20
- iii) 22
- iv) 30

5. नाद की कितनी विशेषताएं हैं?

- i) 2
- ii) 3
- iii) 4
- iv) 5

6. सबसे धीमी लय को क्या कहते हैं?

- i) मध्य लय
- ii) द्रुत लय
- iii) विलंबित लय
- iv) अति द्रुत लय

7. एक राग में कितने संवादी स्वर होते हैं?

- i) 1
- ii) 2
- iii) 3
- iv) 4

8. जो ध्वनि कानों को स्पष्ट सुनाई पड़े उसे क्या कहते हैं?

- i) ध्वनि
- ii) वेग
- iii) श्रुति
- iv) आहट

9. संगीत में (X) क्रास के चिन्ह को क्या कहते हैं?

- i) ताली
- ii) खाली
- iii) दूसरी ताली
- iv) सम

10. किसने राग मियां की मल्हार बनायी?

- i) अमीर खुसरो
- ii) भीमसेन जोशी
- iii) तानसेन
- iv) भातखंडे

11. आश्रय रागों की संख्या है -

- i) 14
- ii) 12
- iii) 10
- iv) 8

12. विलंबित , मध्य और द्रुत किसके प्रकार हैं?

- i) स्वर
- ii) लय
- iii) ताल
- iv) मात्रा



13. विकृत स्वर कितने होते हैं?
- 5
  - 7
  - 10
  - 12
14. राग भीमपलासी में कौन से स्वर कोमल लगते हैं?
- ग - ध
  - ग - नि
  - ग - रे
  - ग - सा
15. जिन वाद्यों में खिचे हुए चमड़े पर प्रहार करने से जो ध्वनि उत्पन्न होती है वे क्या कहलाते हैं?
- अनबद्ध वाद्य
  - घन वाद्य
  - सुषिर वाद्य
  - तत् वाद्य
16. निम्नलिखित में संगीत में खाली का चिन्ह क्या है?
- X
  - 0
  - 3
  - 2
17. निम्न में से प्राकृतिक (अचल) स्वर है-
- नि
  - म
  - ग
  - सा
18. राग भीमपलासी में किन स्वरों की संगति बार बार दिखाई जाती है?
- सा- प
  - सा- म
  - सा- ग
  - सा- नि
19. मियां तानसेन किसके दरबार में संगीतज्ञ थे?
- अकबर
  - हुमायूं
  - जयसिंह
  - माधोसिंह

## खंड - ब

निम्नलिखित में से किन्हीं 3 (तीन) प्रश्नों के सही उत्तर दीजिए। सभी प्रश्नों के अंक समान हैं।

[5X3=15]

1. निम्न को परिभाषित कीजिए

नाद, जाति

2. सप्तक को परिभाषित करते हुए उसके प्रकार को समझाइए।

3. दादरा ताल का परिचय व ठेका लिखिए।

4. तानसेन जी का जीवन परिचय पर प्रकाश डालिए।

5. थाट से आप क्या समझते हैं? इनके नाम लिखिए।

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**DELHI PUBLIC SCHOOL**  
**SAIL TOWNSHIP, RANCHI**  
**HALF YEARLY EXAMINATION (2022-23)**

**Class - XI**  
**Time - 2 Hours**

**Subject - Odissi Dance**  
**Maximum Marks- 30**

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**General instructions:**

- Please check that this question paper contains 6 questions.
- Please write down the serial Number of the question before attempting it.

1. Complete the following sentences.(Attempt any five question, each question carries one mark) [1X5=5]
  - a) Sakuni arranged for a game of dice between the Pandavas and the Kauravas and invited \_\_\_\_\_ to play.
  - b) All the forms of Indian Classical dance owe faithfulness to \_\_\_\_\_ which is often regarded as fifth Veda.
  - c) Indian dance has been contently influenced by several factors. The native Classical dance patterns underwent change with the coming of the \_\_\_\_\_.
  - d) Indian Classical dance celebrated around the world for its lyricism, sensuality and emphasis on \_\_\_\_\_.
  - e) Shiva as Natarja was first depicted in the \_\_\_\_\_ status.
  - f) Krishna was growing in Gokul as the younger son of \_\_\_\_\_.
  - g) \_\_\_\_\_ is the traditional Classical music of Odisha.
  
2. State whether the following are true or false: (Attempt any five question, each question carries one mark) [1X5=5]
  - a) Cheer haran of Droupadi was attempted in the court of Hastinapur.
  - b) In the story of Dashavatar Balaram as the eight Avatar.
  - c) Demon Hiranyakaashyap brother of Hiranyaksha was granted a powerful boon from Brahma that he could not be killed by Man or Animal.
  - d) Prashuram was the son of Jamadgni and Renuka.
  - e) The Mahari of Jagannath temple were belonged to six groups.
  - f) The British were unable to distinguish the Devadasi from religious street dancers.
  - g) Kaliya chose Vridavan as his residence for safty.

3. Match the following pairs correctly: [0.5X10=5]

- a) Natya----- Nrutyahram
- b) Dancing girila----- Ramnaka
- c) Yakshagana----- KVK
- d) Kummi----- Orissa Theatre
- e) Konark temple ----- BandhaNritya
- f) Gotipua----- Narasingha Deva
- g) MayadharRaut ----- Tamil Nadu
- h) BabulalDoshi ----- Karnatak
- i) Island ----- Mohenjodaro
- j) 1990 - ----- Veda

4. Write the definition of any two of the following. [2X2=4]

- a) Kurma,
- b) Balaram,
- c) Varaha,
- d) Kalki

5. State the difference between the following terms: [3X2=6]

- a) KaliyaDaman .
- b) concept of Makhanchor.

6. Attempt any one question: [5]

- a) Briefly describe about Mahari dance.
  - b) Briefly describe about Gotipua dance.
  - c) Briefly describe history of the Odissi dance tradition and development of the style
-



**DELHI PUBLIC SCHOOL**  
**SAIL TOWNSHIP, RANCHI**  
**HALF YEARLY EXAMINATION (2022-23)**

**Class - XI**  
**Time - 3 Hours**

**Subject - Physical Education**  
**Maximum Marks- 70**

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**GENERAL INSTRUCTIONS**

- a. The question paper contains 30 questions and all are compulsory
  - b. Question 1 to 12 carry 1 mark each
  - c. Question 13 to 16 carry 2 marks each and shall not exceed 40-60 words
  - d. Question 17-26 carry 3 marks each and shall not exceed 80-100 words
  - e. Question 27 to 30 carry 5 marks each and shall not exceed 150-200 words
- 

1. When the modern Olympic Games was started? [1]
  - a. 1893
  - b. 1894
  - c. 1895
  - d. 1896
  
2. Ability to get overcome the resistance with high speed is known as \_\_\_\_\_. [1]
  - a. Flexibility
  - b. Explosive strength
  - c. Maximum strength
  - d. Strength endurance
  
3. "Physical Education is the sum of those experiences which come to the individual through movements". This definition was given by \_\_\_\_\_. [1]
  - a. C C Cowell
  - b. D Oberteuffer
  - c. C L Brownell
  - d. R J B Nash
  
4. "Measurement refers to the process of administrating a test to obtain quantitative data". This definition was given by \_\_\_\_\_. [1]
  - a. H M Barrow
  - b. Jack Nelson
  - c. Megee
  - d. Barry L Johnson

5. In which year Boxing was included in Ancient Olympic Games? [1]
- a. 688 BCE
  - b. 724 BCE
  - c. 720 BCE
  - d. 648 BCE

6. Khelo India programme was launched in the session of \_\_\_\_\_. [1]
- a. 2014-15
  - b. 2015-16
  - c. 2016-17
  - d. 2017-18

**OR**

What is the full form of CPED \_\_\_\_\_.

- a. Central course of Physical Education
  - b. Certificate course in Physical Education
  - c. Centre course of physical education
  - d. All of the above
7. Identify the odd one: [1]
- a. Rugby
  - b. Jallikattu
  - c. Lattoo
  - d. Chor-Sipahi
8. Fit-Indian movement was launched on the occasion of the birth anniversary of \_\_\_\_\_ [1]
- a. Bhagat Singh ji
  - b. Mahatma Gandhi ji
  - c. Major Dhyanchand ji
  - d. None of the above
9. Identify the Cardiovascular Endurance test? [1]
- a. 50 mt. dash
  - b. Sit and Reach test
  - c. BMI Test
  - d. 600 mt. run/walk test
10. In which test the length of various bones are measured and tested? [1]
- a. Cardiovascular test
  - b. Speed test
  - c. Agility test
  - d. Anthropometric test

**OR**

Ability to change the direction as fast as possible is known as\_\_\_\_\_.

- a. Strength
- b. Flexibility
- c. Agility
- d. Speed

11. Who declares the modern Olympic Games open in opening ceremony in the stadium?

[1]

- a. Sports Minister
- b. Prime Minister
- c. Home Minister
- d. Defense Minister

12. Static strength can be measured by \_\_\_\_\_.

[1]

- a. Goniometer
- b. Skinfold caliper
- c. Stadiometer
- d. Dynamometer

**OR**

Other name of Dynamic Strength is \_\_\_\_\_.

- a. Isotonic strength
- b. Isometric strength
- c. Maximum strength
- d. None of the above

13. Define Endurance and its types?

[2]

14. Write short note on Playing Surface of changing trends in Sports?

[2]

**OR**

Write in brief on Technological advancements in changing trends in sports.

15. Write any four rules of ancient Olympic games?

[2]

16. Enlist any four tests which is used to measure physical fitness of the individual?

[2]

17. Elaborate the objectives of Physical Education?

[3]

18. Write brief note on Achievement test and Motor ability test?

[3]

19. Explain any three Olympic Values in detail?

[3]

20. Explain any three careers in Communication Media?

[3]

**OR**

Write any six objectives of Khelo-India programme?

21. Define Flexibility and its types in detail?

[3]

22. Write brief note about the start of the Ancient Olympic Games?

[3]

23. Briefly explain about the importance of health?

[3]

**OR**

Discuss any six components of wellness?

24. Explain the benefits of Fit-India movement? [3]
25. Write short note on Questionnaire and Interview? [3]
26. Explain any three of the following:- [3]
- a. Olympic Motto
  - b. Olympic Flag
  - c. Olympic Anthem
  - d. Modern Olympic Awards
27. Write brief note on Traditional sports and Regional sports and explain its importance in daily life? [5]
28. Briefly explain about the teaching career in physical education? [5]
- OR**
- Briefly explain any two of the following:
- a. Sports Coaching
  - b. Sports marketing
  - c. As Players
  - d. As Officials
29. Explain the guidelines of advance preparation in test administration? [5]
30. Write brief note on IOC and its functions? [5]
-





# DELHI PUBLIC SCHOOL

## SAIL TOWNSHIP, RANCHI

### HALF YEARLY EXAMINATION (2022-23)

Class - XI  
Time - 3 Hours

Subject - Physics  
Maximum Marks-70

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#### General Instructions: -

Read the following instructions very carefully and strictly follow them.

1. There are 33 questions in the question paper. All questions are compulsory.
2. This question paper comprises five sections – A, B, C, D, and E.
3. Section A contains **ten** very short answer questions and **four** Assertion-Reasoning MCQ of **1** mark each.
4. Section B has **two** Case based questions of **4** marks each
5. Section C contains **nine** short answer questions of **2** marks each.
6. Section D contains **five** short answer questions of **3** marks each.
7. Section E contains **three** long answer questions of **5** marks each.
8. There is no overall choice in the question paper. However, internal choice has been provided. You have to attempt only one of the choices in such questions.

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#### SECTION A

1. Can a quantity have units but still be dimensionless? Comment.
2. Pressure is defined as momentum per unit volume. Is it true?

OR

What is the dimension of time in power?

3. By the use of dimensions, show that energy per unit volume is equal to pressure.
4. Write down the number of significant figures in the following  
(a) 4200kg (b) 0.02340
5. Two balls of different masses (one lighter and other heavier) are thrown vertically upward with same initial speed. Which one will rise to the greater height?

OR

A ball is thrown vertically upwards. Draw its velocity-time graph.

6. Write an expression for distance covered in the  $n$ th second for uniformly accelerated motion.
7. A bullet fired vertically upwards falls at the same place after some time. What is the displacement of the bullet?
8. Under what condition will the equality  $|\vec{A} \times \vec{B}| = \vec{A} \cdot \vec{B}$  hold good?
9. A body is projected with speed  $u$  at an angle  $\theta$  to the horizontal to have maximum range. What is the velocity at the highest point?
10. A ball is thrown upwards and returns to the ground describing parabolic path. Which of the quantities remain constant throughout the motion.

For the question 11,12, 13 and 14 two statements are given. One labelled Assertion (A) and the other labelled Reason (R). select the correct answer to these question from the codes (a) (b), (c) and (d) as given below.

- (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 but R is false.
- (d) Both A and R are false.

11. Assertion (A): Force cannot be added to pressure  
Reason (R) : Because their dimensions are different .

12. Assertion (A): An object can have constant speed but variable velocity.  
Reason (R) : Speed is a scalar but velocity is a vector quantity.

13. Assertion (A): If dot product and cross product of  $\vec{P}$  and  $\vec{Q}$  are zero, it implies that one of the vector  $\vec{P}$  and  $\vec{Q}$  must be null vector.  
Reason (R) : A null vector is a vector of zero magnitude.

14. Assertion (A): In Javelin throw, the athlete throws the projectile at an angle slightly more than  $45^\circ$ .

Reason (R) : The maximum range does not depend upon angle of projection.

## SECTION B

**Q. No 15 and Q. No 16 are Case- Based Questions and are compulsory. Attempt any *four* sub-parts from each question. Each subpart carries one mark.**

15. Dimensional analysis is the study of the relation between physical quantities based on their units and dimensions. The basic involved is that only dimensionally similar quantities can be added or subtracted or compared.

I. Suppose that quantity y can be dimensionally represented in terms of M, L and T as  $[y] = [M^a L^b T^c]$  then M

- a. May be represented in terms of L, T and y if  $a=0$
- b. May be represented in terms of L, T and y if  $a \neq 0$
- c. Can always be dimensionally represented in terms of L,T,and y
- d. Can never be dimensionally represented in terms of L,T,and y

II. What are the dimensions of  $\frac{A}{B}$  is the relation  $F = A\sqrt{x} + Bt^2$ ,

- a.  $[ML^2T^{-2}]$
- b.  $[L^{\frac{-1}{2}}T^2]$
- c.  $[L^{\frac{-1}{2}}T^{-1}]$
- d.  $[LT^{-2}]$

III. Which of the following is a dimensionless quantity?

- a. Strain
- b. Stress
- c. Specific heat
- d. Quantity of heat

IV. If force (F), length (L) and time (T) be considered as fundamental units, then units of mass will be.

- a.  $[FLT^{-2}]$
- b.  $[FL^{-2}T^{-1}]$
- c.  $[FL^{-1}T^2]$
- d.  $[F^2LT^{-2}]$

V. In the relation  $y=r \sin (wt+kx)$ , the dimensional formula for  $kx$  or  $wt$  is same as

- a.  $\frac{r}{w}$
- b.  $\frac{r}{y}$
- c.  $\frac{wt}{r}$
- d.  $\frac{yr}{wt}$

16. A body released near the surface of earth is accelerated downward under the influence of force of gravity. In the absence of air resistance, all bodies fall with the same acceleration near the surface of the earth. This motion of a body falling towards the earth for a small height ( $h \ll R$ ) is called free fall. Free fall is an example of motion with constant acceleration.

I. When a ball is thrown vertically upwards, at the maximum height.

- a. The velocity is zero and therefore there is no acceleration acting on the particle.
- b. The acceleration is present and therefore velocity is not zero .
- c. The acceleration depends on the velocity as  $a$  is  $= \frac{dv}{dt}$ .
- d. The acceleration is independent of the velocity.

II. Velocity of body on reaching the point, from which it was projected upwards, is

- a.  $V=0$
- b.  $V=2u$
- c.  $V=0.5u$
- d.  $V= u$

III. Three different objects of mass  $m_1$ ,  $m_2$ , and  $m_3$  are allowed to fall from the same point O along three different frictionless paths. The speeds of the three objects, on reaching the ground will be in the ratio of

- a.  $m_1 : m_2 : m_3$
- b.  $m_1 : 2m_2 : 3m_3$
- c.  $\frac{1}{m_1} : \frac{1}{m_2} : \frac{1}{m_3}$
- d. 1 : 1 : 1

IV. A body falling from rest describes distance  $S_1$ ,  $S_2$  and  $S_3$  in the first , second and third seconds of its fall, then the ratio  $S_1 : S_2 : S_3$  is

- a. 1:1:1
- b. 1:3:5
- c. 1:2:3

- d. 1:4:9
- V. The displacement of a particle moving in a straight line is given by  $x = 2t^2 + t + 5$ , where  $x$  is expressed in meters and  $t$  in seconds. The acceleration at  $t = 2$  sec is
- $4m/s^2$
  - $10m/s^2$
  - $8m/s^2$
  - $15m/s^2$

### SECTION C

17. Calculate  $x$  in the equation

$$(\text{velocity})^x = (\text{pressure difference})^{\frac{3}{2}} \times (\text{density})^{\frac{-3}{2}}$$

OR

Using the principle of homogeneity of dimension, find which of the following is correct

(i)  $T^2 = \frac{4\pi^2 r^3}{G}$

(ii)  $T^2 = \frac{4\pi^3 r^3}{GM}$  where  $T$  is time period,  $G$  is universal gravitational constant,  $M$  is mass and  $r$  is radius.

18. The body travels a distance  $S_1$  with velocity  $V_1$  and  $S_2$  with velocity  $V_2$  in the same direction. Calculate the average velocity of the body.
19. When two bodies move uniformly towards each other, the distance between them decreases by  $6m/sec$ . If both the bodies move in the same direction with their same speeds, the distance between them increases by  $4m/sec$ . What are the speeds of the two bodies.

OR

A ball thrown vertically upward with a speed of  $19.6m/sec$ , from the top of a tower returns to the earth in 6 seconds. Find the height of tower.

20. What is the angle made by vector  $\vec{A} = 2\hat{i} + 2\hat{j}$  with  $x$  - axis?
21. The sum and difference of two vectors are perpendicular to each other. Prove that the vectors are equal in magnitude.
22. Two forces 10 N and 14 N are acting upon a body. what can be the maximum and minimum resultant force on the body?

OR

Two vectors, both equal in magnitude, have their resultant equal in magnitude of the either. Find the angle between the two vectors.

23. Points P, Q and R are in a vertical line such that  $PQ = QR$ . A ball at P is allowed to fall freely. What is the ratio of the times of descent through PQ and QR?
24. A particle is projected at an angle  $\theta$  from the horizontal with kinetic energy  $k$ . What is the kinetic energy of the particle at the highest point?
25. Two projectiles A and B are projected with velocities  $\sqrt{2}V$  and  $V$  respectively. They have the same range. If A is thrown at angle of  $15^\circ$  with the horizontal, then what is the angle of projection of B?

### SECTION -D

26. State parallelogram law of vector addition. Find the magnitude and direction of resultant vector when two vectors  $\vec{P}$  and  $\vec{Q}$  inclined at an angle  $\theta$ .

27. If the velocity of light  $C$ , the constant of gravitation  $G$  and Planck's constant  $h$  be chosen as fundamental units, find the dimensions of mass and length in term of  $C$ , and  $G$  and  $h$ .

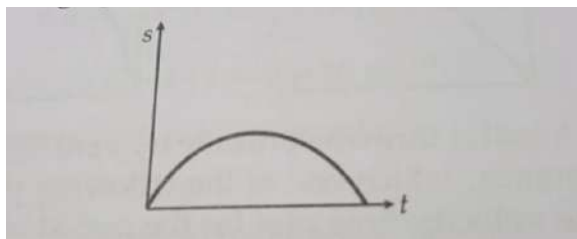
OR

The frequency ( $\nu$ ) of an oscillating drop may depend upon radius ( $r$ ) of the drop, density ( $\rho$ ) of liquid and the surface tension ( $s$ ) of the liquid. Deduce the formula of frequency ( $\nu$ ) dimensionally. Given  $[s]=[MT^{-2}]$

28. The rate of flow ( $V$ ) of a liquid flowing through a pipe of radius  $r$  and pressure gradient ( $\frac{p}{l}$ ) is given by poiseuilles equation  $V = \frac{\pi}{8} \frac{pr^4}{nl}$ . Check the dimensional correctness of this relation
29. Obtain dimensional formula for.
- Power
  - Co-efficient of viscosity
  - Resistance
30. a. The velocity- time relation of an electron starting from rest is given by  $v=kt$ , where  $k=2ms^{-2}$ . Calculate the distance traversed in 3sec.
- b. A body starting from rest moves along a straight line with constant acceleration. Draw a graph showing the variation of speed  $V$  with distance  $S$ .

OR

- A body A is thrown up vertically from the ground with a velocity  $V_0$  and another body B is simultaneously dropped from a height  $H$ . Find the value of  $V_0$  if they meet at height  $\frac{H}{2}$ .
- The graph of displacement versus time is shown in figure. Draw the velocity- time graph for it .



### SECTION E

31. A projectile is fired upward at an angle  $\theta$  with the horizontal with velocity  $u$ . Show that its trajectory is a parabola. Obtain expression for (a) maximum height attained (b) time of flight and (c) horizontal range.

OR

- Determine the sine of the angle between the vectors  $3\hat{i} + \hat{j} + 2\hat{k}$  and  $2\hat{i} - 2\hat{j} + 4\hat{k}$
  - $\hat{i}$  and  $\hat{j}$  are unit vectors along  $x$  and  $y$  axes respectively. What is the component of a vector  $\vec{A} = 2\hat{i} + 3\hat{j}$  along the direction of  $\hat{i} - \hat{j}$  ?
32. a. State four advantages of SI over other systems of units
- b. Find the value of 100J on a system which has 20cm, 250gm and half minute as fundamental units of length, mass and time .

OR

- a. Write four limitations of dimensional analysis.
- b. The number of particle crossing a unit area perpendicular to  $x$  - axis in unit time is given by.  
 $n = -D \frac{n_2 - n_1}{x_2 - x_1}$  where  $n_1$  and  $n_2$  are number of particles per unit volume for the values of  $x$  meant to be  $x_1$  and  $x_2$ . Find the dimensions of the diffusion constant  $D$

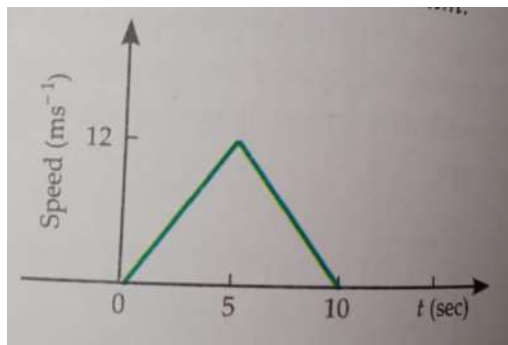
33. a. Derive the following relations for uniformly accelerated motion

(i)  $s = ut + \frac{1}{2} at^2$

(ii)  $v^2 - u^2 = 2 as$ .

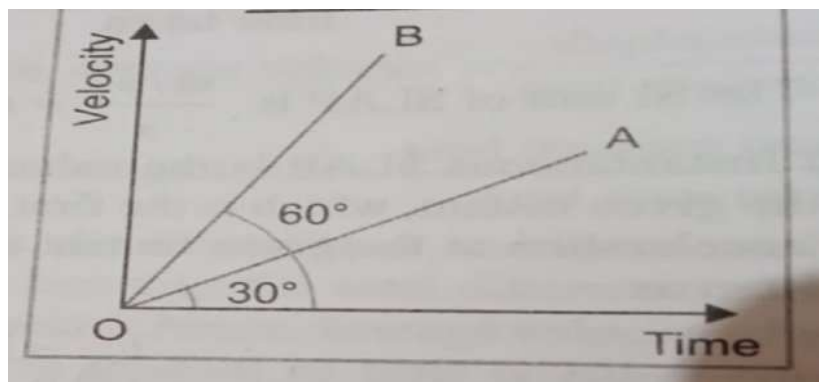
b. The speed - time graph of a particle moving along a fixed direction is shown in figure. Find

- (i) distance travelled by the particle between 0 sec to 10 sec .  
(ii) average speed between this interval.  
(iii) the time when the speed was minimum.  
(iv) the time when the speed was maximum



OR

- a. The relation between time  $t$  and distance  $x$  is  $t = \alpha x^2 + \beta x$  where  $\alpha$  and  $\beta$  are constants. Show that retardation is  $2\alpha V^3$ , where  $V$  is the instantaneous velocity
- b. Two straight lines drawn on the same velocity time graph make angle  $30^\circ$  and  $60^\circ$  with the time axis respectively as shown in figure. Which line represent greater acceleration? What is the ratio of the two accelerations?





# DELHI PUBLIC SCHOOL

## SAIL TOWNSHIP, RANCHI

### HALF YEARLY EXAMINATION (2022-23)

Class - XI  
Time - 3 Hours

Subject - Political Science  
Maximum Marks- 80

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#### General Instructions:

All questions are compulsory.

Question 1-15 carry 1 mark each, answer to one mark question.

Questions 16-23 carry 2 marks each, answer to two marks question should exceed 40 words.

Questions 24-27 carry 4 marks each, answer to four marks question should not exceed 100 words.

Questions 28-30 carry 6 marks each, answer to six marks question should not exceed 200 words

Questions 31-33 carry 5 marks each and are source based questions.

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1. In which year did Nepal emerged as a democratic republic after abolishing the monarchy?
  - (a) 2015
  - (b) 1990
  - (c) 1959
  - (d) 2008
2. Ares described the constitution of which country as the "Castle of Cards"?
  - (a) Afghanistan
  - (b) Pakistan
  - (c) Iran
  - (d) Iraq
3. Who said "These principles of liberty, equality and fraternity are not to be treated as separate items in a trinity. They form a union of trinity in the sense that to divorce one from the other is to defeat the very purpose of democracy."?
  - (a) Dr B.R. Ambedkar
  - (b) Dr Rajendra Prasad
  - (c) PanditJawaharLal Nehru
  - (d) Jaiprakash Narayan
4. Number of members who signed the constitution after 24<sup>th</sup> January 1950?
  - (a) 284
  - (b) 15
  - (c) 12
  - (d) 00

5. When did Dr Ambedkar said that "One likes to ask whether there can be anything new in a constitution framed at this hour in the history of the world... The only new things, if there can be any, in a constitution framed so late in the day are the variations made to remove the faults and to accommodate it to the needs of the country."?
  - (a) November 4, 1948
  - (b) November 9, 1948
  - (c) November 19, 1948
  - (d) November 25, 1948
6. In which year was the legal age for being an adult citizen in India reduced from 21 to 18?
  - (a) 1947
  - (b) 1969
  - (c) 1979
  - (d) 1989
7. Who said that "...But I have come to say a few words on behalf of the Adivasis of India.... In the past, thanks to the major political parties, thanks to the British Government and thanks to every enlightened Indian citizen, we have been isolated and kept, as it were, in a zoo. ...We are willing to mix with you, and it is for that reason, ..., that we have insisted on a reservation of seats as far as the Legislatures are concerned."?
  - (a) Dr Ambedkar
  - (b) Jaipal Singh
  - (c) Arhar Munda
  - (d) Rimongogoi
8. Who won the 2016 assembly elections in Tamil Naidu?
  - (a) Dmk
  - (b) Aiadm
  - (c) Pmk
  - (d) Bjp
9. "The Republic" opens with a discussion between?
  - (a) Socrates and Cephalus
  - (b) Plato and Cephalus
  - (c) Socrates and Polemarchus
  - (d) Plato and Polemarchus
10. Who wrote the book "The Republic"?
  - (a) Plato
  - (b) Socrates
  - (c) Aristotle
  - (d) Polemarchus
11. Who among the following was the first to argue for freedom as a fundamental right of humankind?
  - (a) Karl Marx
  - (b) Rousseau
  - (c) Mill
  - (d) Kant



12. Who amongst the following observed that politics envelops us like the coils of a snake and there is no other way out but to wrestle with it.
  - (a) Dr Ambedkar
  - (b) Mahatma Gandhi
  - (c) Pandit Nehru
  - (d) Srimati Indira Gandhi
13. Hind swaraj was written by?
  - (a) Mahatma Gandhi
  - (b) Dr Ambedkar
  - (c) Pandit Nehru
  - (d) Netaji Subhash Chandra Bose.
14. Mention the 2 functions of south African government that is enshrined in their constitution for pursuing collective good of the society beyond mere rules and regulations?
15. What is a constitution?
16. Elaborate article 324(1) of the Indian constitution.
17. What is meant by special majority?
18. What is the tenure or the CEC as per the Indian constitution? and how can he be removed from his office before the expiry of his term?
19. What is meant by equality and how does its meanings change with change in context?
20. What gives rise to politics?
21. What is that for which Dr Ambedkar rigorously argued and how does it find its expression in the Indian constitution?
22. Mention the 4 main functions of a constitution and elaborate on each briefly.
23. How and by whom were the members of the constituent assembly elected? Mention the 4 major points of the cabinet mission plan roughly around which the constituent assembly was composed.
24. Compare FPTP and PR systems of election with at least 4 major points and provide examples of countries following each system.
25. Elaborate 4 major functions of the Election Commission of India.
26. Mention 4 substantial reasons why should one study political theory.
27. What are the major themes that political theory deals with? Give three arguments to prove the relevance of political theory in the present world.
28. Mention the 5 main points of the objective resolution. Who gave it?
29. Mention 5 major factors to which the success of India's election system can be attributed to. Also mention at least 3 reforms suggested to be brought in the constitutional provisions for electoral reforms?

30.



- (a) Who is the man standing with a violin on extreme left?
  - (b) Name the man standing on the right of Maulana Azad.
  - (c) Name the man in the crawling position behind Nehru ji.
  - (d) Who is the second man on a chair just beside Nehru ji?
  - (e) What is Pandit Nehru trying to do and how far was he successful?
31. "Then if a man says that justice consists in the repayment of debts, and that good is the debt which a man owes to his friends, and evil the debt which he owes to his enemies, – to say this is not wise; for it is not true, if, as has been clearly shown, the injuring of another can be in no case just."
- (a) Who is the narrator of the above lines?
  - (b) To whom are the above lines narrated?
  - (c) These lines are originally present in which book?
  - (d) Who is the author of the book from which these lines are taken?
  - (e) What is the idea of justice present in the Preamble of the Indian Constitution?
32. "Separate electorates have been a curse to India, have done incalculable harm to this country... Separate electorates have barred our progress... We (Muslims) want to merge in the nation. ...for God's sake keep your hands off reservation for the Muslim community."
- (a) Who is the speaker of the above lines?
  - (b) What is meant by separate electorates?
  - (c) How are separate electorates different from reserved seats?
  - (d) How many seats are reserved for Muslims in the Indian Parliament?
  - (e) When and where were these lines said?



# DELHI PUBLIC SCHOOL

## SAIL TOWNSHIP, RANCHI

HALF YEARLY EXAMINATION (2022-23)

Class - XI  
Time - 3 Hours

Subject - Sociology  
Maximum Marks- 80

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### General Instructions

1. The question paper is divided into four sections.
  2. There are 35 questions in all. All questions are compulsory.
  3. Section A includes question No. 1-16. These are objective type questions.
  4. Section B includes question No. 17-25. These are very short answer type questions carrying 2 marks each. Answer to each question should not exceed 30 words.
  5. Section C includes question No. 26-32. These are short answer type questions carrying 4 marks each. Answer to each question should not exceed 80 words. Question no. 26 and 27 are case based questions with 4 parts each carrying 1 mark, making the questions of 4 marks each.
  6. Section D includes question No. 33-35. They are long answer type questions carrying 6 marks each. Answer to each question should not exceed 200 words each. Question no 35 is to be answered with the help of the passage given.
- 

### SECTION - A

1. Capitalism's root lies in the -----
  - A. French Revolution
  - B. Russian Revolution
  - C. Industrial revolution
  - D. Intellectual Revolution
2. -----, the French scholar, considered to be the founder of sociology.
  - A. C. Wright Mills
  - B. Auguste Comte
  - C. Peter Berger
  - D. Herbert Spencer
3. Modes of action which do not conform to the norms or values held by most of the members of a group or society:
  - A. Sanction
  - B. Norms
  - C. Deviance
  - D. Value
4. Personal, Uncodified and Unofficial type of social control is called
  - A. Informal
  - B. Functional
  - C. Formal
  - D. None of these

5. It is a mode of reward or punishment that reinforces socially expected forms of behavior
  - A. law
  - B. rule
  - C. Sanction
  - D. Control
6. It is simply a position in society or in a group every individual occupies.....-
  - A. Identity
  - B. Status
  - C. Role
  - D. Authority
7. ----- emphasises the analysis of social systems and population on large scale.
  - A. Functionalist theory
  - B. Conflict theory
  - C. Micro sociology
  - D. Macro sociology
8. ----- -- refers to type of marriage in which a man marries more than one woman.
  - A. Monopoly
  - B. Monogamy
  - C. Serial monogamy
  - D. Polygamy
9. Which of the following rights includes the rights to own property?
  - A. Social rights
  - B. Civil rights
  - C. Political rights
  - D. None of these
10. According to sociologist ....., the number of joint families have gradually increased in post independence India. According to him, the rising life expectancy in India is a contributing factor.
  - A. A.M. Shah
  - B. Emile Durkheim
  - C. Herbert Spencer
  - D. George Simmel
11. For ..... no society can survive without a 'common base', a certain number of ideas, sentiments and practises which education must inculcate in all children indiscriminately to whatever social category they belong.
  - A. Max Weber
  - B. Auguste Comte
  - C. Emile Durkheim
  - D. Clifford Geertz
12. A family where couple lives with the man's parents is called-----
  - A. Matrilineal
  - B. Patrilineal
  - C. Matrilocal
  - D. Patrilocal

13. Sovereignty, citizenship and ideas of Nationalism are defining features of .....
- A. Modern state
  - B. Monarchy
  - C. Colonial Rule
  - D. Autocracy
14. The most important agent of Socialisation in the early childhood is----
- A. Family
  - B. Peer group
  - C. School
  - D. Mass media
15. ----- culture refers to the intangible elements of culture.
- A. Material
  - B. Non-material
  - C. Explicit
  - D. Mass
16. The process of Socialisation which takes place in school and other institutions is known as--
- A. Personality development
  - B. Secondary socialisation
  - C. Primary Socialisation
  - D. Both A and B

## SECTION B

17. What is society?
18. What do you understand by Synthetic School of thoughts In sociology?
19. How sociology is a progressive science?
20. What are secondary groups?
21. What is peer group?
22. What is meant by role?

**OR**

- What do you mean by deviance ?
23. What do you understand by the term marriage?
24. What is kinship?
25. What are the main elements of culture?

**OR**

What is Material Dimension of culture?

## SECTION - C

26. Read the given passage and answer the questions that follow.
- Political institutions are concerned with the distribution of power in society. Two concepts, which are critical to the understanding of political institutions are power and authority. Power is the ability of individuals or group to carry out their will even when opposed by others. It implies that those who hold power do so at the cost of others. There is a fixed

amount of power in a society and if some wield power, others do not. In other words an individual or group does not hold power in isolation. They hold it in relation to others.

- (i) Around 60 years ago, social anthropologists conducted empirical studies of..... to explain how order can be preserved in the absence of a modern governing apparatus.
  - A. Stateless societies
  - B. Empirical societies
  - C. Modern States
  - D. Nationalism
- (ii) ..... rights involve the freedom of individuals to live where they choose to.
  - A. Civil
  - B. Political
  - C. Social
  - D. All of these
- (iii) ..... is a collection of symbols and values that give people a sense of belonging to a single political group.
  - A. Nationalism
  - B. Regionalism
  - C. Fascism
  - D. Communism
- (iv) ..... is a branch of Protestant Christianity.
  - A. Capitalism
  - B. Calvinism
  - C. Nationalism
  - D. Socialism

27. Read the given passage and answer the questions that follow.

Families have varying locations within the overall institutions of a society. In most traditional societies, the family into which a person is born largely determines the individual's social position for the rest of his/ her life.

Even when social position is not inherited at birth in this way the region and social class of the family into which an individual is born affects patterns of socialisation quite sharply.

Children pick up ways of behaviour characteristic of their parents or others in their neighbourhood or community.

- (i) A sociological agency, ..... is friendship groups of children of a similar age.
  - A. school
  - B. Peer group
  - C. Reference group
  - D. None of these
- (ii) ..... culture refers to the intangible elements of culture.
  - A. Explicit
  - B. Material
  - C. Artifacts
  - D. Non - material

(iii) Normative aspect of culture includes.....

- A. Folkways
- B. Customs
- C. Conventions
- D. All of these

(iv) Every behaviour that is made possible by the use of materials and is considered to be a part of culture falls under the ..... dimension of cultures.

- A. Material
- B. Non - material
- C. Cosmopolitan
- D. Ethnocentrism

28. Why is the study of the origin and growth of Sociology important?

29. Bring out four differences between sociological perspective and common sense knowledge.

30. What do you understand by social groups? State any four characteristics of social groups.

**OR**

What is social stratification? Explain its key principles.

31. State the political institution and its concepts.

32. Discuss the cognitive and normative dimensions of culture.

**OR**

What are the material aspects of culture?

## **SECTION - D**

33. 'Types of families and their forms are based on various parameters'. How can you find the list of family and family forms?

34. Discuss differences between social change and cultural change.

**OR**

What do you mean by Socialisation? Discuss the characteristics of Socialisation.

35. Read the given passage and answer the questions that follow.

The ultimate and no doubt the oldest means of social control is physical violence, even in the politely operated societies of modern democracies the ultimate argument is violence. No State can exist without a police force or its equivalent in armed might. In any functioning society violence is used economically and as a last resort, with the mere threat of this ultimate violence. Sufficing for the day-to-day exercise of social control. Where human beings live or work in compact groups, in which they are personally known and to which they are tied by feelings of personal loyalty (the kind that sociologists called primary groups), very potent and simultaneously very subtle mechanisms of control are constantly brought to bear upon the actual or potent deviant.....

- 1. Explain functionalist perspective of social control. [2]
- 2. Why Social control is necessary for an orderly social life? Explain. [4]