



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

Class - XI
Time - 3 Hours

Subject - Accountancy
Maximum Marks- 80

GENERAL INSTRUCTIONS:

1. There are 34 questions in the question paper. All questions are compulsory.
 2. Question nos. 1 to 20 carry 1 mark each.
 3. Question nos. 21 to 26 carry 3 marks each.
 4. Question nos. 27 to 29 carry 4 marks each.
 5. Question nos. 30 to 34 carry 6 marks each.
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1. Which qualitative characteristics of accounting information is reflected when accounting information is clearly presented
 - A. Reliability
 - B. Relevance
 - C. Comparability
 - D. Understand ability[1]
2. Which of the following is a Liability
 - A. Furniture
 - B. Rent Payable
 - C. Interest Received
 - D. Stock[1]
3. Assets except securities may be valued under IND-AS on
 - A. Fair value
 - B. Historical cost
 - C. Both fair value and Historical cost
 - D. None of these[1]
4. Decrease in one liability may lead to
 - A. Decrease in an asset
 - B. Increase in another liability
 - C. Either A or B
 - D. None of these[1]
5. Debit means
 - A. an increase in asset
 - B. an increase in liability
 - C. an increase in proprietor equity
 - D. a decrease in asset[1]

6. Which of the following accounts has a credit balance
- A. carriage inward
 - B. discount received
 - C. carriage outward
 - D. discount allowed
- [1]
7. Bank account is a
- A. personal account
 - B. real account
 - C. nominal account
 - D. none of these
- [1]
8. Sale of goods to Ram for cash is debited to
- A. Ram
 - B. cash account
 - C. sales account
 - D. none of these
- [1]
9. Ledger is a book in which
- A. real and nominal accounts are recorded
 - B. real and personal accounts are maintained
 - C. real personal and nominal accounts are maintained
 - D. personal and nominal accounts are maintained
10. What type of following accounts will have debit balance
- A. personal account
 - B. real account
 - C. nominal account
 - D. all of the above
- [1]
11. Balance shown in the balance sheet is that of
- A. cash book
 - B. bank pass book
 - C. adjusted cash book
 - D. none of these
- [1]
12. Bank reconciliation statement is started with
- A. Bank balance of the cash book
 - B. cash balance of the cash book
 - C. Pass book balance
 - D. Bank balance of cash book or pass book balance
- [1]
13. Preparation of trial balance is
- A. compulsory
 - B. optional
 - C. compulsory or optional
 - D. None of these
- [1]

14. The preparation of trial balance helps in
- A. assessing the financial position
 - B. locating errors of all types
 - C. preparation of Final accounts
 - D. none of these
- [1]
15. A provision is
- A. an appropriation of profits
 - B. a change against profit
 - C. can be A or B
 - D. none of these
- [1]
16. Provision is a
- A. specific reserve
 - B. general reserve
 - C. capital reserve
 - D. none of these
- [1]
17. Suspense account will give the
- A. debit balance
 - B. credit balance
 - C. debit or credit balance as the case may be
 - D. none of these
- [1]
18. Errors not shown by trial balance are
- A. errors of principal
 - B. compensating errors
 - C. errors of complete omission
 - D. all of these
- [1]
19. Capital expenditure and Revenue expenditure
- A. are distinguished
 - B. are not distinguished
 - C. may or may not be distinguished
 - D. must be distinguished
- [1]
20. Computer purchased for resale is
- A. capital expenditure
 - B. revenue expenditure
 - C. deferred revenue expenditure
 - D. none of these
- [1]
21. Explain:
- A. Dual Aspect Concept
 - B. Business Entity Concept
 - C. Going Concern Concept
- [3]

22. On 01-04-2021 Sohan started a business with a capital of Rs 500000 and a loan of Rs 250000 borrowed from a friend During the year 2021-22 he earned a profit of Rs. 250000 , introduced an additional capital of Rs. 300000 and had withdraw RS 150000 for personal use On 31-03-2022 the total assets were Rs.2000000
Calculate the amount of external liability on 31-03-2022 [3]

23. Calculate General Manager commission and Works Manager commission from the following information and pass adjustment entries
Gross profit Rs. 300000 Indirect expenses Rs. 70000
Works manager commission 5% of gross profit
General Manager commission 10% of Net profit before changing manager commission. [3]

24. Trial Balance on 31st march 2022

| Particular | Amount (Rs.) | Amount (Rs.) |
|----------------------------|--------------|--------------|
| Computer | 100000 | - |
| Provision for depreciation | - | 30000 |
| Capital | - | 500000 |

Adjustment:-

- (i) Depreciate computer by 20% p.a. on WDVM. Computer includes Rs. 50000 purchased on 31.03.2022
- (ii) Capital includes Rs. 200000 introduced in 01.01.2022 Allowed interest capital @6% p.a. How will you disclose the above information in final accounts for the ended 31.03.2022

25. Trial balance on 31st march 2022 [3]

| particular | Amount (Rs) | Amount (Rs.) |
|--------------|-------------|--------------|
| Debtor | 105000 | ---- |
| Cash at Bank | 10000 | ---- |
| Creditors | ----- | 75000 |

Adjustment

- (i) Further Bad Debts amounted to Rs. 5000
- (ii) Make a provision for Bad and Doubtful Debts @ 10% of debtors
- (iii) Bad Debts recovered Rs. 2000

How will you disclose the above information in final account for the year ended 31.03.2022

26. Pass adjustment entry [3]

- (i) Salary paid in advance Rs. 10000
- (ii) Outstanding wages Rs. 2000
- (iii) Depreciation on machine Rs. 10000
- (iv) Closing Stock Rs. 35000
- (v) Goods loss by fire Rs 10000 and it was not insured
- (vi) Interest on drawing Rs 3000

27. Rectify the following error

[4]

- (i) Credit sales to Arun Rs.7200 were recorded as Rs.7260
- (ii) Goods returned from Deepika Rs. 1000 were recorded as Rs. 1600
- (iii) Credit Sales to Arun Rs.7000 were recorded in purchase book
- (iv) An amount of Rs.2500 spent for extension of machinery has been debited to wages account
- (v) Rs. 1000 received from X has been credited to Y's A/C
- (vi) Rs. 800 paid for Rent wrongly debited to Land Lord AC
- (vii) Rs. 3000 paid to Mohan for salary debited to his personal A/C
- (viii) Rs 4000 the amount of sale of an old machine has been credited sales A/C

28. On 01.04.2018 XYZ Ltd. purchased a second hand machine for Rs. 150000. Rs 40000 paid for repair of machine and 10000 paid for installation of machine on 01.01.2023 it was sold for Rs. 30000. Depreciation is provided @ 20% p.a. on Written Down Value method on 31st March every year.

Prepare machine Disposal Account on 01/01/2023 assuming that provision for depreciation Account is maintained in the books.

[4]

29. Prepare sales Book from the following transactions of Navketan Furniture House Ranchi

| | |
|------------|---|
| 2023 Jan 1 | Sold to Star Furniture Ranchi 150 chairs @ Rs 1800 each 36 tables @ Rs. 5000 each Trade discount @20% |
| Jan 15 | Sold goods to Vishal Furniture House Gaya 10 Almirahs @ Rs. 11000 each 5 sofa sets @ Rs. 18000 each Trade discount 20% |
| Jan 20 | Sold to Prakash Furniture Ranchi 100 chairs @ Rs 2000 each 100 tables @ Rs. 5000 each Trade discount 20% |
| Jan 20 | Sold Moonlight Furniture Ranchi for cash 50 chairs @Rs. 2100 each 50 tables @Rs. 4200 each Trade discount 25% |

[4]

30. Pass journal entries

- (i) Good sold for cash Rs. 1000 cash discount allowed @10%
- (ii) Good purchased for cash Rs. 5000, cash discount received @5%
- (iii) Salary paid Rs. 27000 after deducting TDS@10%
- (iv) Cash received from debtors Rs. 13500, discount allowed to him @10%
- (v) Cash paid to creditors Rs. 5400, discount received from him @10%
- (vi) Good loss by fire Rs. 5000, insurance company admitted the claim Rs. 4500 in full settlement
- (vii) Good sold on credit Rs. 7000
- (viii) Goods purchased on credit Rs. 10000
- (ix) Rent paid in advance Rs 20000
- (x) Goods given away as sample Rs.500
- (xi) Goods given away as charity Rs. 1000
- (xii) Bad Debts recovered Rs.1000

[6]

31. Prepare Bank Reconciliation Statement on 31.03.2022 from the following information :-

- (i) Overdraft balance as per Cash Book Rs. 21000
- (ii) Cheque issued but not presented for payment Rs. 10000
- (iii) Cheque deposited but not collected by bank Rs. 5000
- (iv) Bank charged Rs.500 not recorded in cash book
- (v) Interest on overdraft not recorded in cash book Rs. 1000
- (vi) A bill of Rs. 1000 discounted with bank at Rs. 950, but full amount recorded in Bank column of cash book
- (vii) Interest on investment Rs. 2000 not recorded in cash book
- (viii) Insurance premium paid by bank Rs. 700, not recorded in cash Book
- (ix) Dr. side of cash Book overcast by Rs.100
- (x) A cheque of 750 deposited into bank, dishonoured not recorded in Cash Book.

[6]

32. Prepare Double column Cash Book (Cash with Bank column) From the following information:-

2023 Jan1 Cash in hand Rs. 10000, Cash at Bank Rs. 20000

| | |
|--------|--|
| Jan3 | Goods sold for cash Rs. 5000 Cash discount allowed @10% |
| Jan 5 | Goods purchased for cash Rs.4000 cash discount received @10% |
| Jan 7 | Salary paid by cheque Rs. 7200 after deducting TDS@10% |
| Jan 9 | 100 shares of Rs. 10 each purchased @ Rs.15 per share |
| Jan 11 | A cheque of Rs. 4500 issued to creditor and discount received @10% |
| Jan 13 | Cash withdraw from bank - for personal use Rs.5000 for office use Rs 10000 |
| Jan 15 | Personal investment sold for Rs. 50000 and the amount deposited into business bank account |

[6]

33. On 01.04.2018 ABC Ltd. purchased a machine for Rs. 100000 Half of this machine was sold on 31.03.2019 for Rs. 30000 on 30.06.2018 second machine was purchased for Rs. 200000 on 31.03.2019 third machine was purchased for Rs. 300000. Depreciation is provided @ 20% p.a. on WDVM on 31st march every year prepare machine Account for three year ended 31.03.2021 Calculation be made nearest to rupee

[6]

34. Prepare Trading and profit and loss Account and Balance sheet from the following balances relating to the year ending 31st march 2022

| | Rs. | | |
|---------------------|---------|------------------------|--------|
| Capital | 1000000 | wages | 500000 |
| Creditors | 120000 | Bank | 100000 |
| Return outward | 50000 | Repairs | 5000 |
| Sales | 1640000 | Stock (01.04.2021) | 200000 |
| Bills payable | 50000 | Rent | 40000 |
| | | Manufacturing Expenses | 80000 |
| Plant and machinery | 400000 | Trade expenses | 70000 |
| Sundry debtors | 240000 | Bad debts | 20000 |
| Drawing | 100000 | Carriage | 15000 |
| Purchases | 1050000 | Fuel and power | 10000 |
| Return Inward | 30000 | | |

Additional information

- (i) Closing stock was valued Rs.145000
- (ii) Wages due for 2 month
- (iii) Allowed interest in capital @5%
- (iv) Charged interest in drawing @6%

[6]



DELHI PUBLIC SCHOOL

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ANNUAL EXAMINATION (2022-23)

Class - XI
Time - 3 Hours

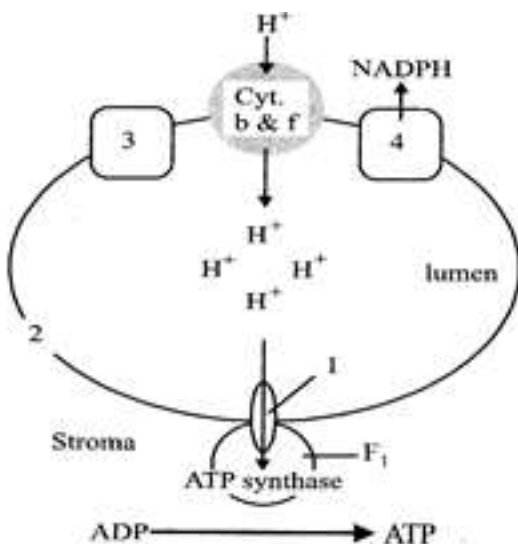
Subject - Biology
Maximum Marks - 70

General Instructions:

- All questions are compulsory.
- The question paper has five sections and 33 questions. All questions are compulsory.
- Section–A has 16 questions of 1 mark each; Section–B has 5 questions of 2 marks each; Section– C has 7 questions of 3 marks each; Section– D has 2 case-based questions of 4 marks each; and Section–E has 3 questions of 5 marks each.
- 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 labeled diagrams should be drawn.

SECTION-A

- The common characteristics between tomato and potato will be maximum at the level of their
a. Genus b. Family c. Order d. Division
- Which one of the following conditions are favourable for formation of carbonamino haemoglobin?
a. low $p\text{CO}_2$ b. high $p\text{O}_2$ c. low H^+ d. low $p\text{O}_2$
- The diagram below shows ATP synthesis through chemiosmosis. Which option shows the correct labelling of 1, 2, 3 and 4 in the diagram?

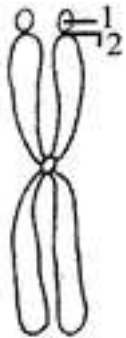


- 1 - F1, 2 - Thylakoid membrane, 3 - Photosystem-I, 4 - Photosystem-II
- 1 - F0, 2 - Thylakoid membrane, 3 - Photosystem-I, 4 - Photosystem-II
- 1 - F1, 2 - Thylakoid membrane, 3 - Photosystem-II, 4 - Photosystem-I
- 1 - F0, 2 - Thylakoid membrane, 3 - Photosystem-II, 4 - Photosystem-I

4. After karyogamy followed by meiosis, spores are produced exogenously in
 a. Neurospora b. Alternaria c. Agaricus d. Saccharomyces
5. The seedless vascular plants whose sporophyte is larger than their small independent gametophyte
 a. Pteridophyte b. Angiosperm c. Gymnosperm d. Thallophyte
6. In an inflorescence where flowers are borne laterally in an acropetal succession, the position of the youngest floral bud shall be
 a. Proximal b. Distal c. Intercalary d. Any where
7. Match the terms in column I with their description in column II and choose the correct option.

| Column I | Column II |
|--------------|------------------------|
| A. IAA | (i) Herring sperm DNA |
| B. ABA | (ii) Bolting |
| C. Ehtylene | (iii) Stomatal closure |
| D. GA | (iv) Weed-free lawns |
| E. Cytokinin | (v) Ripening of fruits |

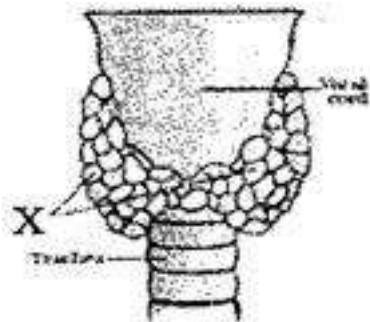
- a. A - iv, B - iii, C - v, D - ii, E - i
 b. A - v, B - iii, C - iv, D - ii, E - i
 c. A - iv, B - i, C - v, D - iii, E - ii
 d. A - v, B - iii, C - ii, D - i, E - iv
8. The following diagram represents a structure of chromosome. Identify the structures marked as 1,2 and 3.



Chromosome - 3

- a. 1 - Satellite, 2 - Primary constriction, 3 - Acrocentric
 b. 1 - Satellite, 2 - Secondary constriction, 3 - Metacentric
 c. 1 - Satellite, 2 - Centromere, 3 - Telocentric
 d. 1 -Satellite, 2-Centromere, 3-Submetacentric
9. The following substances are the excretory products in animals. Choose the least toxic form among them?
 a. Urea b. Uric acid c. Ammonia d. Carbon dioxide
10. Many elements are found in living organisms either free or in the form of compounds. One of the following is not, found in living organisms.
 a. Silicon b. Magnesium c. Iron d. Sodium
11. Muscles with characteristic striations and involuntary are
 a. Muscles in the wall of alimentary canal
 b. Muscles of the heart
 c. Muscles assisting locomotion
 d. Muscles of the eyelids

12. Which of the following disease is caused due to over secretion of the hormone from the structure marked as X?



- Gigantism
- Diabetes mellitus
- Diabetes insipidus
- Grave's disease

Question No. 13 to 16 consist of two statements - Assertion (A) and Reason (R). Answer these questions selecting the appropriate option given below:

- Both A and R are true and R is the correct explanation of A.
- Both A and R are true and R is not the correct explanation of A.
- A is true but R is false.
- A is False but R is true.

13. **Assertion (A):** Cold blooded animals do not have fat layer.

Reason (R): Cold blooded animals use their fat for metabolic process during hibernation.

14. **Assertion (A):** When a neuron is not conducting any impulse, i.e. resting, the axoplasm inside the axon contains high concentration of Na^+ and negatively charged proteins and low concentration of K^+ .

Reason (R): In resting, the axonal membrane is comparatively more permeable to K^+ ions and nearly impermeable to Na^+ ions.

15. **Assertion (A):** During zygotene, chromosomes show bivalent stage.

Reason(R): Bivalent is half the number of chromosomes.

16. **Assertion (A):** Oxidation of one molecule of NADH produces to 3 molecules of ATP, and that of one molecule of FADH_2 produces 2 molecules of ATP.

Reason (R): The number of ATP molecules synthesised depends on the nature of the electron donor.

SECTION-B

17. What is the significance of Juxta-glomerular apparatus (JGA) in kidney function?

18. What are the structural characteristics of
- Meristematic cells near root tip
 - The cells in the elongation zone of the root

19. Differentiate between :

- Actinomorphic and Zygomorphic flower
- Racemose inflorescence and Cymose inflorescence

20. Mitosis results in the production of two cells, which are similar to each other. What would be the consequence of each of the following irregularities that occur during mitosis?

- Nuclear membrane fails to disintegrate.
- Centromeres do not divide

21. What are the constituents of the limbic system? Mention its functions.

(OR)

How does the transmission of a nerve impulse takes place across a chemical synapse?

SECTION-C

22. Trace the events in a muscle fibre from the time it receives the impulse up to the contractile response.

23. Describe the process of Z scheme of light reaction.

24. (a) Name the following:

i. The green algae which is used as protein rich food by space travellers

ii. The gelatinous substance that covers the cell wall of phaeophyceae

iii. The reserve food in Porphyra

iv. The structure that fixes the brown algae to the substratum

(b) Gymnosperms are well adapted to withstand xerophytic conditions. Justify

25. What are the steps in the sexual cycle in kingdom fungi?

26. Explain the mechanism of the action of a protein hormone in human body.

(OR)

Name the hormones, their source glands and their mode of functioning to achieve calcium homeostasis in the human body.

27. Mention the role of the following in a prokaryotic cell:

(a) Mesosome

(b) Chromatophores

(c) Gas vacuoles

28. Describe the components of the diffusion membrane of human respiratory system.

SECTION-D

29. Lipids are hydrocarbon containing molecules that make up the building blocks of living world.

These are small molecular weight compounds that are found in the insoluble fraction along with polymeric substances. Lipids are soluble in nonpolar organic solvents and generally insoluble in water. Lipids exist in various forms and there is great structural variety among these forms. Different types of lipids include fatty acids, steroids, terpenes, phospholipids, waxes, fats, etc. Lipids are hydrophobic and amphipathic in nature.

(a) Why do oils generally remain in liquid state even in winters?

(b) Why do physicians recommend vegetable oils rich in polyunsaturated fat for persons suffering from cardiovascular diseases ?

(c) Why do fats release more energy than carbohydrates on oxidation?

(OR)

(c) Phospholipids form a thin layer on the surface of an aqueous medium. Justify.

30. Annelida (*L - annulus - ring*) is a diverse taxon of segmented worms. The phylum Annelida includes soft bodied, elongated, bilaterally symmetrical, metamerically segmented coelomate worms previously it was included under the phylum vermes by Linnaeus (1736).

The unique characteristic of the phylum Annelida is metamerism. The body is divided into a number of similar parts. Each division or part of the body is known as somite or segments or metameres. The metameres are arranged in a linear series. Externally the metameres are differentiated by ring like grooves called the annuli. The internal segmentation is also complete

and distinct and hence the coelom is divided by transverse septa. The phylum includes about 12000 described species.

- (a) Name the structure present in phylum Annelida for osmoregulation and excretion?
- (b) How do annelids locomote?
- (c) You are given Leech, Nereis, prawn and scorpion. All of them have a segmented body organisation. Will you classify them in one group? If no, state the important characters based on which you will separate these animals into different groups.

(OR)

- (c) Both Earthworm and roundworm are worm like organisms. How are they different from each other?

SECTION-E

31. Describe the male reproductive system of the frog with labelled sketch.

(OR)

Give the possible reason for the following statements:

- (a) A transparent nictitating membrane is present in the eyes of a frog.
 - (b) The first finger of the male frog is swollen.
 - (c) The skin of the frog is moist and slippery.
 - (d) Webs are present between the toes of frog.
 - (e) Frog is useful to mankind.
32. Explain the biosynthetic pathway of carbon dioxide fixation in chloroplast of green plants.

(OR)

What is glycolysis ? Where does glycolysis takes place in a cell ? Give an brief account on glycolysis.

33. (a) Describe the events that occur during a cardiac cycle.
(b) Why is the human heart called myogenic?
(c) What do the P-wave and T-wave represent in the ECG?

(OR)

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

Kidneys are the chief excretory organs and are mainly concerned with the excretion of urea in the form of urine. They play a central role in cardiovascular homeostasis by ensuring a balance between the fluid taken in and that is lost and excreted during everyday activities. This ensures stability of extracellular fluid volume and maintenance of normal levels of blood pressure. Renal fluid handling is controlled via neural and hormonal influences, with the former determining a rapid dynamic response to changing intake of sodium whereas the latter cause a slower longer-term modulation of sodium and water handling.

The function of our kidney is monitored and regulated by the feedback mechanisms which involves the hypothalamus, juxta glomerular apparatus (JGA), and the heart.

- (a) Name the hormone released by the heart for regulation of the kidney function.
- (b) How does Anti Diuretic Hormone (ADH) regulate body fluid volume?
- (c) Give the name of two actively transported substances in glomerular filtrate.
- (d) State why the composition of glomerular filtrate is not the same as urine.



DELHI PUBLIC SCHOOL

SAIL TOWNSHIP, RANCHI

ANNUAL EXAMINATION (2022-23)

Class - XI
Time - 3 Hours

Subject - Business Studies
Maximum Marks- 80

General Instructions

1. This question paper contains 34 questions.
 2. Marks are indicated against each question.
 3. Answers 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 the 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 questions together.
-

Answer the following questions: -

1. In India, all foreign exchange transactions are regulated by
 - a. Director General of foreign trade
 - b. Reserve Bank of India
 - c. Export Council of India
 - d. None of the above[1]
2. Which of the following does not come under the fixed shop small retailers?
 - a. Speciality Shops
 - b. Secondhand goods shop
 - c. Street Stall holders
 - d. Departmental Stores[1]
3. This is not a benefit of e-business
 - a. Convenience
 - b. Low personal touch
 - c. Global reach
 - d. Customer satisfaction[1]
4. This constituent of e-business provides the consumers with the freedom of shopping at will.
 - a. B2B Commerce
 - b. B2C Commerce
 - c. C2B Commerce
 - d. C2C Commerce[1]
5. It is a type of saving bank account in which excess of a particular limit gets automatically transferred to fixed deposit account
 - a. Current deposit account
 - b. Recurring deposit account
 - c. Multiple option deposit account
 - d. Personal account[1]

6. LIC is the example of.....
- Departmental Undertaking
 - Statutory Corporation
 - Government Company
 - Private Company
- [1]
7. Suppose Harsh is a shareholder in a company holding 500 shares of Rs. 10/- each on which he has already paid Rs.8/- per share. His liability in the event of losses or company's failure to pay debts can be only up to
- Rs. 4000
 - Rs. 5000
 - Rs. 1000
 - Rs. 2000
- [1]
8. Business risk is not likely to arise due to
- Changes in government policy
 - Good management
 - Employee dishonesty
 - Power failure
- [1]
9. It is not an application of e-business...
- Online bidding
 - Online procurement
 - Online trading
 - Contract R&D
- [1]
10. Hundi payable on expiry of a fixed period of time to any person is called
- Dhani Jog Hundi
 - Firmaan Jog Muddati Hundi
 - Sah Jog Hundi
 - JokhmiMuddati Hundi
- [1]
11. Which of the following activity is a part of Entrepreneurship?
- Identification of business activity
 - Conducting feasibility test
 - Employing necessary resources for its implementation
 - All of the above
- [1]
12. Mohit took double insurance of his factory, from company A and Company B. A fire broke out in his factory and the amount of loss estimated to be Rs. 70,000. Which of the following statement(s) will hold true in this case: -
- The insured will have no right to recover more than the full amount of actual loss
 - If the full amount of actual loss is recovered from company A, then Mohit cannot claim anything from Company B.
 - If the full amount of the actual loss is recovered from Company B then Mohit cannot claim anything from company A
 - Allofthe above
- [1]

13. Canara Bank opened a new branch in Bangalore. It is fulfilling which of the following organizational objectives: -
- a. Survival
 - b. Profit
 - c. Growth
 - d. Innovation
- [1]
14. The Karta in Joint Hindu Family Business has
- a. Limited Liability
 - b. Unlimited Liability
 - c. No liability for debts
 - d. Joint Liability
- [1]
15. Which of the following is not applicable in life insurance contract?
- a. Conditional contract
 - b. Unilateral contract
 - c. Indemnity contract
 - d. None of the above
- [1]
16. Registration is compulsory in this form of business....
- a. Partnership and joint Hindu family
 - b. Joint Hindu family and sole proprietorship
 - c. Co-operative societies and joint stock company
 - d. Partnership and joint stock company
- [1]
17. Which of the following is not a benefit of e-business?
- a. Movement towards a paperless society
 - b. Globalization
 - c. incongruence between order taking and order fulfillment speed
 - d. Convenience
- [1]
18. Which of the following transactions are not included in e-commerce?
- a. A firm's interactions with its customers
 - b. Electronic management of production function
 - c. A firm's interaction with its suppliers
 - d. All of the above
- [1]
19. Which of these is a geographical indication?
- a. Mona Lisa Painting
 - b. IRCTC logo
 - c. Darjeeling tea
 - d. Light bulb
- [1]
20. Under which of the following conditions the working capital requirements of a business will not be high....
- a. When it sells goods on credit
 - b. When it sells goods in cash
 - c. When it maintains high levels of inventory
 - d. All of the above
- [1]

21. What is a Co-operative Society ? Briefly explain what is meant by
- a) "Equality in voting status"
 - b) "Support from government", with respect to a cooperative society. [3]

22. Railways and Post & Telegraph department are the prominent examples of this form of public sector enterprise.
- State any three features of the related public sector enterprise [3]

23. Explain briefly any three social responsibilities towards different interest groups. [3]

OR

Mention any six specific steps which can be taken by business enterprises for environmental protection.

24. "Itinerant traders have been an integral part of internal trade in India". Analyse their features in the context of the above mentioned statement. [3]

OR

In the era of Departmental Stores, Malls & Specialty Shops, a General store continues to be popular retail shop among middle class income group. Mention any three distinct reasons for its success.

25. Explain the following terms. Also mention the name of organization they are related to:
- a) Perpetual succession.
 - b) Common Seal
 - c) Karta
 - d) Artificial person [4]

OR

The business assets of an organization amount to Rs. 50,000 but the debts that remain unpaid are Rs.80,000. What course of action can the creditors take if

- a) The organization is a sole proprietorship firm.
 - b) The organization is a partnership firm with Anthony and Akbar as partners. Which of the two partners can the creditors approach for repayment of debt? Explain giving reasons.
26. What are the advantages enjoyed by a Government company? State any four points. [4]

OR

Explain briefly any four limitations of a Departmental Undertaking.

27. "Insurance is a social device, meant to protect the insured, as per certain set of principles which define their rules of action." In the light of the statement given, explain the following principles of insurance with suitable examples
- i) Proximate Cause
 - ii) Insurable interest
 - iii) Subrogation
 - iv) Contribution [4]

28. Radhika Ltd. has good growth prospects. So it is planning to expand their business. For this the company needs additional funds. The finance manager reports that the company is not in a position to bear extra burden of paying any fixed financial charges like interest or dividend. The already existing shareholders had also expressed that they do not want to have any dilution in the control of business in case of additional issue of shares.
- Mention and explain the source of finance most suitable for Radhika Ltd.
 - Explain any three merits of the source of finance so identified. [4]
29. Mention & explain various elements of Business Ethics. [4]
30. Anand wants to start a business, but, before that he wanted to develop an understanding of the important features of business to enable him to be a successful businessman. In the light of the statement given mention any four important characteristics of the business. [4]
31. Explain in detail the following sources of owner's funds :-
- Equity Shares
 - Preference shares
- [6]

OR

What is meant by Trade Credit & Debentures, explain in detail.

32. Explain in detail the different ways to fund a Start-up? [6]

OR

Give the meaning of Entrepreneurship. State any five characteristics of Entrepreneurship.

33. Riya wanted to buy a particular type of footwear of a good brand. Her mother took her to a branded store located in a popular market in the city. To her disappointment, she could not find her size in the style that she had liked. But her mother pacified her by saying that should not lose heart, as there are three more stores of the same brand in the city. When they visited another store of the same brand in the city, she was surprised to see that it had the identical products and display like the previous store.
- Identify and explain the type of retailer that has been described in the given paragraph.
 - State any five features of such type of retailers. [6]
34. Nikhil deals in different types of gems and stone jewellery. Over the years, his business has gained good reputation. When his son, Sushil joined him in the business, he expressed his desire to expand their business beyond the boundaries of the home country. He also shared with his father, that this approach will increase the prospects of both higher profits and growth of their business.
- Identify and give the meaning of the concept which will help Sushil to expand his family business beyond the boundaries of the home country.
 - Name the two benefits of this concept to their business firm that have been mentioned in the paragraph.
 - Also, explain any two of its other benefits which have not been mentioned in the given paragraph. [6]



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

Class - XI
Time - 3 Hours

Subject - Chemistry
Maximum Marks- 70

General Instructions:

Read the following instructions carefully.

- a) There are 35 questions in this question paper with internal choice.
 - b) SECTION A consists of 18 multiple-choice questions carrying 1 mark each.
 - c) SECTION B consists of 7 very short answer questions carrying 2 marks each.
 - d) SECTION C consists of 5 short answer questions carrying 3 marks each.
 - e) SECTION D consists of 2 case- based questions carrying 4 marks each.
 - f) SECTION E consists of 3 long answer questions carrying 5 marks each.
 - g) All questions are compulsory
-

SECTION - A

The following questions are multiple choice questions with one correct answer. Each question carries 1 mark. There is no internal choice in this section.

1. A hydrocarbon is found to contain 85.7% by mass of carbon and 14.3% by mass of hydrogen. Molar mass of hydrocarbon is 56 g/mol. The formula for hydrocarbon is
a) CH₄ b) C₂H₄ c) C₄H₈ d) C₅H₁₀.
2. The pair of ions having same electronic configuration is:
a) Cr³⁺, Fe³⁺ b) Fe³⁺, Mn²⁺ c) Fe³⁺, Co³⁺ d) Sc³⁺, Cr³⁺
3. The elements with positive electron gain enthalpy is
a) Hydrogen b) Sodium c) Oxygen d) Neon
4. The electronegativities of C, N, Si and P are in order of
a) Si < P < C < N b) Si < P < N < C c) P < Si < N < C d) P < Si < C < N
5. Which of the following molecule is expected to be diamagnetic?
a) S₂ b) B₂ c) N₂ d) O₂
6. Which of the following is not correct?
a) ΔG is zero for a reversible reaction
b) ΔG is positive for a spontaneous reaction.
c) ΔG is negative for a spontaneous reaction
d) ΔG is positive for a non spontaneous reaction.
7. Which group elements are most electropositive and most electronegative respectively?
a) 1,17 b) 2,16 c) 17,1 d) 16,2

17. **Assertion:** The IUPAC name of $\text{HOCH}_2\text{-(CH}_2\text{)}_3\text{-CH}_2\text{COCH}_3$ is 7-Hydroxy heptan-2-one.
Reason: Keto group is preferred over -OH group.
18. **Assertion:** Neopentane has lower boiling point than n-Pentane and isopentane.
Reason: Boiling point increases with increase in branching.

SECTION B

This section contains 7 questions with internal choice in two questions. The following questions are very short answer type and carry 2marks each.

19. What will be the mass of one ^{12}C atom in g?
20. List main differences between orbit and orbital.
21. Why does He_2 not exist?

OR

Draw the shape of PH_3 and SF_6 according to VSEPR theory.

22. Calculate $\Delta_f H^\circ$ of HCl if bond energy of H-H bond is 437 KJ/mol , Cl-Cl bond is 244 KJ/mol and HCl is 433 KJ/mol .
23. Assign the oxidation number to the underlined elements in each of the following species:
i) $\text{K}_2\underline{\text{Mn}}\text{O}_4$ ii) $\text{KAl}(\underline{\text{S}}\text{O}_4)_2 \cdot 12\text{H}_2\text{O}$
24. a) What is nucleophile? Give one example.
b) Draw the structure of 3-Oxopentanal.

OR

- a) Why is resonance hybrid is more stable than resonating structures?
b) Carbon atom number 2 in $\text{CH}_3\text{CH}_2\text{Cl}$ has more positive charge than that in $\text{CH}_3\text{-CH}_2\text{-Br}$.
25. Propanal and pentan-3-one are the ozonolysis products of an alkene? What is the structural formula and IUPAC name of the alkene.

SECTION C

This section contains 5 questions with internal choice in two questions. The following questions are short answer type and carry 3 marks each.

26. a) Define unified mass.
b) At STP, what will be the volume of 6.022×10^{23} molecules of H_2 ?
c) Define limiting reagent.
27. The ejection of the photoelectron from the silver metal in the photoelectric effect experiment can be stopped by applying the voltage of 0.35 V when the radiation 256.7 nm is used. Calculate the work function for silver metal.
28. Give reason for the following :
i) Electron gain enthalpy of fluorine is less negative than that of chlorine.
ii) Anionic radius is always more than that of neutral atom.
iii) Ionization enthalpy of nitrogen is more than that of oxygen.

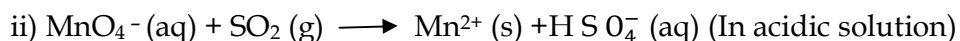
29. A mixture of 1.57 mol of N_2 , 1.92 mol of H_2 and 8.13 mol of NH_3 is introduced into a 20L reaction vessel at 500K. At this temperature, the equilibrium constant, K_c for the reaction: $N_2(g) + 3H_2(g) \rightleftharpoons 2NH_3(g)$ is 1.7×10^2

Is the reaction mixture at equilibrium? If not, what is the direction of the net reaction?

OR

Equal volumes of 0.002M solutions of sodium iodate ($NaIO_3$) and copper chlorate $Cu(ClO_3)_2$ are mixed together. Will it lead to precipitation of copper iodate $Cu(IO_3)_2$? (For cupric iodate, $K_{sp} = 7.4 \times 10^{-8}$)

30. Balance the following redox reaction either by oxidation number method or ion electron method:



SECTION D

The following questions are case based questions. Each question has an internal choice and carries 4(1+1+2) marks each. Read the passage carefully and answer the questions that follow.

31. The attractive force which holds the two atoms together is called chemical bond. Covalent bond is formed by equal sharing of electrons. Coordinate bond is formed by unequal sharing of electrons. Ionic bond is formed by transfer of electron from one atom to another. According to valence bond theory, covalent bond is formed by overlapping of half filled atomic orbitals resulting in lowering of energy and more stability. Bond order is the number of bonds between atoms in a molecule. Higher the bond order, more will be stability and bond dissociation enthalpy but smaller bond length. Polarity of covalent bond depends upon difference in electronegativity. VSEPR theory helps to predict the shapes of molecules.

- Draw the structure of N_2O .
- Define Valence bond theory.
- Draw the shape of NH_3 and ClF_3 .

OR

Define electronegativity with one example.

32. Organic compounds are formed by covalent bonding. The nature of covalent bonding can be described with the help of hybridisation and structural reactivity depends upon type of bond present in organic compound. Organic compound can be classified on the basis of functional group. Organic reaction mechanism are based on structure of substrate and the attacking reagent.

The intermediate formed can be free radical, carbocation or carbene. The attacking reagent can be electrophile or nucleophile. The inductive, electrometric, resonance and hyperconjugative effect may help in polarization of covalent bond. Organic reaction may be regarded as substitution, addition, elimination and rearrangement, oxidation and reduction reaction.

- What are free radicals?
- Write the order of stability of alkyl carbocation.
- Give difference between Inductive and electromeric effect

OR

Draw all possible resonating structures of aniline.

SECTION E

The following questions are long answer type and carry 5marks each. Two questions have an internal choice.

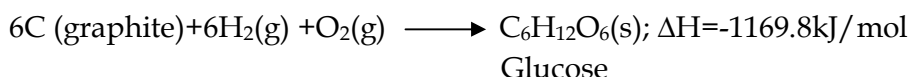
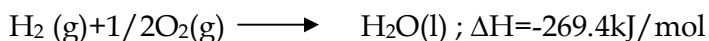
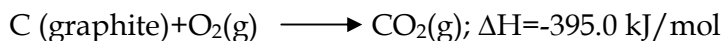
33. i) The value of K_c for the reaction

$3O_2(g) \rightleftharpoons 2O_3(g)$ is 2.0×10^{-5} at 25°C . If the equilibrium concentration of O_2 in air at 25°C is 1.6×10^{-2} , What is the concentration of O_3 .

ii) The species HCO_3^- and NH_3 can act as Bronsted acid and bases. For each case give the corresponding conjugate acid and base.

iii) If $Q_c < K_c$, in which direction reaction will proceed?

34. a) Calculate the heat of combustion of glucose from the following data:



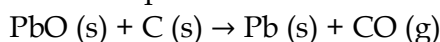
b) Define the following terms:

i) Enthalpy of neutralization

ii) Hess's law of constant heat summation.

OR

a) Calculate the temperature above which the reduction of lead oxide in the following reaction becomes spontaneous



[Given $\Delta H = 108.4 \text{ kJ/mol}$, $\Delta S = 190 \text{ JK}^{-1} \text{ mol}^{-1}$]

b) Define Entropy and State Function.

35. a) Explain the mechanism of nitration in benzene ring.

b) Arrange Benzene, n - Hexane and Ethyne in decreasing order of acidic behaviour. Also give reason for this behaviour

OR

a) Explain the mechanism of Friedel Craft Alkylation reaction.

b) Why is Wurtz reaction not preferred for the alkanes containing odd number of carbon atoms?

c) How will you convert benzene into acetophenone.



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

Class - XI
Time - 3 Hours

Subject -Computer Science (083)
Maximum Marks - 70

General Instructions:

- The question paper is divided into 3 sections- A, B and C.
 - Section-A, consists of 18 questions (1-18). Each question carries 1 mark.
 - Section-B, consists of 7 questions (19-25). Each question carries 2 marks.
 - Section-C, consists of 5 questions (26-30). Each question carries 3 marks.
 - Section-D, consists of 2 questions (31-32). Each question carries 4 marks.
 - Section-E, consists of 3 questions (33-35). Each question carries 5 marks.
-

SECTION-A

Each question carries 1 mark.

(1x18=18 Marks)

1. When we work on any file on PC, It is stored temporarily in _____ memory.
(a) RAM (b) ROM (c) CPU (d) CD-ROM
2. This gate will give the output signal as TRUE only when all the inputs are True
(a) NOT (b) AND (c) NAND (d) OR
3. $(A+B)'$ is equal to
(a) $A'+B'$ (b) $A'B'$ (c) $(AB)'$ (d) $A'+B$
4. What is the output of print ("ABC"<"abc")?
(a) True (b) False (c) 0 (d) Error
5. What will be the output of following python statement: - print("foo+bar")
(a) foo+bar (b) foobar (c) FooBar (d) none of these
6. The full form of malware is:
(a) Malfunctioned software
(b) Multipurpose software
(c) Malicious software
(d) Malfunctioning of security

7. Legal rights related to invention are called as_____
- (a) Patent (b) Utility (c) Trade secrets (d) Trade Marks
8. What will be the output :
- ```
L = ['Harsh', 'Pratik', 'Bob', 'Dhruv']
Print(L[1][-1])
```
- (a) Pratik                      (b) Error                      (c) D                      (d) k
9. Find the output:
- ```
lst = ['a', 'b', 'c', 'd', 'e']
print(lst[10:])
```
- (a) ['a', 'b', 'c', 'd', 'e'] (b) ['c', 'd', 'e']
(c) [] (d) ['a', 'b']
10. Find the output:
- ```
L = [1, 3, 5, 7, 9]
print(L.pop(-3), end = '')
```
- (a) 5                      (b) 9                      (c) 7                      (d) 3
11. The\_\_\_\_\_ function returns the exact copy of the string with the first letter in uppercase
- (a) find()                      (b) copy()                      (c) upper()                      (d) capitalize()
12. What is the output of the following?
- ```
print("xyyzxyzxxyy".count('xyy', 2,11))
```
- (a) 2 (b) 0 (c) 1 (d) Error
13. Write a statement to create tuple T1 with single element.
14. Write the output of the following code:
- ```
T1=(45,67,98)
T1=T1+(1,2,3)
print(T1)
```
15. Write the output of the following:
- ```
print([1,2,3,4]>[4])
```
16. Write any one difference between insert() and append() function.
17. Write the output of the following:
- ```
for a in range(2,5,2):
 print(a*"#")
```
18. Write the output of the following:
- ```
print((7>9) and (3!=2) or (11<13))
```


SECTION-B

Each question carries 2 marks

(7x2=14 Marks)

19. Differentiate between RAM and ROM.
20. Find error in the following code (if any) and correct code by rewriting code and underline the correction;
- ```
- 30=To
for K in range(0,TO):
 IF k%4==0:
 print(K*4)
 Else:
 print(K+3
```
21. What is difference between mutable and immutable data types? Explain with example.
22. Write the output of the following:
- ```
s="DELHI PUBLIC SCHOOL"
for i in range(len(s)-1,0,-1):
    if s[i].isupper():
        print(s[i].lower(),end="")
    elif i%2==0:
        if s[i].islower():
            print(s[i].upper(), end="")
        else:
            print("@", end="")
```
23. Write the output of the following:
- ```
x=10
y=1
while x>y:
 x=x-4
 y=y+3
 print(x)
```
24. WAP to accept a number from the user and reverse a number without using any built in function or using string concept.
25. Draw a circuit diagram corresponding to the following boolean expression:
- $$F=A'.B+(C+D)'$$

## SECTION-C

**Each question carries 3 Marks**

**(3x5=15 Marks)**

26. Define the following:

- (i) Identity theft
- (ii) Ransomware
- (iii) Worms

27. Evaluate the following:-

- (i)  $(BE.D)_{16} = ( )_{10}$
- (ii)  $(715.4)_8 = ( )_{16}$
- (iii)  $1011+1111+111010$

28. Write a program to input line(s) of text from the user until enter is pressed. Count the total number of characters in the text (including white spaces), total number of alphabets, total number of digits, total number of special symbols and total number of words in the given text. (Assume that each word is separated by one space).

29. Write a program to convert a number entered by user into its corresponding number in words. For example, if input is 528 then the output should be "Five Two Eight".

30. Write a program to create a dictionary with Employee name and Salary as key-value pair. Now print those Employee names whose salary is greater than 65000.

## SECTION-D

**Each question carries 4 marks**

**(4x2=8 Marks)**

31. Simpy has created a dictionary of month name with number of days in Python. Help her in completing the program.

```
Days={"January":31, "February":28, "March":31, "April":30, "May":31, "June":30,
"July":31, "August":31, "September":30, "October":30, "November":30, "December":31}
```

```
Display months having 31 days
```

```
for key, value in _____ : # Line-1
```

```
 if value==31:
```

```
 print(key)
```

```
display months and days starting with "A" or "M".
```

```
for key in Days.keys():
```

```
 if _____ # Line-2
```

```
 print(_____) # Line-3
```

```
change number of days in February as 29.
```

```
_____ # Line-4
```

```
print(Days)
```

- (i) The function to get both keys and values.
- (ii) The condition to check if month starts with "A" or "M".
- (iii) Display month and days.
- (iv) change number of days to 29 for the month of February.

OR

The record of Rachit (Name, Roll No., Marks of five subjects and percentage of marks) is stored in the following list:

L=['Rishabh',23,[56,98,65,82,72],74.6]

Write the statements in python for helping the operator to retrieve the following information from the list L.

- (i) Display the percentage of the student.
- (ii) Change the name of the student from "Rishabh" to "Abhinav".
- (iii) Display the minimum marks of the student.
- (iv) Display the marks in 3<sup>rd</sup> subject.

32. Write a program to arrange a list of numbers in ascending order using Bubble Sort Technique.

### SECTION-E

**Each question carries 5 marks**

**(5x3=15 Marks)**

33. (i) Write a program to enter a list of strings as color names and an index n such that the elements after n index are shifted before.

For ex: If L=['red','blue','yellow','green'] and n=2, then the output should be L=['dre', 'uebl', llowye', 'eengr']

[3]

(ii) Write a program to enter a number of elements in a list and find the frequency of each element in a list.

[2]

34. (i) Write a program to find the sum of the following series:

[3]

$$s=x - \frac{x^2}{2!} + \frac{x^3}{3!} - \frac{x^4}{4!} + \frac{x^5}{5!} - \frac{x^6}{6!} + \dots \text{ upto } n \text{ terms.}$$

(hint: take the input for x and n)

(ii) Write a program to print the following pattern by using loop.

[2]

```

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

35. Write a program in Python to create a List of 20 terms of Fibonacci series and display the following menu:

1. Display first 10 numbers of Fibonacci series
2. Display last 10 numbers of Fibonacci series
3. Search the number in the series
4. Exit

When user-selected option 1 displays first 10 elements of Fibonacci series, for example, 0,1,1,2,3,5,8,13,21,34

When user-selected option 2 displays last 10 elements of the Fibonacci series.

When user-selected option 3 accepts a number from the user to find if the number exists in the list of Fibonacci series or not.

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

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

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

**General Instructions:**

- Please write down the serial number of the question before attempting it.
- Please check that this question paper contains 8 questions.

1. Complete the following sentences. [1X5=5 Marks]

- a) \_\_\_\_\_ matra is in Ekatali.
- b) Mangalacharan is divided into \_\_\_\_\_ parts.
- c) Tribhangi represents to \_\_\_\_\_ Lord.
- d) \_\_\_\_\_ Types of Tandava are there.
- e) Pallavi is a \_\_\_\_\_ part of Odiaai dance.

2. State whether the following are true or false: [1X5=5 Marks]

- a) Mahari's are male dancers.
- b) Salutation to the Earth is called Trikhandipranam in Odissi Dance.
- c) Gotipua's are permitted to dance inside the temples.
- d) Krishna was actually the son of Devki.
- e) Asamyuta hast mudra are of 28 types.

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

- |                 |                   |
|-----------------|-------------------|
| a) Chouka       | a) Three Types    |
| b) Ram          | b) Tamil Nadu     |
| c) Kaliya       | c) Bharata Muni   |
| d) Pallavi      | d) Jayadev        |
| e) Lasya        | e) temple dancers |
| f) Mahari       | f) Two types      |
| g) Gita Govinda | g) Soft           |
| h) Natyashastra | h) Ramanaka       |
| i) Kummi Dance  | i) Avtar          |
| j) Laya         | j) Tribhanga      |

4. Write the definition of any two of the followings, (Answer to be written in 30 words). [2Marks]

- a). Describe the story of Makhanchor.

**OR**

- b) Describe the story of Droupadi Vastraharanharan.

5. a) Describe the story of Dashavatara.

[2 Marks]

**OR**

b) Describe the story of KaliyaDamanan.

6. Write the definition of any two of the followings, (Answer to be written in 60 words). [3 Marks]

a) Nritya                      b) Nritya                      c) Natya

7. State the difference between the following terms: -

[3 Marks]

Mahari **OR** Devadasi.

8. Attempt any one question. (each question carry 5 marks; Answer to be written more than 150 words).

a) Describe is the important of Taal, Laya, Matra and Avartana.

b) Briefly describe the Odissi dance tradition.

c) Briefly explainGotipua tradition.

.....



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

Class - XI  
Time - 3 Hours

Subject - Economics  
Maximum Marks - 80

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**General instructions:**

- i) All question in both section are compulsory.
  - ii) Question no. 1-10 and 18-27 are multiple choice questions carrying 1 marks each.
  - iii) Question no. 11-12 and 28-29 are short-answer questions carrying 3 marks each. Answer to them should normally not exceed 60 words each.
  - iv) Question no.13-15 and 30-32 are also short-answer questions carrying 4 marks each. Answer to them should normally not exceed 70 words each.
  - v) Question no. 16-17 and 33-34 are long-answer questions carrying 6 marks each. Answer to them should normally not exceed 100 words each.
  - vi) Answer should be brief and to the point and the above word limits should be adhered to as far as possible.
- 

**SECTION -A**

1. Total utility is maximum when: [1]
  - a) Marginal utility is zero
  - b) Marginal utility is at highest point
  - c) Marginal utility is equal to average utility
  - d) Average utility is maximum
2. What does the area under the marginal utility curve depict? [1]
  - a) Average utility
  - b) Total utility
  - c) Indifference curve
  - d) Consumer equilibrium
3. A consumer is preferred to buy more of 'X' as compared to 'Y' when: [1]
  - a)  $MU_x = MU_y$
  - b)  $MU_x > P_x$
  - c)  $\frac{MU_x}{P_x} > \frac{MU_y}{P_y}$
  - d)  $\frac{MU_x}{P_x} < \frac{MU_y}{P_y}$
4. If marginal rate of substitution is constant throughout, the indifference curve will be [1]
  - a) parallel to the x- axis
  - b) downward sloping concave
  - c) downward sloping straight line
  - d) upward sloping
5. If due to fall in the price of good X, demand for good Y rises, the two goods are: [1]
  - a) Substitutes
  - b) Complements
  - c) Not related
  - d) competitive

6. When MP is greater than AP, what would you say about AP? [1]
7. When TR increases at constant rate. MR should be \_\_\_\_\_ . [1]
8. The total cost incurred for 10 units is Rs.400 and 20 units is Rs.800. Find the marginal cost. [1]
- a) 400  
b) 40  
c) 200  
d) 20

**OR**

MC curve cuts the AC curve from

- a) Below  
b) Above  
c) Either (a) or (b)  
d) None of these
9. Suppose the value of demand and supply curves of a commodity X is given by the following two equations simultaneously:  
 $Q_d = 200 - 10p$   
 $Q_s = 50 + 15p$   
 What will be the equilibrium quantity? [1]
10. If quantity supplied of a commodity decreases by 80% due to a 40% decrease in price, then price elasticity of supply is:  
 a) (+) 2                                      b) (-)2                                      c) (+) 0.5                                      d) (-) 0.5 [1]
11. Due to high level of unemployment, government starts employment generation schemes MGNREGA, explain its effect using production possibilities curve. [3]

**OR**

A consumer consumes only two goods X and Y whose prices are Rs. 4 and Rs. 5 per unit respectively. If the consumer chooses a combination of the two goods with MU of X equal to 5 and that of Y equal to 4, is the consumer in equilibrium? Give reason. What will a rational consumer do in this situation? Use utility analysis.

12. Find the missing value: [3]

| Units of output | TC  | AVC | MC |
|-----------------|-----|-----|----|
| 1               | 90  | ?   | 30 |
| 2               | ?   | 27  | ?  |
| 3               | ?   | ?   | 27 |
| 4               | 180 | 30  | ?  |

13. A consumer consumes two goods X and Y. Her money income is Rs. 24 and the prices of Goods X and Y are Rs. 4 and 2 respectively. Answer the following questions:  
 a) Can the consumer afford a bundle of 4X and 5Y? explain.  
 b) What does the point on Budget line indicate in terms of prices?  
 c) What will be the  $MRS_{xy}$  when consumer is in equilibrium? Explain. [4]



14. There are train and bus services between Noida and Agra. Suppose that the train fare between two cities comes down. How will this affect demand curve for train as well as for bus travel between two cities. [4]

**OR**

Elasticity of supply of good X is 3. The elasticity of supply of a good Y is  $\frac{1}{3}$  that of good X. In case of good X, when price of the good changes from Rs.45 to Rs.60 per unit, calculate the percentage change in quantity supplied. In case of good Y, calculate the quantity supplied before price change when price changes from Rs.40 to Rs.20 with 40 units as initial quantity supplied.

15. Why should MC curve cut MR curve from below in order to achieve producer's equilibrium? Giving reasons, identify the equilibrium level of output using MR-MC approach. [4]

|               |    |    |    |    |    |
|---------------|----|----|----|----|----|
| Output        | 1  | 2  | 3  | 4  | 5  |
| Total cost    | 12 | 22 | 30 | 40 | 42 |
| Total revenue | 10 | 20 | 30 | 40 | 50 |

16. Market for a good is in equilibrium. There is simultaneous 'decrease' in both demand and supply but there is no change in market price. Explain with the help of a schedule and diagram. [6]
17. Explain with the help of numerical examples, the effect on total output of a good when only one input used in production increases.

**OR**

Are the following statements true or false? Give reasons. [6]

- Average cost falls only when marginal cost falls.
- Explicit cost includes opportunity cost of resources owned and used by the firm.
- AR is always equal to price.
- When TR is maximum, MR is also maximum.
- When  $AR < AC$ , it represents a situation of loss.
- In a situation of equilibrium, average cost of production is the minimum.

### **SECTION B**

18. Statistics in singular sense includes: [1]
- Collection of data
  - Organization of data
  - Distribution of data
  - All of the above
19. State the method which estimates the population in a country. [1]
20. If the mid-values are given as: 25,34,43,53,61,70, then first class of the distribution is: [1]
- 25-34
  - 24.5-34.5
  - 20-30
  - 20.5-29.5
21. The algebraic sum of deviation of a set of N values from arithmetic mean is: [1]
- N
  - 0
  - 1
  - none

22. In what type of frequency distribution the values of mean, median and mode are equal? [1]

**OR**

What is the median of 12, 32, 9, 11, 18, 20 and 28.

- a) 16                                      b) 18                                      c) 20                                      d) 12

23. The central 50% items of the distribution lie between \_\_\_\_\_ and \_\_\_\_\_ [1]

24. If the mean of a series is 32 and median is 40, what would be the value of mode? [1]

- a) 54                                      b) 58                                      c) 56                                      d) 38

25. For finding the degree of agreement about beauty between two judges in a beauty contest, we use: [1]

- a) Karl Pearson coefficient of co-relation  
 b) Coefficient of Rank co-relation  
 c) Scatter diagram  
 d) dispersion

26. Rate of Inflation is generally measured with the help of: [1]

- a) Wholesale price index  
 b) Consumer price index  
 c) Sensex  
 d) None of these

27. Which of the following indicates “negative correlation”?

- a) Price of own good and supply of the given good  
 b) Price of substitute good and demand for a given good  
 c) Price of complimentary good and demand of given good  
 d) Income of consumer and demand of a normal good [1]

28. Find out the frequency distribution and more than ‘cumulative frequency table: [3]

|             |    |    |    |    |    |    |
|-------------|----|----|----|----|----|----|
| Price below | 10 | 20 | 30 | 40 | 50 | 60 |
| quantity    | 17 | 22 | 29 | 37 | 50 | 60 |

**OR**

The average age of a class having 35 students is 14 years. When the age of the class teacher is added to the sum of the ages of the students, the average rises by 0.5 year. What must be the age of the teacher?

29. Differentiate positive and negative co-relation by using suitable numerical example. [3]

30. Calculate missing frequency, if mean of the distribution is 28. [4]

|           |      |       |       |       |       |       |
|-----------|------|-------|-------|-------|-------|-------|
| C.I       | 0-10 | 10-20 | 20-30 | 30-40 | 40-50 | 50-60 |
| frequency | 12   | ?     | 27    | 20    | 17    | 6     |

**OR**

Draw ‘less than’ and ‘more than’ ogive curves from the following frequency distribution.

|                 |      |       |       |       |       |       |
|-----------------|------|-------|-------|-------|-------|-------|
| marks           | 0-10 | 10-20 | 20-30 | 30-40 | 40-50 | 50-60 |
| No. of students | 3    | 4     | 8     | 10    | 3     | 2     |

31. In 2018, out of total of 2000 applicants in a college, 1200 were from commerce background. The numbers of girls was 750, out of which 330 were from science stream. In 2019, the total number of applicants was 3500 of which 2200 were boys. The number of students from science stream was 1100 of which 610 were girls. Tabulate the given information. [4]

32. Construct Price index no. of 2016 from the following data by (i) Laspeyre's method and (ii) Paasche's method. [4]

| Commodities | Base year price | Base year expenditure | Current year price | Current year expenditure |
|-------------|-----------------|-----------------------|--------------------|--------------------------|
| A           | 10              | 300                   | 12                 | 600                      |
| B           | 8               | 120                   | 10                 | 250                      |
| C           | 6               | 120                   | 6                  | 180                      |
| D           | 4               | 40                    | 6                  | 120                      |

33. Distinguish between linear and non-linear correlation. Calculate the Karl Pearson's coefficient of correlation between birth rate and death rate from the following data: [6]

| Year | Birth rate | Death rate |
|------|------------|------------|
| 2011 | 24         | 15         |
| 2012 | 26         | 20         |
| 2013 | 32         | 22         |
| 2014 | 33         | 24         |
| 2015 | 35         | 27         |
| 2016 | 30         | 24         |

34. Calculate median, upper and lower quartile from the following data: [6]

| variables | 0-10 | 10-20 | 20-30 | 30-40 | 40-50 | 50-60 | 60-70 |
|-----------|------|-------|-------|-------|-------|-------|-------|
| frequency | 10   | 20    | 35    | 40    | 25    | 25    | 15    |

**OR**

Calculate the Rank co-relation of the following data:

|   |    |    |    |    |    |    |    |    |
|---|----|----|----|----|----|----|----|----|
| X | 75 | 73 | 72 | 72 | 63 | 62 | 55 | 50 |
| Y | 10 | 11 | 13 | 13 | 13 | 20 | 16 | 28 |



# DELHI PUBLIC SCHOOL

## SAIL TOWNSHIP, RANCHI

ANNUAL EXAMINATION (2022-23)

Class - XI  
Time - 3 Hours

Subject - English  
Maximum Marks- 80

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### *General Instructions*

1. *This paper is divided into 3 Sections: A,B, and C. All the sections are compulsory.*
  2. *Separate instructions are given with each section and question, wherever necessary. Read the instructions very carefully and follow them faithfully.*
  3. *Do not exceed the prescribed word limit while answering the questions.*
- 

### SECTION - A (READING)

(26 Marks)

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

1. Although pollution of land, sea and air has been well documented, the latest and the least recognised version is the swelling tide of noise which is engulfing urban as well as rural areas. This has long-term implications on the ecology, health and productivity of a fast developing country like India.
2. Unlike other pollutants, noise lacks visibility, seldom registering on the consciousness, except as a trifling irritant to be dismissed at will and therefore less likely to be perceived as a threat. Available data indicate that noise does pose a threat to health and is known to have caused a number of complications. Declining productivity among workers in certain industries has been directly correlated with noise levels, particularly those under constant exposure to the menace.
3. The first ever survey of the impact of noise on health, conducted by All India Institute of Medical Sciences, has established that noise not only impairs the physical and psychological functioning of the human organism, but also causes nausea, vomiting, pain, hypertension and a lot of other complications, including cardio-vascular complaints.
4. A study by Post Graduate School of Basic Medical Sciences, in Chennai, confirms such conclusions. In 50 per cent of industries it was found that workmen exposed to higher intensities of noise in occupational capacities, were often irritated, short-tempered and impatient and more likely to resort to agitation and disrupt production. This was true of units in heavy industrial pockets in and around the four metropolitan centres.
5. Recreational noise, another ugly facet, is becoming more widespread in cities and towns. Loudspeakers are turned at full volume during marriages, festivals, jagrans, musical programmes, particularly at night, without the least consideration for others. Even at 50 dB, sound can awaken a person from deep slumber. As experiments have shown, loudspeakers with output from 60 to 80 dB cause the pupils of a slumbering person to dilate, with increasing intake of oxygen, resulting in palpitation. The effect is more pronounced in narrow lanes. TV

sets are played at full volume at prime time, invariably disturbing neighbours. Noise making seems to have become the latest status symbol, be it an election campaign or slogan shouting or advertising ownership of a smart TV.

**On the basis of your reading of the passage , answer the following questions by choosing the best option :** (1X10=10)

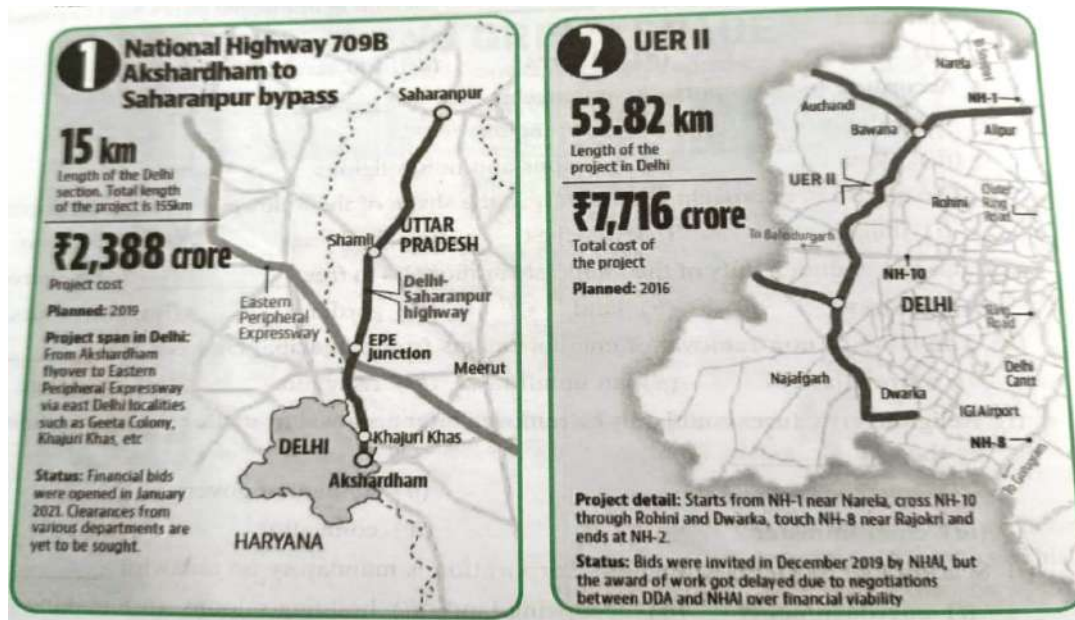
- a) What is the difference between noise and other pollutants?
- i) Noise is not resented.
  - ii) Noise is regarded as a small irritant and dismissed.
  - iii) People are not aware of noise as a pollutant.
  - iv) Noise can be found in rural as well as urban areas.
- b) What are the diseases connected with the impact of noise?
- i) Hypertension and cardio-vascular problems.
  - ii) Nausea, vomiting, pain
  - iii) Impaired physical and psychological functioning
  - iv) All of the above.
- c) Recreational noise is created during
- i) Public speeches
  - ii) Revelries and excursions
  - iii) Sports events
  - iv) Weddings, festivals and jagrans at night.
- d) Engulfing in para 1 means.....
- i) Completely drown
  - ii) Surrounded
  - iii) Covered
  - iv) Divided by a gulf
- e) In what way can creating noise be considered as a status symbol?
- i) By playing loud music
  - ii) By showing off ones TV with a loud sound
  - iii) By delivering speeches
  - iv) By talking loudly

Answer the following questions briefly:

- f) What effect do the loudspeakers with output from 60 to 80 dB have on a person who is sleeping?
- g) The swelling tide of noise pollution has long-term implications on the ....., health and productivity of a fast developing country like India.
- h) What does **invariably** stand for in para5?
- i) Find a word which means the same as **recorded** (para1)
- j) What is the reason behind declining productivity among workers in some industries?

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

1. Work on four major road infrastructure projects planned as part of a Rs. 50,000 crore plan to decongest Delhi and curb vehicular pollution will begin this year. The new road links will not only reduce the traffic load on arterial roads such as Ring Road but also make it easier to travel between various zones of the city.
2. The four projects, announced in the run-up to the 2019 general elections, are National Highway 709B (Akshardham to Eastern Peripheral Expressway to Saharanpur bypass), Delhi-No Direct Flyway to KMP interchange via Kalindi Kunj bypass (part of Delhi-Mumbai expressway), Urban Extension Road (UER)-II and Dwarka Expressway.
3. The National Highways Authority of India (NHAI), which is executing the four projects, said while work on some has already begun, on others it will start this year.



4. Of the four projects, UER-II and Kalindi Kunj bypass were planned by the Delhi Development Authority and the Delhi government's Public Works Department decades ago. But they got stuck due to technical and land acquisition related issues, said senior DDA and PWD officials.
5. The 31.1 km corridor between Akshardham and EPE, part of national highway 709B, will start from Akshardham flyover and pass through densely populated areas such as Geeta Colony, Shastri Park, Khajuri Khas, etc. Of the 31.1 km, 14.7 km will be in Delhi and the entire stretch will be elevated, officials said.
6. Though tenders for the project were floated in January 2019, the project got delayed as the ministry of road transport and highways asked NHAI to reassess the financial viability of the project and explore options to bring down the cost.
7. After the evaluation, the total cost of the project has been revised to 2,388 crore from the earlier estimate of 2,820 crore. A senior NHAI official said, "We have opened the financial bids for the project. The work on the 31.1 km stretch will be done in two packages. Based on the financial bids, we have declared the contractors for the two packages. The work will be awarded soon."

8. The official added, "The work should start soon. Some clearances such as environment, fire, setting up a temporary bitumen plant, etc has to be taken."

**On the basis of your understanding of the above passage, answer the following questions by choosing the correct option. (1X8=8)**

- (a) According to the passage, there are four major road infrastructure projects planned to -----  
(i) decongest Delhi and curb vehicular pollution  
(ii) sanitise Delhi and solve water problem  
(iii) subsidise ration to the underprivileged people  
(iv) give soft loans to all farmers
- (b) The projects are planned as part of a -----  
(i) 20,000 crore plan  
(ii) 50,000 crore plan  
(iii) 30,000 crore plan  
(iv) 40,000 crore plan
- (c) UER-II project is held up due to  
(i) wrong planning  
(ii) technical and land related issue  
(iii) insufficient fund  
(iv) manpower problems
- (d) In view of decongesting East Delhi, the 31.1 km corridor between Akshardham and EPE, part of national highway 709B will start from -----  
(i) Shastri Park  
(ii) Khajuri Khas  
(iii) Akshardham  
(iv) Geeta Colony
- (e) Though the tenders for the project were floated in January 2019, the project got delayed because-----  
(i) the ministry of road transport and highways asked NHAI to bring down the cost  
(ii) of financial crisis  
(iii) deadline of the project failed  
(iv) there was an environmental issue
- (f) After the evaluation, the total cost of the project as shown in the chart, is -----  
(i) 1,388 crore  
(ii) 3,277 crore  
(iii) 2,388 crore  
(iv) 3,118 crore
- (g) The work on the 31.1 km stretch will be done in -----  
(i) 5 packages  
(ii) 2 packages  
(iii) 6 package  
(iv) 7 packages

- (h) The synonym of 'evaluation' as used in para 7 means the same as
- (i) examination
  - (ii) test
  - (iii) assessment
  - (iv) Verification

### III. Read the passage given below:

1. Classical dance evolved from Tamil Nadu's temples across centuries. The revived and reformed Bharatanatyam keeps the art born of these ancient temples alive even to this day. Once sustained and nurtured in temples as part of a rich and vibrant temple tradition, classical dance in South India has remained over centuries a dynamic, living tradition that is continuously renewed.
2. Even 2000 years ago, dance in India was a highly evolved and complex art. It was an integral part of ancient Indian theatre as established by the Natya Shastra, the oldest and exhaustive treatise on theatre and dramaturgy. Dance dramas were performed in temple precincts. Dance movements were crystallised in stone as karanas in temple sculpture. Following the Bhakti movement in the 6th century, dance and music became powerful vehicles of veneration. The deity was treated like a much-loved king, praised and royally entertained with music and dance, as part of the daily sacred rituals of worship. Gifted, highly educated temple dancers or devadasis were supported by the temples that were richly endowed by the rulers. Some 400 temple dancers were dedicated to and maintained by the Brihadeswarar Temple in Thanjavur. Dance evolved as a composite art in temples as dancers, nattuvanars (dance gurus), musicians, poets, composers, architects, sculptors and painters shared a holistic approach to all the arts.
3. The evolution of Bharatanatyam derives from the invaluable contribution of The Tanjore Quartet. The four Pillai brothers - Chinnayya, Ponnayya, Sivanandam and Vadivelu - served as court musicians at the kingdom of Maratha king, Serfoji II in the early 19th century. Their legacy to Bharatanatyam has been their restructuring of the dance repertoire into the margam format and their vast and diverse music compositions set specifically for dance. Some of their descendants like Guru Meenakshisundaram Pillai evolved the famous Pandanallur bani (style) and trained many eminent dancers.
4. From the temples, dance made its way into the courts of kings and dancers were not just devadasis, but also rajanartakis. By the early 17th century dance forms like sadir or chinna melam, precursors to Bharatanatyam as we know it today had become popular in the courts of the Maratha rulers in Thanjavur. However, in the 19th century, colonial propaganda perceived such dance as vulgar and immoral. It led to the Anti-Nautch Movement and legislation against temple dance and dancers. Divested of all patronage and temple support, devadasis were thrown into dire straits. In the early 20th century, thanks to enlightened visionaries like EV Krishna Iyer and later, Rukmini Devi Arundale, and the dedication of a handful of devadasis and nattuvanars, classical dance was resuscitated and revived as Bharatanatyam. Today, apart from a few cultural festivals in some temples, dance has left the temple for the proscenium stage.



- (a) On the basis of your reading of the above passage, make notes on it using headings and sub headings. Use recognizable abbreviations (minimum 4) 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 & GRAMMAR) (23 Marks)**

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

- (a) The following passage has not been edited. Find the error and write the correct word in your answer sheet.

|                                                        | Error       | Correction |
|--------------------------------------------------------|-------------|------------|
| The poet relates an incident who changed               | (i) -----   | -----      |
| his life. It was the season where the leaves           | (ii) -----  | -----      |
| turned yellow. He reached a place when the road forked | (iii) ----- | -----      |
| into two. For he was a single traveller who could not  | (iv) -----  | -----      |

- (b) Complete the sentences using suitable clauses :

- (i) I am certain -----
- (ii) I know the boy -----
- (iii) You should act -----
- (iv) Walk carefully -----

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

**A.**

Repeated earthquakes in India and elsewhere have resulted in unprecedented damage and destruction to both life and property. Educating people on the precautions to be taken is the need of the hour. Prepare a poster, in not more than 50 words, for creating awareness among the people. [3]

**OR**

As the Manager of Excellent Coaching Centre, design a poster calling the attention of students desirous of attending IIT, CLAT, GMAT coaching to join your coaching centre. (50 words)

**B.**

You want to let out a portion of your house. Draft a suitable advertisement to be published in the classified columns of a newspaper giving all the relevant details. (50 words) [3]

**OR**

You are Rohit of 105, Rajendra Nagar, Ghaziabad. You want to sell your house. Write a suitable advertisement to be published in the classified columns of a newspaper. (50 words)

C.

You are a member of the Environment Club of your School. After visiting many places you have realised that it is the need of the hour to protect our environment. Write a **speech** in 120-150 words to create awareness among the people and how the children can contribute in a major way in this project. [5]

OR

Charity begins at home. If we want our surroundings to be clean we have to begin with our selves, make individual efforts not to make our surroundings dirty. Write a **speech** in 120-150 words on 'Role of individuals in society to keep our environment clean ' You are Karan/ Karuna.

D.

Your recent visit to a zoo forced you to realise that captivity is the greatest of all evils that can befall on one. Write a debate in 120-150 words either for or against the motion on " Zoos should be banned" . You are Anup/ Anima. [5]

OR

'Private cars should be banned in the congested commercial areas of the cities ' . Write a debate in 120-150 words either for or against the motion.

**SECTION C (Literature)**

**(31 marks)**

**VI. Read the extracts given below and answer ANY ONE out of TWO (From A, B& C)**

**(A)** . ... I would have

**[1X3=3]**

Him prodigal, returning to

His father 's house, the home he knew,

Rather than see him make and move

His world. I would forgive him too,

Shaping from sorrow a new love.

(i) What is meant by... have him prodigal?

(ii) Who is the poet?

- (a) Shirley Toulson
- (b) Markus Natten
- (c) Elizabeth Jennings
- (d) Walt Whitman

(iii) ' I ' does not want his son to.....

**OR**

They talked of love and preached of love,

But did not act so lovingly,

Was that the day !

(i) Name the poet and the poem.

(ii) ' They' stands for.....

(iii) Which trait of the adults has been discussed in these lines?

- (a) matured behaviour
- (b) interest in Geography
- (c) helplessness
- (d) hypocrisy of adults

**(B)** In his defence, Carter really had little choice. If he hadn't cut the mummy free, thieves most certainly would have circumvented the guards and ripped it apart to remove the gold. In Tut's time the royals were fabulously wealthy, and they thought or \_ hoped\_ they could take their riches with them. For his journey to the great beyond, King Tut was lavished with glittering goods : precious collars, inlaid necklaces and bracelets, rings, amulets, a ceremonial apron, sandals, sheaths for his fingers and toes, and the now iconic inner coffin and mask \_ all of pure gold. To separate Tut from his adornments, Carter's men removed the mummy 's head and severed nearly every major joint. [1X3=3]

a) What made Carter cut the mummy free?

i ) afraid of authorities

ii ) afraid of thieves

iii) afraid of the government

iv ) All of the above

b) What did the royals think or hope?

c) Which word in the passage means the same as **evade**?

**OR**

These shaggy monsters, blacker than the darkest night , usually wore bright red collars and barked furiously with massive jaws. They were completely fearless of our vehicle, shooting straight into our path, causing Tsetan to brake and swerve. The dog would make chase for a hundred metres or so before easing off, having seen us off the property. It wasn't difficult to understand why ferocious Tibetan mastiffs became popular in China's imperial courts as hunting dogs, brought along the Silk Road in ancient times as tribute from Tibet.

- a) Which word in the above extract means the same as **deviate**?
- i. Tribute
  - ii. Swerve
  - iii. Ancient
  - iv. Massive
- b) Why were Tibetan mastiffs popular in China?
- c) How has the author described the shaggy monsters?

(C) The floor was now a draggled mess. Stumbling over a sopping towel, Andrew almost dropped the child, which was now wet and slippery in his hands, like a strange, white fish.

"For mercy 's sake, Doctor," whimpered the midwife. "It's stillborn."

Andrew did not heed her. Beaten, despairing, having laboured in vain for half an hour, he still persisted in one last effort, rubbing the child with a rough towel, crushing and releasing the little chest with both his hands, trying to get breath into that limp body. [1X4=4]

- (a) What did Andrew conclude seeing the whiteness of the child?
- i) that the child was anemic.
  - ii) that it was a case of asphyxiapallida
  - iii) that the child has inherited his mother 's complexion.
  - iv) that he was a very healthy child.
- (b) What did the child look like?
- (c) How did Andrew try to bring back the child to life?
- (d) Which word in the above extract means the same as **persevere**.

**OR**

Mum \_ you'll have to iron my yellow silk. I must wear it tonight. [ She now sees what is happening, and is astounded .] What are you doing? [ She moves down left centre.] [Mrs Pearson now uses her ordinary voice, but her manner is not fluttering and apologetic but cool and incisive.]

- (a) What is the speaker instructing her mother to do?
- i) to get her a cup of coffee
  - ii) to prepare her breakfast
  - iii) to iron her yellow silk
  - iv) to get her a slice of cake

- (b) Where does the speaker want to go?
- (c) Which word in the extract means the same as penetrating
- (d) Write three to four words that bring out the characteristics of the 'changed' Mrs. Pearson?

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

[3x2=6]

A. What information did Professor Gaitonde get from 'Bhaushebanchi Bakhar'?

**OR**

What physical discomfort did the narrator experience in Darchen? How did he find relief?

B. What points of similarity do you notice between rain and music in the poem The Voice of the Rain?

**OR**

To what is the bird's (Goldfinch) movement compared? What is the basis for the comparison?

**VIII. Attempt ANY ONE out of the two questions given below in 40-50 words.**

[3x1=3]

(i) Mrs Pearson says, "... I've joined the movement." What does she mean by movement?

(ii) Explain: " I stopped, horrified. I was in a room I knew and did not know?"

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

[6x1=6]

(i) Egypt is a popular tourist destination. People from all over the world visit this place to acquire knowledge about mummies and King Tut. India too has many wonders that attracts tourists. But our habits and behaviour drive the tourists away.

Write a speech in about 120-150 words on how we can make the tourists happy when they visit India.

(ii) The grandmother was not an educated woman but very well new that education is the best investment. Elucidate referring to the story – **The Portrait of a Lady**.

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

[6x1=6]

(i) ' The Tale of Melon City ' tells us the story of a king who either does not govern or misgoverns. It is a satire on a ruler who has no concern for justice or welfare of the people in his kingdom, blame gets shifted from one to the other. Elucidate.

(ii) A doctor must remain committed to saving life. Unfortunately, this commitment and dedication is grossly lacking in today's world. Justify this remark citing relevant examples from the story – **Birth**.



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

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

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

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**I. Select the best option:**

**(1X10=10 marks)**

1. What is the name of India's initiative to deliver Covid-19 vaccines to friendly countries?

- (a) Covid Maitri
- (b) Vaccine Maitri
- (c) Corona Vaccine
- (d) Vaccine India

2. In which city, India's first under sea tunnel is being constructed?

- (a) Chennai
- (b) Mumbai
- (c) Mangalore
- (d) Vizag

3. Introducing a boy, a girl said, "He is the son of the daughter of the father of my uncle." How is the boy related to the girl?

- (a) Brother
- (b) Uncle
- (c) Nephew
- (d) Son-in-law

4. In a certain code language

- (1) '134' means 'good and tasty'
- (2) '478' means 'see good pictures'
- (3) '729' means 'pictures are faint'

Which of the following digits stand for 'see'?

- (a) 7
- (b) 3
- (c) 4
- (d) 8

5. If it was a Sunday on 1 January 2017, what was the day of the week on 31 December 2017?

- (a) Saturday
- (b) Sunday
- (c) Monday
- (d) Tuesday

6. During the Indian Freedom Struggle, why did Rowlatt Act arouse popular indignation?
- (a) It curtailed the freedom of religion.
  - (b) It suppressed the Indian traditional education.
  - (c) It authorised the government to imprison people without trial.
  - (d) It curbed the trade union activities.
7. The concept of five year plan in India was borrowed from
- (a) USA
  - (b) England
  - (c) Russia
  - (d) France
8. What is the full form of "ATM"?
- (a) Automated Transaction of Money
  - (b) Automated Teller Machine
  - (c) Automated Totalling Machine
  - (d) Automated Tallying Machine
9. The first Indian to win an individual medal in Olympics is
- (a) Milkha Singh
  - (b) Abhinav Bindra
  - (c) Leander Pacs
  - (d) KD Jadhav
10. Who invented the Ballpoint Pen?
- (a) Biro Brothers
  - (b) Waterman Brothers
  - (c) Bice Brothers
  - (d) Write Brothers

**II. ANSWER THE FOLLOWING QUESTIONS IN 130-150 WORDS ANY FOUR. (4X8= 32 marks)**

1. Is cashless economy a boon or a bane? Give reasons for your answer.
2. Do you agree that environment protection and development can go hand in hand ? Justify your answer.
3. How has the Indian National Flag evolved ?
4. According to you what are the reasons for the recession in the year 2023?
5. Why did Russia invade Ukraine in the year 2022?

**III. Answer the following question in 120-150 words**

**(1X8=8 marks)**

A new cafe is struggling to attract customers. What can the owners do to increase footfalls and revenue?



# DELHI PUBLIC SCHOOL

## SAIL TOWNSHIP, RANCHI

ANNUAL 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 & D
- In section A question number 1 to 17 are MCQ type questions.
- In section B question number 18-23 are SA type questions (80-100 words). Question 18 & 19 are Source based questions.
- In section C question number 24 to 28 are Long Answer based questions (120-150 words).
- In section D question number 29 & 30 are Map based questions.
- Outline map of World and India provided to you must be attached with your answer book.

### SECTION A

**There are 17 questions in this section. All are mandatory.**

1. Which one of the following earthquake waves is more destructive? [1]
- (A) P-waves  
(B) Surface waves  
(C) S-waves  
(D) None of the above

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

| Column A                        | Column B               |
|---------------------------------|------------------------|
| a. The Continental Drift Theory | 1. Mckenzie and Parker |
| b. The Matching of Continents   | 2. Alfred Wegener      |
| c. Conventional Current Theory  | 3. Bullard             |
| d. Plate Tectonics              | 4. Arthur Holmes       |

### 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. The mean density of material in oceanic crust is [1]  
(A)  $3.7 \text{ g/cm}^3$   
(B)  $2.7 \text{ g/cm}^3$   
(C)  $3.4 \text{ g/cm}^3$   
(D)  $5 \text{ g/cm}^3$
4. Which one of the following is the type of plate boundary of the Indian plate along the Himalayan mountains? [1]  
(A) Ocean-continent convergence  
(B) Divergent Boundary  
(C) Transform Boundary  
(D) Continent-continent convergence
5. Which one of the following groups of layers of atmosphere have been arranged in the sequence as per height from the earth's surface? [1]  
(A) Mesosphere, Troposphere, Stratosphere, Thermosphere  
(B) Stratosphere, Troposphere, Mesosphere, Thermosphere  
(C) Troposphere, Stratosphere, Mesosphere, Thermosphere  
(D) Mesosphere, Thermosphere, Troposphere, Stratosphere
6. Which one of the following gases is transparent to incoming solar radiation and opaque to outgoing terrestrial radiation? [1]  
(A) Oxygen  
(B) Helium  
(C) Nitrogen  
(D) Carbon Dioxide
7. **Assertion:** Tropical cyclones are not formed near the equator. [1]  
**Reason:** At the equator, the Coriolis force is zero and the wind blows parallel to the isobars. The low pressure gets filled instead of getting intensified.  
(A) Only assertion is correct  
(B) Only reason is correct  
(C) Both assertion and reason are correct and reason is the correct explanation for assertion  
(D) Both assertion and reason are correct but reason is not the correct explanation for assertion.
8. Which one of the following is the highest cloud in the sky? [1]  
(A) Cirrus  
(B) Stratus  
(C) Nimbus  
(D) Cumulus
9. Koeppen's system of classification of climates can be termed as : [1]  
(A) Applied  
(B) Systematic  
(C) Genetic  
(D) Empirical

10. Consider the following statements and choose the correct option from the given options [1]  
I. The time between the high tide and low tide, when the water level is falling, is called the ebb.  
II. The time between the low tide and high tide, when the tide is rising, is called the crest.

**Options:**

- (A) Only statement I is correct  
(B) Both the statements are correct  
(C) Only Statement II is correct  
(D) Both the statements I and II are incorrect
11. Which of the following is incorrectly matched? [1]

| RIVER        |   | ORIGIN                                         |
|--------------|---|------------------------------------------------|
| (A) Mahanadi | - | Near Sihawa in Raipur district of Chhattisgarh |
| (B) Godavari | - | Nasik district of Maharashtra                  |
| (C) Krishna  | - | Near Mahabaleshwar in Sahyadri                 |
| (D) Narmada  | - | Multai in the Betul district of Madhya Pradesh |

12. The Chenab is an important tributary of [1]  
(A) The Ganga  
(B) The Kaveri  
(C) The Indus  
(D) The Narmada

13. **Assertion:** With along coastline, large coastal areas have an equable climate. [1]  
**Reason:** The people of Mumbai and the Konkan coast have hardly any ideas of extremes of temperature and the seasonal rhythm of weather.  
(A) Only assertion is correct.  
(B) Only reason is correct.  
(C) Both assertion and reason are correct and reason is the correct explanation for assertion  
(D) Both assertion and reason are correct but reason is not the correct explanation for assertion.

14. Which one among the following soil type is the result of intense leaching due to tropical rains? [1]  
(A) Laterite Soil  
(B) Alluvial Soil  
(C) Red Soil  
(D) Black Soil

**Read the following text and answer question no 15 to 17.**

In 1972, a comprehensive Wildlife Act was enacted, which provides the main legal framework for conservation and protection of wildlife in India. The two main objectives of the Act are; to provide protection to the endangered species listed in the schedule of the Act and to provide legal support to the conservation areas of the country classified as National parks, sanctuaries and closed areas. This Act has been comprehensively amended in 1991, making punishments more stringent and has also made provisions for the protection of specified plant species and conservation of endangered species of wild animals. There are 101 National parks and 553 wildlife sanctuaries in the country.

Wildlife conservation has a very large ambit with unbounded potential for the well-being of humankind. However, this can be achieved only when every individual understands its significance and contributes his bit.

For the purpose of effective conservation of flora and fauna, special steps have been initiated by the Government of India in collaboration with UNESCO's 'Man and Biosphere Programme'.

Special schemes like Project Tiger and Project Elephant have been launched to conserve these species and their habitat in a sustainable manner.

15. What is the main objective of wildlife act? [1]  
(A) To provide protection to the vulnerable species listed in the schedule of the Act.  
(B) To provide protection to the rare species listed in the schedule of the Act.  
(C) To provide protection to the endangered species listed in the schedule of the Act.  
(D) None of these
16. Project Elephant was launched in : [1]  
(A) 1990  
(B) 1992  
(C) 1995  
(D) 1972
17. Consider the following statements and choose the correct option from the given options [1]  
I. The main objective of the Project Tiger is to ensure maintenance of viable population of tigers in India for scientific, aesthetic, cultural and ecological values, and to preserve areas of biological importance as natural heritage for the benefit, education and enjoyment of the people.  
II. Initially, the Project Tiger was launched in nine tiger reserves, covering an area of 16,339 sq. km.  
**Options:**  
(A) Only statement I is correct  
(B) Both the statements are correct  
(C) Only Statement II is correct  
(D) Both the statements I and II are incorrect

### SECTION B

**Question numbers 18-23 are SA type questions. Question 18 & 19 are Source based questions.**

18. Read the given passage carefully and answer the questions that follow: [3]  
The earth's radius is 6,370 km. No one can reach the centre of the earth and make observations or collect samples of the material. Under such conditions, you may wonder how scientists tell us about the earth's interior and the type of materials that exist at such depths. Most of our knowledge about the interior of the earth is largely based on estimates and inferences. Yet, a part of the information is obtained through direct observations and analysis of materials.

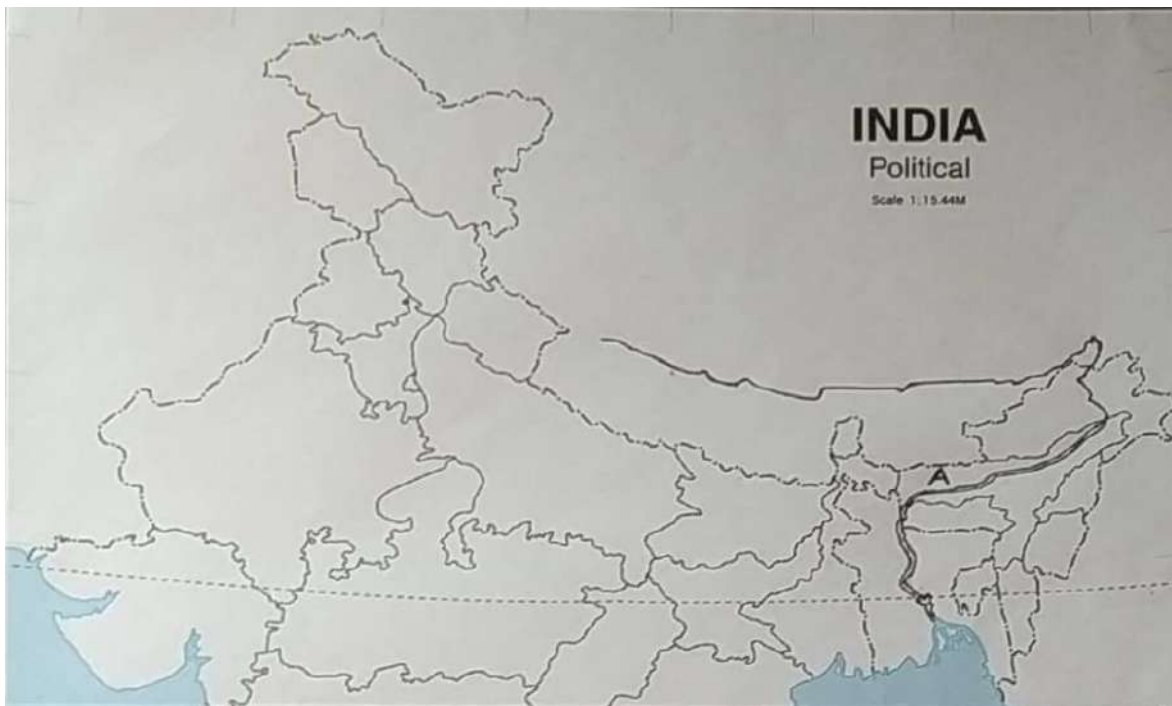
The most easily available solid earth material is surface rock or the rocks we get from mining areas. Gold mines in South Africa are as deep as 3 - 4 km. Going beyond this depth is not possible as it is very hot at this depth. Besides mining, scientists have taken up a number of projects to penetrate deeper depths to explore the conditions in the crustal portions. Scientists world over are working on two major projects such as "Deep Ocean Drilling Project" and "Integrated Ocean Drilling Project". The deepest drill at Kola, in Arctic Ocean, has so far reached a depth of 12 km. This and many deep drilling projects have provided large volume of information through the analysis of materials collected at different depths.

Volcanic eruption forms another source of obtaining direct information. As and when the molten material (magma) is thrown onto the surface of the earth, during volcanic eruption it becomes available for laboratory analysis. However, it is difficult to ascertain the depth of the source of such magma.

- 1) From where do we get the rocks for the study of the interior of the earth?
- 2) How have deep drilling projects helped us to know about the interior of the earth?
- 3) How is volcanic eruption one of the important source of obtaining about the interior of the earth?

19. Observe the given map and answer the following questions:

[3]



- 1) Name the river marked as 'A'.
- 2) Where is the origin of this river?
- 3) Why is this river well-known for floods, channel shifting and bank erosion?

20. Describe the three major divisions of the ocean floor based on the depth as well as the forms of relief. [3]

OR

What facts have been revealed by the study of the mapping of the ocean floor and the paleomagnetic studies of rocks from oceanic regions?

21. Explain three main types of rainfall on the basis of origin. [3]

22. How are the Himalayan rivers different from the Peninsular rivers? [3]

**OR**

How did the Himalayan drainage evolve?

23. Which soil is known as 'Regur Soil'? Why does this soil develop wide cracks during the dry season? [3]

### SECTION C

**Question numbers 24 to 28 are Long Answer based questions.**

24. Explain five types of earthquakes. [5]

25. How does the extra tropical cyclone differ from the tropical cyclone? [5]

26. Name any two major areas of tropical wet climate and mention any four features of it. [5]

**OR**

Discuss the possible consequences of continued addition of greenhouse gases in the atmosphere.

27. How is the economic life in India affected by monsoon? [5]

28. 'The Himalaya ranges show a succession of Vegetation from the tropical to the tundra, which change in with the altitude'. Explain. [5]

**OR**

Explain any five important reasons of the declining of wildlife in India.

### SECTION D

**Question numbers 29 & 30 are Map based questions.**

29. On the given political map of the world, the following seven features are shown. Identify **any five** of these features and write their correct names on the lines marked near each feature. [5]

(A) A Major Plate

(B) A Minor Plate

(C) A Trench

(D) A Cold Ocean Current

(E) A Cold Ocean Current

(F) A Warm Ocean Current

(G) A Cold Ocean Current

30. On the given political map of India, locate and label **any five** of the following with appropriate symbols: [5]

(A) Aravali Range

(B) Garo Hills

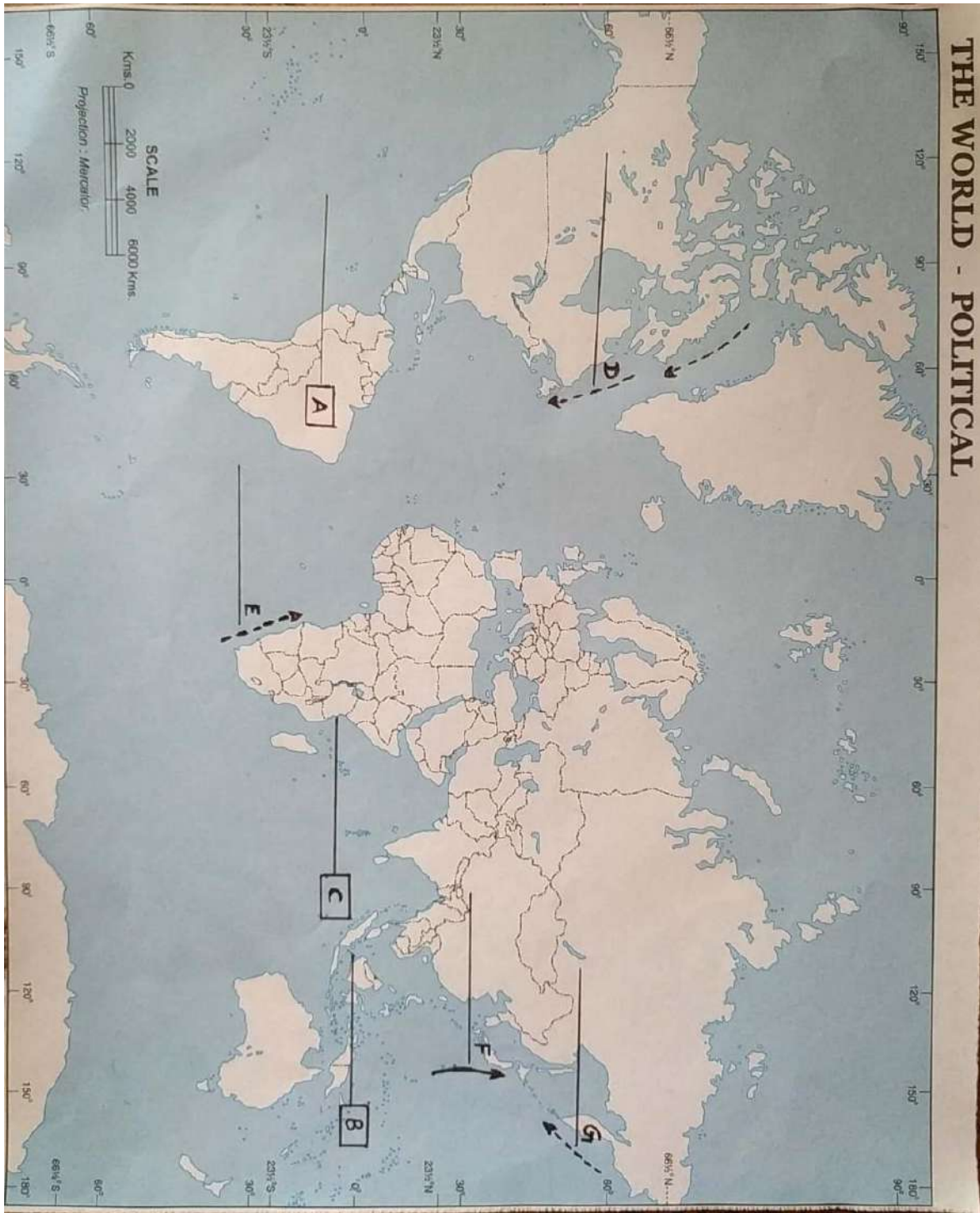
(C) Bomdi La Pass

(D) Nanda Devi Peak

(E) Simlipal Biosphere Reserve

(F) Gulf of Mannar Biosphere Reserve

(G) Sunderbans Biosphere Reserve







# DELHI PUBLIC SCHOOL

SAIL TOWNSHIP, RANCHI

ANNUAL EXAMINATION (2022-23)

Class - XI  
Time – 2 Hours

Subject – Graphics / Painting  
Maximum Marks - 30

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**General Instructions:**

- Section-A: Attempt all Questions (Each Question will carry 1 Mark)
  - Section-B: Attempt all Questions (Each Question will carry 2 Marks)
  - Section-C: Attempt any two Questions (Each Question will carry 6 Marks)
- 

**SECTION-A**

**Write in short or select the right answer from the given options or write in short: [1x8=8]**

**Q.1.**

- A. Bhimbetka is in which district of India?
- B. Why is Indus Valley Civilization also known as Bronze Age Civilization?
- C. Vihara caves of Ajanata were used for \_\_\_\_\_ purpose?
- D. Who was the founder of the Maurya dynasty?  
(a) Ashoka  
(b) Bindusara  
(c) Kalinga  
(d) Chandragupta Maurya
- E. Where is the collection of sculpture 'Jain Tirthankar' of Gupta period?  
(i) State Museum, Lucknow  
(ii) State Museum, Bihar  
(iii) Indian Museum, Kolkata  
(iv) National Museum, New Delhi
- F. Which of the following is a marble sculpture?  
(i) Yakshini  
(ii) Nataraj  
(iii) Mother & child  
(iv) Seated Buddha from Sarnath
- G. Write an example of the Vasera style of Architecture.  
(i) Dilwara temple, Rajasthan.  
(ii) Kendriya Mahadev Temple, Khajuraho.  
(iii) Kailash Temple, Ellora.  
(iv) Gol Gumbaz, Bijapur
- H. To which dynasty does the Gol Gumbaz of Bijapur belong?  
(i) Rashtrakutas  
(ii) Cholas  
(iii) Adil Shah  
(iv) Bahadur Shah Zafar



## SECTION-B

(Short answer type questions)

The answer to this question is expected around 100 words

[2x5=10]

**Q.2.** How do you understand Rock Art / Cave Painting? What are its features? Describe any Indian Rock-Art site and its one painting according to your syllabus.

**OR**

Where and how Indus Valley Civilization was discovered? Who discovered it? Where it was discovered?

**Q.3.** Describe the characteristic features of the 'Chauri bearer' a famous sculpture of Maurya dynasty.

**OR**

Why do you like or dislike the Ashoka Pillar of the Mauryan Period? Why it was adopted as our National Emblem and what is its significance?

**Q.4.** What is Chaitya and Vihara? Why is the Ajanta period known as the 'Golden Period' of Indian Art?

**OR**

Write a descriptive note on any one Ajanta fresco mural Painting including location, period, medium, features, subject matters, art and aesthetics.

**Q.5.** Write a detailed note on temple structure 'Descent of Ganga'. Mention the subject, medium, period, dynasty, location and artistic description of the given sculptures.

**OR**

Describe the sculpture Rashtrakuta Dynasty in which greatness of Shiva is depicted.

**Q.6.** Describe the lost wax technique of casting and iconography of 'Natraj'.

**OR**

Appreciate the Art and Architecture of 'Qutub Minar'?

## SECTION-C

Attempt any two questions from the given options (Long answer type questions)

An answer for this question is expected in more than 200 words

[6x2=12]

**Q.7.**

A. Describe the significance of the Indus Valley Civilization with its method, material and subjects of artefacts found.

B. Describe the characteristics of Temple architecture and explain one of Chandela Period temple.

C. What are the main characteristics of Indo-Islamic architecture? Describe it with examples.



# DELHI PUBLIC SCHOOL

## SAIL TOWNSHIP, RANCHI

ANNUAL EXAMINATION (2022-23)

Class - XI  
Time - 2 Hours

Subject - Hindustani Music Vocal  
Maximum Marks - 30

सामान्य निर्देश :

इस प्रश्न पत्र में तीन खण्ड है क,ख और ग

खण्ड-क 1 अंको का है। सभी प्रश्न अनिवार्य है।

खण्ड-ख 2 अंको का है। सभी प्रश्न अनिवार्य है।

खण्ड-ग 6 अंको का है। किन्ही दो प्रश्नों के उत्तर दीजिए।

### खण्ड-क

[18 = 8]

1. राग बिहाग का गायन समय

- (i) दिन का द्वितीय प्रहार
- (ii) प्रातःकाल
- (iii) मध्यरात्रि
- (iv) रात्रि का द्वितीय प्रहार

2. 'म - सा ' वादी संवादी स्वर है?

- (i) भीमपलासी - बिहाग
- (ii) भैरवी - बिहाग
- (iii) बिहाग - भैरव
- (iv) भैरवी - भीमपलासी

3. गन्धर्व महाविद्यालय की स्थापना की

- (i) प. विष्णु नारायण भातखंडे
- (ii) प.विष्णु दिगम्बर पलुस्कर
- (iii) प.अहोबल
- (iv) प.आचार्य शारंगदेव

4. राग भीमपलासी किस थाट का राग है?

- (i) भैरवी
- (ii) विलावल
- (iii) काफी
- (iv) तोड़ी

5. कौन सा गायन पुरुष प्रधान होता है?

- (i) शास्त्रीय गायन
- (ii) ध्रुपद
- (iii) ठुमरी
- (iv) कव्वली

6. राग भैरवी में ज्यादातर क्या गाते हैं?

- (i) गज़ल
- (ii) टप्पा
- (iii) ठुमरी
- (iv) ध्रुपद

7. दादरा में 'ना ' बोल किन मात्राओं पर आता है?

- (i) पहली व तीसरी
- (ii) तीसरी व छठी
- (iii) तीसरी व पाँचवी
- (iv) पाँचवी व छठी

8. ख्याल शब्द किस भाषा से लिया गया है?

- (i) उर्दू
- (ii) फारसी
- (iii) अरबी
- (iv) हिंदी

**खण्ड ख**

**[2×5=10]**

9. निम्न में से किन्हीं दो को परिभाषित करें।

मार्गी संगीत, नाद, देशी संगीत

10.भरत के नाट्यशास्त्र का संक्षेप मे वर्णन करें।

**अथवा**

श्री विष्णु दिगम्बर जी के जीवन परिचय पर प्रकाश डालिए ।

11.अपने पाठयक्रम की किन्ही एक बारह मात्राओं वाले ताल का परिचय सहित तालबद्ध करें।

12. गायन शैली क्या है? तराना गायन शैली के बारे मे संक्षेप मे वर्णन करें।

**अथवा**

ध्रुपद गायन शैली के बारे मे लिखें।

13. राग की विशेषता बताते हुए राग और थाट मे तुलना कीजिए।

**अथवा**

लय किसे कहते है? लय के कितने प्रकार है, समझाइये।

**खण्ड-ग**

**[6×2=12]**

14. अपने पाठयक्रम मे से किसी एक राग के छोटे ख्याल की स्वरलिपि लिखें।

15. तानपुरे के अंगों को सचित्र वर्णन करें।

16. तीनताल का परिचय देते हुए, ठेका, दुगुन और चौगुन लिखें।

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# DELHI PUBLIC SCHOOL

## SAIL TOWNSHIP, RANCHI

ANNUAL EXAMINATION (2022-23)

Class - XI  
Time - 3 Hours

Subject - History  
Maximum Marks - 80

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### General Instructions:

- i. Question paper comprises five Sections - A, B, C, D and E. There are 34 questions in the question paper. All questions are compulsory.
  - ii. Section A - Question 1 to 21 are MCQs of 1 mark each.
  - iii. Section B - Question no. 22 to 27 are Short Answer Type Questions, carrying 3 marks each. Answer to each question should not exceed 100-120 words.
  - iv. Section C - Question no 28 to 30 are Long Answer Type Questions, carrying 8 marks each. Answer to each question should not exceed 300-350 words.
  - v. Section D - Question no.31 to 33 are Source based questions with three sub questions and are of 4 marks each.
  - vi. Section-E - Question no. 34 is Map based, carrying 5 marks that includes the identification and location of significant test items. Attach the map with the answer book.
  - vii. In addition to this, separate instructions are given with each section and question, wherever necessary.
- 

### SECTION A

1. Identify the writer from the statements given below.
  - \*He used the term Industrial Revolution for the first time in English.
  - \*He used the term Industrial changes in Britain
  - a) Georges Michelet
  - b) Friedrich Engels
  - c) Arnold Toyanbee
  - d) TS Ashton
2. The Mesopotamian city, which was systematically excavated in the 1930s, was
  - a) Mari
  - b) Ur
  - c) Nineveh
  - d) Uruk
3. Name the bank in 17th century Europe whose features are listed below.
  - It was central of country's financial system .
  - It was founded in 1694 CE.
  - a) Bank of London
  - b) Bank of England
  - c) Bank of France
  - d) Bank of Manchester

4. Which of the following pairs is correctly matched

**List-I**

a) Richard Trevithic

b) George Stephenson

c) Thomas Savery

d) Richard Arkwright

**List-II**

- Puffing Devil 1

-The Water Frame

-The Blutcher

- Miner's Friend

5. In which of these groups, the sources of Roman history could be divided?

a) All of these

b) Material remains

c) Documents

d) Texts

6. Who collected taille?

a) The Priest

b) The Nobles

c) The Peasantry

d) The King (Monarch)

7. Consider the following statements and choose the correct option.

I. Britain in the 17<sup>th</sup> century was politically stable. England, Wales and Scotland were unified under Monarchy.

II. There existed common laws.

a) Only I is correct

b) Only II is correct

c) Both I and II are correct

d) Both I and II are incorrect

8. \_\_\_\_\_ is the staple food of Japan.

a) Pizza

b) Grains

c) Soup

d) Rice

9. Consider the following statements and choose the correct option.

I. Henry cort designed the Puddling Furnace

II. It resulted in wide range of iron products that had better durability.

a) Only I is correct

b) Only II is correct

c) I and II are correct

d) 1 and II are incorrect

10. Mesopotamia is now part of the Republic of \_\_\_\_\_.
- a) Syria
  - b) Iran
  - c) Iraq
  - d) Egypt
11. Consider the following statements and choose the Correct option
- I. Water was used as hydraulic power as basic source of energy during the industrial revolution.
  - II. Thomas Newcomen invented the first Steam Engine.
- a) Only I is correct
  - b) Only II is correct
  - c) I and II are correct
  - d) I and II are incorrect
12. Commodore Perry reached Japan in \_\_\_\_\_ C.E.
- a) 1850
  - b) 1853
  - c) 1856
  - d) 1859
13. Who had painted The Last Judgement?
- a) Leonardo-da-Vicni
  - b) Kepler
  - c) Mona lisa
  - d) Michelangelo
14. Who discovered the continent of Australia?
- a) William Janszoon
  - b) A.J. Tasman
  - c) Thomas Janszoon
  - d) James Cook
15. Who had written Utopia ?
- a) Jacob
  - b) Machiavelli
  - c) Balthasar
  - d) Thomas Moore
16. \_\_\_\_\_ is that branch of Christianity which considers the Roman Pope as the superior most.
- a) Protestant Church
  - b) Catholic Church
  - c) Greek Orthodox
  - d) Calvinism

17. World War-II came to an end with the surrender of:
- Russia
  - Japan
  - China
  - Germany
18. Which professor in Medicine laid the foundation of modern physiology in the renaissance period?
- Andreas Vesalius
  - Michelangelo
  - Buonarroti
  - Donatello
19. Identify the writer from the statements given below.
- He was an Arab philosopher from Spain.
  - Also known as Averroes in Latin.
  - He tried to revolve the tension between philosophical knowledge and religious beliefs.
- Ibn Rushd
  - Aristo
  - Ptolemy
  - Ibn Sina
20. Identify the architect from the statements given below.
- He painted the Sistine chapel.
  - He designed the dome of St Peter's Church.
  - He made the Sculpture The Pieta'.
- Filippo Brunellesch
  - Leonardo da Vinci
  - Michelangelo Buonarroti
  - Donatello.
21. Humanism led to the development of many Universities in Europe, one among them was the University of Bologna. It dealt with
- Legal studies
  - Architecture
  - Humanities
  - Archaeology

## SECTION B

22. List few reasons that were responsible for the emergence of Renaissance.
23. Explain Sun Yat-sen's Three Principles?
24. The Romans were great lawgivers. Justify the statement.



25. Mesopotamian society and culture were the inter mixture of people of various communities and cultures. Explain.
26. Why did the Europeans start to come and settle down in America during 19<sup>th</sup> century? Write any three reasons behind it.
27. Explain the life in a mediaeval European Monastery.

### SECTION C

28. Explain the causes, course and effects of Reformation in Europe.
29. List down the consequences of the Meiji Restoration on the future development of Japan?

**OR**

Do you think that Mao Zedong and the Communist Party of China were successful in liberating China and laying the basis for its current Success?

30. Discuss how Sufi practices made Islam penetrate deep into the Indian subcontinent giving the example of the Chishti Silsila.

### SECTION D

31. Read the given passage and answer the questions that follow:

Niccolo Machiavelli wrote about human nature in the fifteenth chapter of his book, *The Prince* (1513). 'So, leaving aside imaginary things, and referring only to those which truly exist, I say that whenever men are discussed (and especially princes, who are more exposed to view), they are noted for various qualities which earn them either praise or condemnation. Some, for example, are held to be generous, and others miserly. Some are held to be benefactors, others are called grasping, some cruel, some compassionate; one man faithless, another faithful; one man effeminate and cowardly, another fierce and courageous; one man courteous, another proud; one man lascivious, another pure; one guileless, another crafty; one stubborn, another flexible; one grave, another frivolous; one religious, another sceptical; and so forth.' Machiavelli believed that 'all men are bad and ever ready to display their vicious nature partly because of the fact that human desires are insatiable'. The most powerful motive Machiavelli saw as the incentive for every human action is self-interest.

1. Name the book written by Machiavelli. What did he believe? [1]
2. Which work of Machiavelli is known as the Bible of the kings? [1]
3. Which one important value did it depict? [2]

**32. Read the following passages and answer the questions that follow:**

Kathy my sister with the torn heart,  
I don't know how to thank you  
For your dream time stories of joy and grief  
Written on paperbark.

You were one of the dark children  
I wasn't allowed to play with –

Riverbank campers, the wrong colour  
(I couldn't turn you white.)

So it was late I met you,

Late I began to know  
They hadn't told me the land I loved  
Was taken out of your hands.'

– 'Two Dreamtimes', written for Oodgeroo Noonuccal

Questions

- (i) What do you know about Judith Wright? [1]
- (ii) How did the European settlers treat the natives? [1]
- (iii) How did things begin to change for the natives in Australia? [2]

**33. Read the following passages and answer the questions that follow:**

Doctor Galen on how Roman Cities Treated the Countryside

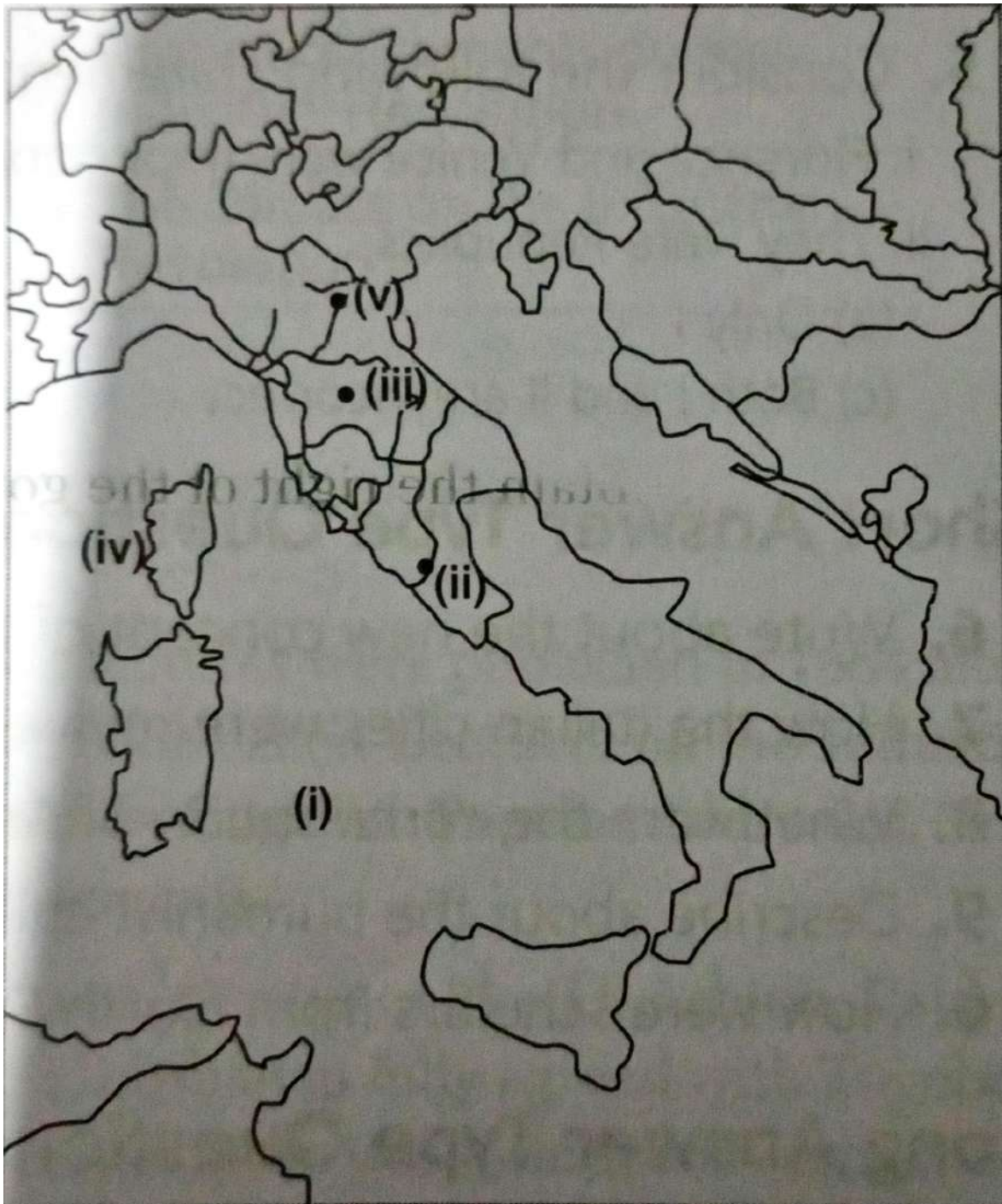
The famine prevalent for many successive years in many provinces has clearly displayed for men of any understanding the effect of malnutrition in generating illness. The city-dwellers, as it was their custom to collect and store enough grain for the whole of the next year immediately after the harvest, carried off all the wheat, barley, beans and lentils, and left to the peasants various kinds of pulse- after taking quite a large proportion of these to the city. After consuming what was left in the course of the winter, the country people had to resort to unhealthy foods in the spring; they ate twigs and shoots of trees and bushes and bulbs and roots of inedible plants.....

Questions

- 1. What did the city dwellers do? [1]
- 2. What does the given passage depict? [1]
- 3. How was ancient Roman society divided [1]

SECTION E

34. Identify the following locations marked on the map of Italy given below





# DELHI PUBLIC SCHOOL

## SAIL Township, Ranchi

Annual Examination 2023

Class: XI

Subject: Informatics Practices (065)

Max Marks: 70

Time: 3 Hours

### General Instructions:

- There are 4 groups A, B, C, D
- Group A contains 10 marks from MCQ type questions.
- Group B contains 25 marks of Programming & Prog. Logic.
- Group C contains 15 marks from Computer fundamentals, Programming & Database concept.
- Group D contains 10 marks from SQL Commands
- Group E contains of 10 marks from Cyber security
- Keep margin at the left side of your answer script & clearly write the Question Numbers
- Keep spaces and mark 'line-of-separation' in between two answers.

### GROUP – A

[10 marks]

Answer the following questions (Objective type):

[10X1=10]

- 1) Computer system has four physical components viz. i) CPU ii) Secondary Memory Other two are iii) \_\_\_\_\_ and iv) \_\_\_\_\_.
- 2) \_\_\_\_\_ operator gives decimal quotient of division of any two numbers.
- 3) RAM is an example of \_\_\_\_\_ (i) Volatile memory (ii) Non-volatile memory (iii) Both i and ii (iv) None.
- 4) In the statement, **for i in range(1,10,3)**, i belongs to: (i) 1,2,3,4,5,6,7,8,9 (ii) 1,3,5,7,9  
(iii) 1,4,7,10 (iv) 1,4,7
- 5) Find correct output of following code:  
L = [5,10,15,20,25,30,35,40,45,50]  
del L[2]  
L[3]=25  
print(L)  
(i) [5, 15, 20, 25, 30, 35, 40, 45, 50] (ii) [5, 10, 20, 25, 30, 35, 40, 45, 50]  
(iii) [5, 15, 20, 25, 30, 35, 40, 45, 50] (iv) [5, 20, 25, 25, 30, 35, 40, 45, 50]
- 6) Break terminates \_\_\_\_\_ (i) Immediate block (ii) Loop (iii) Flow of data (iv) Jump
- 7) \_\_\_\_\_ is a mapping (non-scalar) data type. It is an unordered collection of key-value pair; key-value pair are put inside curly braces.
- 8) A Table "Stationary" has 7 columns and 5 rows. Choose correct option.  
(i) Degree=7, Cardinality=5 (ii) Cardinality=7, Degree=5  
(iii) Degree=5, Cardinality=8 (iv) None
- 9) append() function is applied to add a value at \_\_\_\_\_ of the list.  
(i) Last (ii) First (iii) Mid (iv) Just before last
- 10) 'Modify' keyword is use for: (i) Update Data(ii) Update Column (iii) None (iv) Both i & ii

**GROUP – B**

**[25 Marks]**

**11)** Being a programmer, you help your younger brother to complete his Python project work and write output of Any Four of the following codes given as tasks. **[4X1=4]**

**(i)**

```
str = 'ABCDEFGHJIJ'
for i in str:
 if (i == 'A' or i == 'C' or i == 'E' or i == "G" or i == "I"):
 print(i, end = "")
```

**(ii)**

```
L1 = list(range(2, 21,2))
print(L1)
```

**(iii)**

```
dict1 = {'Roll':11,'Name':'Rahul', 'Marks':89}
print(dict1)
```

**(iv)**

```
str="DPS Ranchi"
str=str*3
print(str)
```

**(v)**

```
str="DPS Ranchi"
print(str[-7:])
```

**12)** Draw a Flowchart to check the entered number is Prime or not. **[2]**

**13)** Draw a Flowchart to find the greatest number of any three user given numbers. **[2]**

**14)** Write a program to find  $S = (1) + (1+2) + (1+2+3) + (1+2+3+4) \dots$  Nth Term. **[2]**

**15)** Write a program to enter a character and check that character is vowel or consonant. **[2]**

**16)** Write a program to find:  $S = 1 + 1 + 2 + 3 + 5 + 8 + \dots$  Nth term **[2]**

**17)** Write a program to create list of 3X4 2D arrays Lst initialized by zero (0). Then fill those by user given values. Finally add the corresponding values of each row. **[2]**

**18)** Write a program to find the largest value and smallest value in a LIST of values. **[2]**

**19)** Write a program to enter a number/element and check whether it is present in a LIST of values. **[2]**

**20)** Write a program to create a dictionary named 'class', which will be generated by user entries of N items of 'Section' and 'Number of students' as Keys and Values respectively, of the dictionary. **[2]**

**21)** Write a program to create an Array (using NumPy) with the following list: **[3]**

$x = [[1,2,3], [4,5,6], [7,8,9], [10,11,12]]$

Then print the values of the Array of:

(i) 1st row and 2nd to 3rd columns of the array

(ii) 1st to 2nd rows and 1st to last columns of the array

**GROUP – C**

**[15 Marks]**

- 22) Explain the functionality of Memory management of a disk with a diagram. [2]
- 23) Explain the functions of the System Software. [2]
- 24) (i) Differentiate RAM and ROM. (ii) Write the function of Cache Memory. [2]
- 25) Explain the roles of **Logical Error** and **Syntax Error** to develop programming. [2]
- 26) Explain the most two major advantages of DataBase. [2]
- 27) Explain the functions of Key in database. Differentiate Primary and Foreign Key [2]
- 28) Show the steps to find the final output (T/F) of the following statement, if x=10, y=20 & z=30. [3]

**! (((x<=y) || (y==z) ) && (! (z!=x) && (y>z)))**

**GROUP – D**

**[10 Marks]**

- 29) Write the SQL commands of the following queries: [10X1=10]

**Table : ITEMS**

| ID   | PNAME       | PRICE  | MDATE      | QTY |
|------|-------------|--------|------------|-----|
| T001 | Soap        | 12.00  | 2007-03-11 | 200 |
| T002 | Paste       | 39.50  | 2006-12-23 | 55  |
| T003 | Deodorant   | 125.00 | 2007-6-12  | 46  |
| T004 | Hair Oil    | 28.75  | 2007-9-25  | 325 |
| T005 | Cold Cream  | 66.00  | 2007-10-9  | 144 |
| T006 | Tooth Brush | 25.00  | 2006-2-17  | 455 |

- (i) Create a table ITEMS (as given above) with suitable Data types and essential constraints, such as Primary Key, Not Null, Unique, Check (*Quantity must more than 10*), Default (*Price as 0.0*).
- (ii) Enter a new record to ITEMS of your choice.
- (iii) Display PNAME, PRICE, QTY only for the Quantity have 100 or above.
- (iv) Display product name, price for those items whose range of price are 60 to 120.
- (v) Display the details of those, have second character of the Product name is "o".
- (vi) Display the detail in descending order on quantity, those have priced more than 50.
- (vii) Delete the products produced before 2007.
- (viii) Increase the price by 5% of the product names soap and paste.
- (ix) Add a new column 'email' of char type to the table.
- (x) Increase the size of the column PNAME by 10 (*assume the size was 15*).

**GROUP – E**

**[10 Marks]**

- 30) What is the role of Robotics in modern era using AI? [2]
- 31) Write the application Machine Learning. How it is different from traditional computing? [2]
- 32) What is Big Data? Write the functionality of Big Data. [2]
- 33) Write a note on: Concept of Smart City. [2]
- 34) Write notes on the followings: (i) NLP (ii) Cloud Computing [2]

**###**



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

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

**Subject - Mathematics**  
**Maximum Marks - 80**

**General Instructions:**

1. This question paper contains - five sections A, B, C, D and E. Each section is compulsory. However, there are internal choices in some questions.
2. Section A has 18 MCQ's and 2 Assertion Reason based questions of 1 mark each.
3. Section B has 5 Very Short Answer (VSA) type questions of 2 marks each.
4. Section C has 6 Short Answer (SA) type questions of 3 marks each.
5. Section D has 4 long answer (LA) type questions of five marks each.
6. Section E has 3 source based / case based / passage-based / integrated units of assessment (4 marks each) with sub-parts.

**SECTION - A**

(Multiple Choice Questions)  
Each question carries 1 mark

1. Two finite sets have  $m$  and  $n$  elements. The number of elements in the power set of first set is 56 more than the total number of elements in the power set of second set. then the values of 'm' and 'n' are respectively :  
(a) 6 and 3                      (b) 3 and 6                      (c) 4 and 5                      (d) 5 and 4
2. Let  $F_1$  be the set of all parallelograms,  $F_2$  be the set of all rectangles,  $F_3$  be the set of all rhombuses,  $F_4$  be the set of all squares and  $F_5$  be the set of all trapeziums in a plane. Then  $F_1$  may be equal to :  
(a)  $F_2 \cap F_3$                       (b)  $F_3 \cap F_4$                       (c)  $F_2 \cup F_3$                       (d)  $F_2 \cup F_3 \cup F_4 \cup F_1$
3. A relation  $R$  is defined from set  $\{2, 3, 4, 5\}$  to set  $\{3, 6, 7, 10\}$  by :  
 $(x, y) \in R \Leftrightarrow x$  is relatively prime to  $y$  then the domain of  $R$  is :  
(a)  $\{2, 3, 5\}$                       (b)  $\{3, 5\}$                       (c)  $\{2, 3, 4, 5\}$                       (d)  $\{2, 3, 4\}$
4. Let  $R = \{(x, y) : x, y \in Z, y = 2x - 4\}$ . If  $(a, -2)$  and  $(4, b^2) \in R$  then find the values of  $a$  and  $b$ .  
(a)  $a = 1, b = 2$                       (b)  $a = -1, b = -2$                       (c)  $a = 2, b = \pm 1$                       (d)  $a = 1, b = \pm 2$
5. If  $f(x) = \frac{x-1}{x+1}, x \neq -1$ , then find the value of  $f(f(x))$ .  
(a)  $\frac{1}{x}$                       (b)  $-\frac{1}{x}$                       (c) 0                      (d) None of the above
6. Find the range of the real valued function  $f(x) = \frac{4-x}{x-4}$   
(a)  $R - \{4\}$                       (b)  $\{4\}$                       (c)  $\{-1\}$                       (d)  $R - \{-1\}$

7. The radian measure corresponding to the degree measure  $-37^{\circ}30'$  is :

(a)  $\left(\frac{5\pi}{24}\right)^c$       (b)  $-\left(\frac{5\pi}{24}\right)^c$       (c)  $\left(\frac{8\pi}{22}\right)^c$       (d)  $-\left(\frac{8\pi}{22}\right)^c$

8. A horse is tied to a post by a rope . If the horse moves along a circular path always keeping the rope tight and describes 88metres when it has traced out  $72^{\circ}$  at the centre , then the length of the rope is :

(a) 70metres      (b) 80metres      (c) 75metres      (d) 65metres

9. If  $a \cos x + b \sin x = m$  and  $a \sin x - b \cos x = n$  , then :

(a)  $a^2 - b^2 = m^2 + n^2$    (b)  $a^2 - b^2 = m^2 - n^2$    (c)  $a^2 + b^2 = m^2 - n^2$       (d)  $a^2 + b^2 = m^2 + n^2$

10. If  $\alpha$  and  $\beta$  are acute angles such that  $\tan \alpha = \frac{m}{m+1}$  and  $\tan \beta = \frac{1}{2m+1}$  , then :

(a)  $\alpha + \beta = \frac{\pi}{3}$       (b)  $\alpha + \beta = \frac{\pi}{6}$       (c)  $\alpha + \beta = \frac{\pi}{4}$       (d)  $\alpha + \beta = \frac{\pi}{2}$

11. The solution of the quadratic equation  $25x^2 - 30x + 11 = 0$  is :

(a)  $\frac{3}{5} \pm \frac{\sqrt{2}}{5}i$       (b)  $\frac{2}{5} \pm \frac{\sqrt{3}}{5}i$       (c)  $\frac{2}{5} \pm \frac{\sqrt{2}}{5}i$       (d)  $\frac{3}{5} \pm \frac{\sqrt{3}}{5}i$

12. The solution of the inequality :  $1 \leq |x-2| \leq 3$  is :

(a)  $x \in [-2,1] \cup [2,5]$    (b)  $x \in [-1,1] \cup [3,5]$    (c)  $x \in [-1,2] \cup [3,6]$    (d)  $x \in [-2,0] \cup [2,5]$

13. A solution is to be kept between  $30^{\circ}C$  and  $35^{\circ}C$  , then the range of temperature in degree Fahrenheit is :

(a) Between  $82^{\circ}F$  and  $96^{\circ}F$       (b) Between  $84^{\circ}F$  and  $92^{\circ}F$   
(c) Between  $86^{\circ}F$  and  $95^{\circ}F$       (d) Between  $84^{\circ}F$  and  $98^{\circ}F$

14. The total number of terms in the expansion of  $(x+a)^{100} + (x-a)^{100}$  after simplification is :

(a) 100      (b) 50      (c) 51      (d) 202

15. If the points  $(a,0)$  ,  $(0,b)$  and  $(x,y)$  are collinear , then :

(a)  $\frac{x}{a} + \frac{y}{b} = 0$       (b)  $\frac{x}{a} - \frac{y}{b} = 0$       (c)  $\frac{x}{a} - \frac{y}{b} = 1$       (d)  $\frac{x}{a} + \frac{y}{b} = 1$

16. The distance between the parallel lines :  $3x - 4y + 9 = 0$  and  $6x - 8y - 15 = 0$  is :

(a)  $\frac{11}{10}$  units      (b)  $\frac{22}{10}$  units      (c)  $\frac{33}{10}$  units      (d)  $\frac{44}{10}$  units

17. The image of the point  $(-5,4,-3)$  along  $xz$  plane is :

(a)  $(-5,4,-3)$       (b)  $(-5,-4,-3)$       (c)  $(5,-4,3)$       (d)  $(5,4,3)$

18. If a plane is parallel to  $yz$  plane, then it is perpendicular to :

(a)  $x$ -axis      (b)  $y$ -axis      (c)  $z$ -axis      (d) None of the above



**(ASSERTION - REASON BASED QUESTIONS)**

In the following questions a statement of **Assertion (A)** is followed by a statement of **Reason (R)**. Choose the correct answer out of the following choices.

- 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. **A** is false, but **R** is true.

19. **Assertion (A)** :  $33!$  is divisible by  $2^{15}$ .

**Reason (R)** : 15 is the largest integer  $n$  such that  $33!$  is divisible by  $2^n$ .

20. **Assertion (A)** : A and B are two events associated with the random experiment , then the probability of occurrence of neither A nor B is  $1 - P(A \cup B)$ .

**Reason (R)** :  $P(A' \cap B') = 1 - P(A \cup B)$ .

**SECTION - B**

**This section comprises of very short answer type questions (VSA) of 2 marks each.**

21. If  $5({}^4P_r) = 6({}^5P_{r-1})$ , then find the value of 'r'.

22. Find the value of  $(0.99)^5$  by using the first three terms of its expansion.

**OR**

If a and b are distinct integers , then prove that  $a^n - b^n$  is divisible by  $a - b$ , where  $n \in N$

23. If  $p$  is the length of the perpendicular from the origin to the line  $\frac{x}{a} + \frac{y}{b} = 1$ , then prove that  $\frac{1}{p^2} = \frac{1}{a^2} + \frac{1}{b^2}$ .

**OR**

Transform the equation of the line :  $\sqrt{3}x + y - 8 = 0$

(I) to intercept form and find intercepts on the coordinate axes.

(II) to slope intercept form and find its slope.

24. Determine the point in  $XY$  plane which is equidistant from three points A(2, 0, 3) , B(0, 3, 2) and C(0, 0, 1).

25. Differentiate the given function with respect to  $x$  :  $f(x) = \frac{ax^2 + bx + c}{\sqrt{x}}$ .

**SECTION - C**

**This section comprises of short answer type questions ( SA ) of 3 marks each**

26. Prove that :  $\tan\left(\frac{\pi}{3} + x\right) \tan\left(\frac{\pi}{3} - x\right) = \frac{2 \cos 2x + 1}{2 \cos 2x - 1}$ .

**OR**

Prove that :  $\frac{\sec 8x - 1}{\sec 4x - 1} = \frac{\tan 8x}{\tan 2x}$ .

27. Solve the system of inequalities :

$$\frac{x}{2x+1} \geq \frac{1}{4} \text{ and } \frac{6x}{4x-1} < \frac{1}{2}$$

28. If  $\alpha$  and  $\beta$  are different complex numbers with  $|\beta|=1$ , then find the value of :  $\left| \frac{\beta - \alpha}{1 - \alpha\beta} \right|$

OR

If  $a + ib = \frac{c+i}{c-i}$ , where  $c$  is real, then prove that :  $a^2 + b^2 = 1$  and  $\frac{b}{a} = \frac{2c}{c^2 - 1}$ .

29. If one geometric mean  $G$  and two arithmetic means  $A_1$  and  $A_2$  be inserted between two given quantities, then prove that  $G^2 = (2A_1 - A_2)(2A_2 - A_1)$ .

30. For the curve :  $16x^2 + 25y^2 = 400$ , find :  $\left(\frac{1}{2} \times 6 = 3\right)$

- (i) the coordinates of foci.
- (ii) the coordinates of vertices .
- (iii) the length of major axis .
- (iv) the length of minor axis .
- (v) the eccentricity .
- (vi) the length of latus rectum .

31. Calculate the mean deviation about the median for the following distribution :

|       |    |    |    |    |    |    |    |    |
|-------|----|----|----|----|----|----|----|----|
| $x_i$ | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 45 |
| $f_i$ | 7  | 3  | 8  | 5  | 6  | 8  | 4  | 9  |

### SECTION - D

This section comprises of long answer type questions ( LA ) of 5 marks each.

32. The sum of three numbers in G.P. is 56 . If we subtract 1 , 7 , 21 from these numbers in that order we obtain an arithmetic progression . Find the numbers .

OR

If in an A.P. the sum of 'm' terms is equal to  $n$  and the sum of 'n' terms is equal to  $m$ , then prove that the sum of  $(m+n)$  terms is  $-(m+n)$  .Also find the sum of first  $(m-n)$  terms ( $m > n$ ).

33. (i) An equilateral triangle is inscribed in the parabola  $y^2 = 4ax$  whose vertex is at the vertex of the parabola . Find the length of its side. (3)

(ii) Find the centre and radius of the circle:  $x^2 + y^2 + 6x - 4y + 4 = 0$  (2)

34. (i) If  $\lim_{x \rightarrow -a} \left[ \frac{x^9 + a^9}{x+a} \right] = 9$ , then find the real values of 'a'. (2)

(ii) Using the First principle, prove that the differentiation of  $\operatorname{cosec} x$  with respect to  $x$  is:  $-\operatorname{cosec} x \cot x$  (3)

35. (i) Find the probability that the birth days of six different persons will fall in exactly two calendar months.

(ii) Three letters are dictated to three persons and an envelope is addressed to each of them, the letters are inserted into the envelopes at random so that each envelope contains one letter. Find the probability that at least one letter is in its proper envelope. (3+2=5)

OR

Four cards are drawn at random from a pack of 52 playing cards.

Find the probability of getting:

(1×5 = 5)

- (i) all the four cards of the same suit .
- (ii) all the four cards of the same number .
- (iii) two red cards and two black cards .
- (iv) all the four cards of the same color .
- (v) all are face cards .

### SECTION - E

**This section comprises of 3 case - study / passage-based questions of 4 marks each with sub - parts. Marks allotted for each sub questions are indicated.**

**Case - Study 1:** Read the following passage and answer the questions given below.

36. In a town of 10,000 families, it was found that 40% families buy newspaper A, 20% families buy newspaper B and 10% families buy newspaper C. 5% families buy newspapers A and B , 3% families buy newspapers B and C and 4% families buy newspapers A and C. If 2 % families buy all the three newspapers, then:

- (i) Find the number of families that who buy newspaper B only? (2)
- (ii) Find the number of families that who buy atleast two newspapers? (1)
- (iii) Find the number of families that who buy exactly one newspaper? (1)

37. **Case - Study 2:** Read the following passage and answer the questions given below.

Suppose that you are a representative of your class comprising of 9 girls and 8 boys (including you also). Your class teacher has assigned you a task of forming a team of 12 students for conducting morning assembly. In how many ways you can form teams such that:

- (i) the girl are in majority . (2)
- (ii) the boy are in majority . (2)

38. **Case - Study 3:**

The following table represents the marks obtained by the students of class X in half yearly examination. Study the following table and answer the questions given below:

| Marks obtained     | 20-30 | 30-40 | 40-50 | 50-60 | 60-70 | 70-80 | 80-90 |
|--------------------|-------|-------|-------|-------|-------|-------|-------|
| Number of students | 3     | 6     | 13    | 15    | 14    | 5     | 4     |

- (i) Calculate the mean marks obtained by the students. (1)
- (ii) Using nearest integral value of mean, calculate the variance for the given data. (2)
- (iii) Calculate the standard deviation for the given data. (1)





# DELHI PUBLIC SCHOOL

## SAIL TOWNSHIP, RANCHI

ANNUAL EXAMINATION (2022-23)

Class - XI  
Time - 3 Hours

Subject - Physical Education  
Maximum Marks - 70

### GENERAL INSTRUCTION

- A) The question paper consist of 5 sections and 37 questions.
- B) Section -A consists of questions 1- 18 carrying 1 marks each and is multiple choice questions. All questions are compulsory.
- C) Section B consist of questions 19-24 carrying 2 marks each and are very short answer type and should not exceed 60-90 words. Attempt any 5.
- D) Section C consist of questions 25-30 carrying 3 marks each and are short answer type and should not exceed 100-150 words. Attempt any 5.
- E) Section D consist of questions 31-33 carrying 4 marks and each are case studies.
- F) Section E consist of questions 34-37 carrying 5 marks each and are long answer type and should not exceed 200-300 words. Attempt any 3.

### SECTION - A

1. Rohit's height is 5 feet 1 inch measured with the help of Stadiometer. The 5 feet 1 inch is an example of \_\_\_\_\_  
a) Test                      b) Measurement                      c) Evaluation                      d) Assessment
2. What is the duration of Mesocycle?  
a) 3-6 weeks                      b) 3-10 days                      c) 3-12months                      d) None of the above
3. Blood doping is a method that increase the count of \_\_\_\_\_  
a) White blood cell                      b) Red blood cell                      c) Monocytes                      d) Skin Cell
4. If our arm moves away from the midline of the body, this movement is called:  
a) Adduction                      b) Abduction                      c) Retraction                      d) Circumduction
5. Which one of the following joints is not a freely moveable joints ?  
a) Hinge joint                      b) Saddle joint                      c) Pivot joints                      d) Symphysis joints
6. Sit & reach test is used to measure  
a) Strength                      b) Endurance                      c) Speed                      d) Flexibility
7. Which type of muscle fibres is beneficial for Endurance activities ?  
a) White muscles fibres                      b) Yellow muscles fibre                      c) Red muscles fibre                      d) Both A & C
8. Which type of disabilities creates hinderance for an individual to store, process and produce information?  
a) Intellectual disability                      b) Cognitive disability                      c) Physical disability                      d) None of these
9. Who added the words for the Olympic Anthem?  
a) Kostis Palamas                      b) Spiros Samaras                      c) Homer                      d) Pheidippides

10. Which day is celebrated as 'International Yoga Day' ?  
 a) June 19                      b) June 20                      c) June 21                      d) June 22
11. Which one of the following is the head quarter of IOC ?  
 a) Lausanne                      b) New York                      c) Paris                      d) Bonn
12. Fit India movement was launched on:  
 a) 29<sup>th</sup> July 2019                      b) 29<sup>th</sup> August 2019                      c) 29<sup>th</sup> September 2019                      d) 29<sup>th</sup> June 2019

13. Given Below are the two statements labelled Assertion (A) and Reason (R) .

**Assertion (A) :-** Skeleton system is a combination of various bones, which differ in shape and size.

**Reason (R) :-** There are two types of skeletal muscle fibres i.e slow twitch fibres and fast twitch fibres.

In the context of the above two statements, which one of the following is correct?

- 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) (A) is false but(R) is true.
14. "Psychology" is the positive science of behaviour". Whose statement is it?  
 a) Watson                      b) Pillsbury                      c) Ross                      d) Wood Worth
15. Which one of the following plane divides the body into a left and a right.  
 a) Coronal plane                      b) Sagittal plane                      c) Vertical plane                      d) Transverse plane
16. Hinge joint is found in which joint?  
 a) Pivot joint                      b) Saddle joint                      c) Knee joint                      d) Hip joint
17. Match list - 1 and list - 2 and select the correct answer from the code given below:

List - 1

List - 2

- |              |                                                  |
|--------------|--------------------------------------------------|
| a) Pranayama | (i) To sit in easy posture                       |
| b) Samadhi   | (ii) Concentration of mind .                     |
| c) Asana     | (iii) Union of individual soul with supreme soul |
| d) Dharana   | (iv) Control of the process of breathing.        |

**Code:**

- a) a-ii, b-i, c-iii, d- iv    b) a-i, b-ii, c-iv, d- iii                      c) a-iv, b-iii, c-ii,d-I    d) a-iv, b- iii, c-i, d-ii

18. Which type of bone provides protection to the delicate organs?  
 a) Long bones                      b) Flat bones                      c) Short bones                      d) Irregular bone

### SECTION - B

19. What is Adaptation and Recovery?
20. Which physical changes do take place during adolescence? Discuss in brief.
21. What do you mean by Supination and Pronation?

22. Briefly explain the types of Capillaries.
23. What do you mean by Anthropometric test?
24. Explain the types of Endurance?

### SECTION - C

25. Explain the role of school Counsellor and Physiotherapist.
26. Write six benefits of Fit India movement.
27. Discuss the type of Axis.
28. Discuss about the structure, location and function of Heart.
29. Discuss any six importance of Test, Measurement and Evaluation.
30. Write a short notes on :
  - a) Flexion
  - b) Adduction
  - c) Circumduction

### SECTION -D

31. Dr. Deepa Mallik was the first Indian female para athlete to win Asian games medal in Athletics as well as the first female world championship medal. She is also India's first female paralympic medalist, She has won 23 international medals and 68 national and state level medals. She has been awarded Padma Shri, Arjuna Award and Rajeev Gandhi Khel Ratna Award.
  - 1) In which one of the following event she won a silver medal at Paralympic Games in 2016 summer Paralympics?
    - a) Javelin throw
    - b) Discus throw
    - c) Shot put
    - d) None of these
  - 2) Who became the first female paralympic medalist of India?
    - a) Deepa Karmakar
    - b) Deepa Malik
    - c) Deepa Singh
    - d) Sakshi Malik
  - 3) Who became the first Indian to clinch gold medals in Paralympics in Javelin?
    - a) Devendra Jhajharia
    - b) T. Maiyappan
    - c) Sundar Singh Gujar
    - d) Sandeep Chaudhary
  - 4) Which one of the following is the motto of Paralympics?
    - a) Mind, Body, Spirit
    - b) Spirit in Motion
    - c) Faster, Higher, stronger
    - d) None of these
32. Srishti is a good middle distance runner but she could not achieve any position, this time she aimed to win state level championship in 800 mtr race. Her physical education teacher advised her to improve flexibility and coordinative ability by taking help of the coach in the stadium. He suggested different exercise to improve Strength, Flexibility and Endurance. After six month of vigorous training she won silver medal.
  - A) What is endurance?
  - B) How do coordinative abilities help to improve performance?
  - C) What values were shown by the Physical education teacher?
  - D) What do you mean by principle of Continuity ?

33. Last year our school organised a programme "Run for Unity" all the students and teachers of our school were involved in the race. Such runs promote unity, peace and harmony among the people. After covering a distance of 2km one student suddenly felt chest pain. He informed to a teacher regarding pain. Immediately some of the teachers who were running beside him took him to the doctor for a necessary check up . his blood pressure was measured and ECG was also performed. After seeing the report Doctor said it was not a case of heart problem. It was surely a problem of second wind which is an usual phenomenon for individual who does not practice to run a race.

- A) What is Physical fitness?
- B) What values did the teacher show by taking the student to the doctor immediately?
- C) Was the student physically fit enough to take part in 'Run for unity'.
- D) "Run for unity" promotes \_\_\_\_\_

### **SECTION - E**

34. What do you mean by Sport Training? Enumerate the principles of Sports Training .

35. Explain the problem of Adolescence in details?

36. What do you mean by Doping? Discuss the performance enhancing substances in detail.

37. Explain about the various organs of Respiratory System?

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

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

**Subject - Physics**  
**Maximum Marks- 70**

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**General Instructions:**

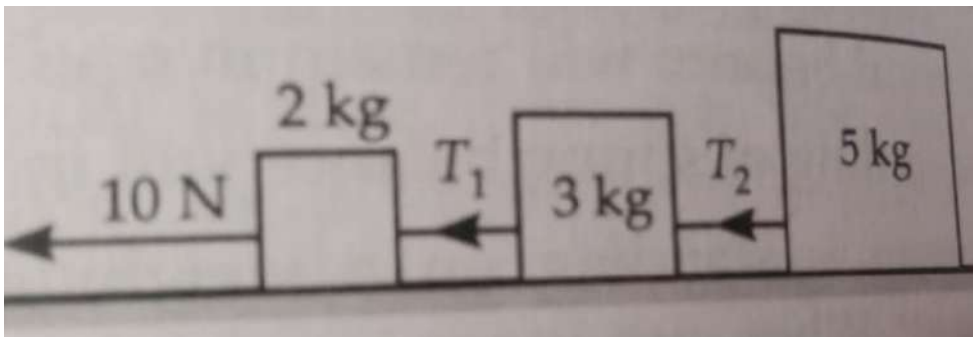
- (1) There are 35 questions in all. All questions are compulsory.
  - (2) This question paper has five sections: Section A, Section B, Section C, Section D and Section E. All the sections are compulsory.
  - (3) Section A contains eighteen MCQ of 1 mark each, Section B contains seven questions of two marks each, Section C contains five questions of three marks each, section D contains three questions of five marks each and Section E contains two case study-based questions of 4 marks each.
  - (4) There is no overall choice. However, an internal choice has been provided in section B, C, D and E. You have to attempt only one of the choices in such questions.
  - (5) Use of calculators is not allowed.
- 

**SECTION A**

1. Which of the following pair does not have similar dimensions?
  - A. Stress and pressure
  - B. Angle and strain
  - C. Tension and Surface - tension
  - D. Planck's constant and angular momentum
2. A car travels from A to B at a speed of 20 km/hr and returns at a speed of 30 km/hr. The average speed of the car for the whole journey is
  - A. 5 km/hr
  - B. 24 km/hr
  - C. 25 km/hr
  - D. 50 km/hr
3. According to Hooke's law of elasticity, if stress is increased, the ratio of stress to strain
  - A. increases
  - B. decreases
  - C. becomes zero
  - D. remains constant
4. Radius of one arm of a hydraulic lift is four times of the radius of the other arm. What force should be applied on the narrow arm to lift 100 kg?
  - A. 26.5 N
  - B. 62.5 N
  - C. 6.25 N
  - D. 8.3 N

5. First law of thermodynamics corresponds to
- conservation of energy
  - heat flow from hotter to colder body
  - law of conservation of angular momentum
  - Newton's law of cooling
6. Which one of the following is not a state function ?
- temperature
  - volume
  - pressure
  - work
7. What is the maximum acceleration of the particle executing the SHM,  $y = 2 \sin \left[ \frac{\pi}{2} t + \theta \right]$ , where y is in cm?
- $\frac{\pi}{2} \text{ cm/s}^2$
  - $\frac{\pi^2}{2} \text{ cm/s}^2$
  - $\frac{\pi}{4} \text{ cm/s}^2$
  - $\frac{\pi^2}{4} \text{ cm/s}^2$
8. A wave is expressed by the equation  $y = 0.5 \sin \pi (0.01 x - 3t)$  where x, y are in metre and t is in second. The speed of propagation will be:
- 150 m/sec
  - 300 m/sec
  - 350 m/sec
  - 250 m/sec
9. Two bodies of masses 2kg and 4 kg are moving with velocities 2m/sec and 10m/sec towards each other due to mutual gravitational attraction. What is the velocity of their centre of mass?
- 5m/sec
  - 6m/sec
  - 8m/sec
  - Zero
10. If a force acts on a body, whose line of action does not pass through its centre of gravity, then the body will experience
- angular acceleration
  - linear acceleration
  - both (A) and (B)
  - none of these
11. Two racing cars of masses  $m_1$  and  $m_2$  are moving in circles of radii  $r_1$  and  $r_2$  respectively. Their speeds are such that each makes a complete circle in the same time t. The ratio of the angular speeds of the first to the second car will be
- 1:1
  - $r_1 : r_2$
  - $m_1 : m_2$
  - $m_1 m_2 : r_1 r_2$

12. At an instant  $t$ , the co - ordinates of a particle are  $x = at^2$ ,  $y = bt^2$  and  $z = 0$ . The magnitude of velocity of particle at an instant  $t$  is
- $t\sqrt{(a^2+b^2)}$
  - $\frac{v}{\sqrt{2}}$
  - $\frac{v}{\sqrt{3}}$
  - $2t\sqrt{a^2+b^2}$
13. Critical velocity of the liquid
- decreases when radius decreases
  - increases when radius increases
  - decreases when density increases
  - increases when density increases
14. An object is moving on a plane surface with uniform velocity 10m/sec in the presence of a force of 10 N. The frictional force between the object and the surface is
- 1 N
  - 10 N
  - 10N
  - 100 N
15. Three blocks of masses 2kg, 3kg and 5kg are connected to each other with a light string and are then placed on a frictionless surface .The system is pulled by a force  $F = 10$  N, then the tension  $T_1$  is
- 1 N
  - 5 N
  - 8 N
  - 10 N



For Question No. 16 - 18

Two statements are given - one labelled Assertion (A) and the other labelled Reason (R). Select the correct answer to these questions from the codes (A), (B), (C) and (D) as given below.

- Both A and R are true and R is the correct explanation of A
  - Both A and R are true but R is NOT the correct explanation of A
  - A is true but R is false
  - A is false and R is also false.
16. Assertion (A) :- Frictional forces are conservative forces.  
Reason (R) :- Polishing surfaces always reduces friction.

17. Assertion (A) : - K.E is conserved at every instant of elastic collision.  
Reason (R) :- No deformation of matter occurs in elastic collision.
18. Assertion (A) : - The size and shape of the rigid body remains unaffected under the effect of external forces.  
Reason (R) :- The distance between two particles remains constant in a rigid body.

### SECTION B

19. Draw the following graphs (expected nature only) representing motion of an object under free fall. Neglect air resistance.
- A. Variation of position with respect to time.
  - B. Variation of velocity with respect to time.
  - C. Variation of acceleration with respect to time.
  - D. How can the distance travelled be calculated from the velocity - time graph in a uniform one dimensional motion?
20. Determine a unit vector perpendicular to both  $\vec{A} = 2\hat{i} + \hat{j} + \hat{k}$  and  $\vec{B} = \hat{i} - \hat{j} + 2\hat{k}$

**OR**

Find the angle between the vectors  $\vec{A} = \hat{i} + 2\hat{j} - \hat{k}$  and  $\vec{B} = -\hat{i} + \hat{j} - 2\hat{k}$

21. State the advantages of SI over other system of units.
22. Find the value of 60 J per min. on a system that has 100 g, 100 cm and 1 min as the base units.
23. State and prove work - energy theorem.
24. Show that the average K.E of a gas molecule is directly proportional to the absolute temperature of the gas.
25. Derive the relationship of the (a) coefficient of superficial expansion ( $\beta$ ) (b) coefficient of cubical expansion ( $\gamma$ ) with the coefficient of linear expansion ( $\alpha$ )

**OR**

Define the co-efficient of thermal conductivity and give its S.I. unit and dimensions.

### SECTION C

26. Define Elastic collision and derive the expressions for the velocities of two bodies after collision in one dimension.

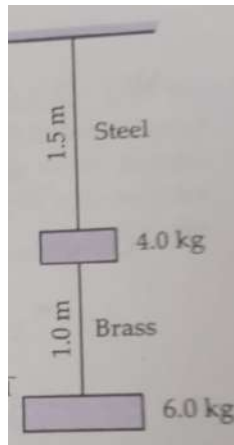
**OR**

A railway carriage of mass 9000 kg moving with a speed of 36 km/hr collides with a stationary carriage of the same mass. After the collision, the carriages get coupled and move together. What is their common speed after collision? What type of collision is this?

27. A ball is released from the top of a tower of height h metres. It takes T second to reach the ground. What is the position of the ball in  $\frac{T}{3}$  seconds?
28. Derive an expression for the excess pressure inside a liquid drop.

**OR**

Two wires of diameters 0.25 cm, one made of steel and other made of brass are loaded as shown in figure. The unloaded length of steel wire is 1.5 m and that of brass wire is 1.0 m. Young's modulus of steel is  $2.0 \times 10^{11}$  Pa and that of brass is  $0.91 \times 10^{11}$  Pa. Compute the elongations of steel and brass wire.



29. Show that, for small oscillations, the motion of a simple pendulum is simple harmonic. Derive an expression for its time period. Does it depend on the mass of the bob?
30. The distances of two planets from the sun is  $10^{13}$  m and  $10^{12}$  m respectively. Find the ratio of time periods and speeds of the two planets.

**OR**

The escape velocity on the earth is 11.2 km/s. What is its value for a planet having double the radius and eight times the mass of the earth?

#### SECTION D

31. (A) Discuss analytically the formation of a stationary wave in a string, clamped at its ends. Obtain the expression of the fundamental frequency. Show that in case of a string, the frequencies of the first four harmonic are in the ratio 1:2:3:4.
- (B) The length of a string tied to two rigid supports is 40 cm. What is the wave length (in cm) of the stationary wave produced on it if the string is plucked at its centre?

**OR**

- (A) What are beats? Explain the formation of beats analytically. Prove that the beat frequency is equal to the difference in frequencies of the two superposing waves.
- (B) A tuning fork arrangement (pair) produces 4 beats  $s^{-1}$  with one fork of frequency 288 Hz. A little wax is placed on the unknown fork and it then produces 2 beats  $s^{-1}$ . What is the frequency of the unknown fork?
32. State Bernoulli's theorem. With the help of a suitable diagram, establish Bernoulli's equation for liquid flow. Write the formula and SI unit of velocity head.

**OR**

- (A) What is capillarity? Derive an expression for the height to which the liquid having an angle of contact  $\theta$  rises in a capillary tube of radius  $r$ .
- (B) What happens when a capillary tube of insufficient length is dipped in a liquid?

33. (A) Derive the expression for the acceleration due to gravity at a depth  $d$  from the centre of the earth. What happens to "g" at the centre of the earth?  
 (B) What is the relation between height  $h$  and depth  $d$  at which the value of  $g$  is the same?

**OR**

- (A) Define Escape velocity. Obtain an expression for the escape velocity of a body from the surface of the earth.  
 (B) Calculate the value of orbital velocity for an artificial satellite of the Earth orbiting at a height equal to the radius of the earth. ( $R=6400$  km)

### SECTION E

**34. Case Study-**

**Read the following paragraph and answer the questions.**

The law of Conservation of linear momentum states that the total linear momentum of an isolated system of interacting particles is conserved. The recoil of a gun on firing, the explosion of a bomb into different fragments due to internal forces the working of rockets and jet planes etc.; can be explained on the basis of momentum conservation.

- (i) A gun fires a bullet of mass 50 g with a velocity of 30m/sec. Because of this, the gun is pushed back with a velocity of 1m/sec. Find the mass of the gun.  
 (ii) A body of mass  $M$  moving with velocity  $V$  explodes into two equal parts. If one comes to rest and the other parts moves with a velocity  $v$ , what would be the value of  $v$ ?  
 (iii) A body of mass 0.25 kg is projected with a muzzle velocity of 100 m/sec from a tank of mass 100 kg. What is the recoil velocity of the tank?

**OR**

A bomb of mass 9 kg explodes into 2 pieces of masses 3 kg and 6 kg. The velocity of the mass of 3 kg is 1.6m/sec. Find the K.E of the mass of 6 kg.

35. A body is said to be a projectile if it is projected into space with some initial velocity and then it continues to move in a vertical plane such that its horizontal acceleration is zero and vertical downward acceleration is equal to  $g$ . If an object is projected from the origin with initial velocity  $u$  making an angle  $\theta$  with the  $X - axis$  then at any instant  $t$ , the path of the projectile is parabolic, maximum height attained by the projectile is  $H = \frac{u^2 \sin^2 \theta}{2g}$ , the time of flight  $T = \frac{2u \sin \theta}{g}$  and the horizontal distance travelled by the projectile during its time of flight is called its range  $R = \frac{u^2 \sin 2\theta}{g}$

- (i) The velocity of a projectile is 10m/sec. At what angle to the horizontal should it be projected so that it covers maximum horizontal distance?  
 (ii) Why does the direction of motion of a projectile become horizontal at the highest point of its trajectory?  
 (iii) A particle is projected with a certain velocity at two different angles of projections with respect to horizontal plane so as to have the same range  $R$  on a horizontal plane. If " $t_1$ " and " $t_2$ " are the time taken for the two paths, then find the value of  $t_1 t_2$  (product of  $t_1$  and  $t_2$ )

**OR**

A particle is projected at an angle of  $45^\circ$ . Find the relation between the range and the maximum height attained by the particle.



# DELHI PUBLIC SCHOOL

## SAIL TOWNSHIP, RANCHI

ANNUAL EXAMINATION (2022-23)

Class - XI  
Time - 3 Hours

Subject - Political Science  
Maximum Marks- 80

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### General Instructions:

- I. All questions are compulsory.
  - II. Question numbers 1-12 are multiple choice questions of one mark each.
  - III. Question numbers 13-18 are of 2 marks each. Answers to these questions should not exceed 50 words each.
  - IV. Question numbers 19-23 are of 4 marks each. Answers to these questions should not exceed 100 words each.
  - V. Question numbers 24-27 are of 6 marks each. Answers to these questions should not exceed 170 words.
  - VI. Question numbers 28-30 are passage, cartoon and map-based questions. Answer accordingly.
- 

1. When was the first sitting of the divided constituent assembly?
  - A. 9<sup>th</sup> of December 1946
  - B. 14<sup>th</sup> of August 1947
  - C. 26<sup>th</sup> of January 1947
  - D. 15<sup>th</sup> August 1947
2. The idea of residual powers is taken from the constitution of which country?
  - A. United States
  - B. French constitution
  - C. British constitution
  - D. Canadian constitution
3. In the historic Lok Sabha elections of 1984 the Congress party came to power with how many seats?
  - A. 543
  - B. 408
  - C. 402
  - D. 415
4. Which of the following systems is not based on the principle of collective leadership?
  - A. Parliamentary Republic
  - B. Ceremonial executive
  - C. Presidential system
  - D. Constitutional monarchy

5. Which of the following state does not have a second Chamber of legislature?
  - A. Rajasthan
  - B. Telangana
  - C. Bihar
  - D. Karnataka
  
6. In 1991 the first ever motion to remove a Supreme Court Justice was signed by how many parliamentarians?
  - A. 245
  - B. 208
  - C. 145
  - D. 108
  
7. Which article of the Indian constitution states“ ..... All authorities, civil and judicial, in the territory of India shall act in aid of the Supreme Court.”?
  - A. article 137
  - B. article 361
  - C. article 148
  - D. article 144
  
8. The Republic opens with a dialogue between Socrates and?
  - A. Aristotle
  - B. Cephalus
  - C. Polemarcus
  - D. Paramedies
  
9. Who said the following lines“if we are to bring about a revolution of ideas we have first to hold up before us an ideal which will galvanise our whole life.That ideal is freedom.”
  - A. Mahatma Gandhi
  - B. Pandit Nehru
  - C. Sardar Patel
  - D. Subhash Chandra Bose
  
10. The lines quoted and question 9are from the Presidential address, where was this conference held?
  - A. Kolkata
  - B. Delhi
  - C. Lahore
  - D. Amritsar
  
11. For whom amongst the followingSaptakranti was the ideal of socialism?
  - A. Mahatma Gandhi
  - B. Jayaprakash Narayan
  - C. RamManoharLohia
  - D. Lal Bahadur shastri



12. "... And so when men have both done and suffered injustice and have had experience of both, not being able to avoid the one and obtain the other, they think that they had better agree among themselves to have neither." Who said these lines?
- Glaucon
  - Socrates
  - Plato
  - Hariclitus
13. Name the books written by Nelson Mandela and Aung San Suu Kyi respectively.
14. Explain briefly any two ways in which we can promote equality.
15. What is 'veil of ignorance' ?
16. How does PR system works in Rajya Sabha? ( mention the formula of determining the minimum quote of votes)
17. Explain the semi- presidential executive in Sri Lanka.
18. Name the two houses in Germany's bicameral legislature.
19. Differentiate between Negative and Positive liberty.
20. What is equality and elaborate upon its 3 dimensions.
21. Differentiate FPTP from PR system of election.
22. Explain the different types of executive through a flow chart.
23. Mention the jurisdictions of the Supreme Court of India.
24. What does political theory do? And why should we study it? ( mention 3 points each)
25. What is justice? Elaborate upon its 3 main elements.
26. Mention any six points from Objective Resolution.
27. Mention any six functions of the parliament in Indian context.
28. Name any four leaders from the given cartoon.



29. Answer with respect to the given passage.
- " 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, an 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 injury of another can be in no case just."
- Who is the speaker of the above lines?
  - To whom were the above lines said by the speaker?
  - What is the name of the book in which this dialogue is mentioned?
  - Who is the author of the book containing the dialogue?

30. Indicate any five Indian states with bicameral legislature except for those mentioned in question number 5.







# DELHI PUBLIC SCHOOL

## SAIL TOWNSHIP, RANCHI

ANNUAL 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 38 questions in all. All questions are compulsory.
  3. Section A includes question No. 1-20. These are MCQ type and Assertion - Reason based questions. As per the question, there can be one answer.
  4. Section B includes question No.21-29. 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. 30-35. They are short answer type questions carrying 4 marks each. Answer to each question should not exceed 80 words.
  6. Section D includes question No. 36-38. They are long answer type questions carrying 6 marks each. Answer to each question should not exceed 200 words each. Question no 38 is to be answered with the help of the passage given.
- 

**SECTION - A**

1. The contemporary history now also focuses on social patterns, gender, relations, customs, etc. The credit for it goes to----
  - A. Political science
  - B. Sociology
  - C. Psychology
  - D. Social Anthropology
2. Whose idea led to the comparison of the society with living organisms?
  - A. Max Weber
  - B. Auguste Comte
  - C. Charles Darwin
  - D. Karl Marx
3. Which of these is an example of a quasi group?
  - A. Classmates
  - B. Office colleagues
  - C. Cinema audience
  - D. Relatives

**OR**

Who among the following used the term 'life chances' which refer to the rewards and advantages afforded by market capacity?

- A. Emile Durkheim
- B. Karl Marx
- C. Max Weber
- D. None of these

4. Assertion (A): In traditional India different castes formed a hierarchy of social precedence.  
Reason (R): Every aspect of the life of every individual and household is affected by stratification.
- 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. A is false but R is true.
5. Which of the following is the most common form of marriage?
- A. Polygamy
  - B. Polyandry
  - C. Monogamy
  - D. Polygyny
6. Assertion (A): Religion cannot be studied as a separate entity.  
Reason (R): Social forces always and invariably influence religious institutions.
- 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. A is false but R is true.
7. Who is the founder of the functional school of Anthropology?
- A. Leslie white
  - B. Edward Taylor
  - C. Clifford Geertz
  - D. Bronislaw Malinowski

**OR**

The most important agent of Socialisation in the early childhood is----

- A. Family
  - B. Peer groups
  - C. School
  - D. Mass media
8. .... culture refers to the intangible elements of culture.
- A. Material
  - B. Non- material
  - C. Explicit
  - D. None of these
9. Shared ideas or beliefs serve to justify the interests of dominant groups is known as the .....
- A. Political ideology
  - B. Dominant ideology
  - C. Social ideology
  - D. None of these

10. The social structure of society is stratified due to the.....
- Division of labour
  - Difference in an individual's position.
  - Inequality persistent in society
  - The different level of understanding of individuals.
11. **Assertion (A):** In the contemporary world, competition is the dominant norm and practice.  
**Reason (R):** Traditionally the family and households were often seen as harmonious units where cooperation was the dominant process.
- Both A and R are true and R is the correct explanation of A.
  - Both A and R are true but R is not the correct explanation of A.
  - A is true but R is false.
  - A is false but R is true
12. .... includes a continuous urban settlement that is many times the size of a single city.
- Urban Agglomeration
  - Town
  - Metropolitan city
  - Commercial city
13. **Assertion (A):** Change is faster to arrive in villages than in towns.  
**Reason (R):** The social structure in village tends to follow a more traditional pattern. Institutions like caste and religion are stronger here.
- Both A and R are true and R is the correct explanation of A.
  - Both A and R are true but R is not the correct explanation of A.
  - A is true but R is false.
  - A is false but R is true
14. Which of the following is the outcome of human action?
- Deforestation
  - Climate change
  - Global warming
  - All of these
15. Which of the following concepts is the basis of relationships in a society?
- Concept of capitalism
  - Concept of hierarchical society
  - Concept of ownership of property
  - Concept of conflicts
16. **Assertion (A):** The interaction between environment and society is shaped by social organisation.  
**Reason (R):** Property relations determine how and by whom natural resources can be used.
- Both A and R are true and R is the correct explanation of A.
  - Both A and R are true but R is not the correct explanation of A.
  - A is true but R is false.
  - A is false but R is true

17. Who among the following laid the foundation of sociology as a subject?
- A. Karl Marx
  - B. Emile Durkheim
  - C. Max Weber
  - D. All of these
18. Marx's conception of the economy was based on the concept of.....
- A. Mode of production
  - B. Mode of organisation
  - C. Capitalism
  - D. Political basis
19. The book 'Caste and Race in India' was the work of which of the following Indian Sociologists?
- A. Sarat Chandra
  - B. Govind Sadashiv Ghurye
  - C. A R Desai
  - D. D P Mukherji
20. He was strongly influenced by Marxism, though he had more faith in it as a method of social analysis than as a political program for action.
- A. Ananthkrishna Iyer
  - B. D P Mukherji
  - C. Sarat Chandra Roy
  - D. G S Ghurye

#### **SECTION - B**

21. What is the meaning of term Dialect?
22. What are Sanctions?
23. Explain the term Social Mobility.
24. What do you understand by the term Great Tradition?
25. What do you mean by the term Gated Communities?

**OR**

Define Gentrification.

26. Explain the term Emissions.

**OR**

What do you understand by the term 'Effluent'?

27. Explain the term Hydrology.
28. What are Social Facts?
29. What is the meaning of the term 'Assimilation'?

#### **SECTION - C**

30. What is Sociology? Discuss sociology as a science.

**OR**

Write down scope of sociology in detail.

31. What do you understand by primary groups? Discuss the importance of primary group in the society.
32. What are political institutions? Also differentiate between power and authority.
33. Discuss the cognitive, normative and material dimensions of culture.
34. What are some kinds of changes brought about by technology and the economy?

**OR**

What is meant by social order and how is it maintained?

35. What are some of the challenges to maintain social order in urban areas?

**OR**

What is the importance of conserving the environment?

### SECTION - D

36. What are the basic features of Bureaucracy?

**OR**

What are the main features of the 'Theory of Alienation'?

37. What are the Structural features of caste as given by G. S. Ghurye?

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

Competition and the whole laissez-faire economy of 19<sup>th</sup> century capitalism, may have been important in promoting economic growth. The exceptionally rapid development of the American economy may be attributed to the greater scope of competition in the United States. But still, we cannot produce any exact correlations between the extent of competition, or the intensity of the competitive spirit, and the rate of economic growth in different societies. And on the other hand, there are grounds for supposing that competition has other less welcome effects.

1. Competition is the basis of capitalistic society. Justify. [3]
2. What are the key principles on which social stratification is based? [3]