

**SHARDEIN SCHOOL**  
**ANNUAL EXAMINATION (2022-23)**  
**CLASS – XI**  
**SUBJECT : ENGLISH CORE**

**TIME : 03 HOURS**

**MM : 80**

**NAME :** \_\_\_\_\_

**ROLL NO.** \_\_\_\_\_

**General Instructions:**

- a. 15 minute prior reading time allotted for question paper reading
- b. The question paper contains three sections: Reading, Writing & Grammar and Literature.
- c. Attempt questions based on specific instructions for each part.

**SECTION – A : READING**

A1- Read the passage carefully and answer the questions.

1. We live in an age of wonders and miracles. It has been called the ‘Age of Science’ and different aspects of our life that changed in the preceding centuries have been attributed to science. This is completely true, but it is only one side of the coin. The flip side is that as we have advanced more in the field of technology, something fundamental to humanity has been left behind. Values such as empathy and concern for our fellow human beings are gradually being eroded due to the onslaught of our ever-evolving lifestyles, aided by the marvels of technological advancements.
2. Take the example of the Internet. On one hand, access to information and knowledge at the click of a button is a veritable boon to everyone (especially students) and this has made our lives much simpler. On the other hand, it has severely limited actual contact with teachers, friends’ and elders. Thus, the learning that a person gains is incomplete as he or she cannot easily take the advice that another person can give on the basis of knowledge and practical experience that is at his or her disposal.
3. Today, a small child can access and navigate the Internet with an ease that still astounds those from the older generation. But what is even more astounding is the neglect of the basic human traits of friendship, relationships and family values. Owing to all the technological advancements and the gadgets available today, children often miss out on the most enriching childhood experiences such as playing outdoor games with friends, which apart from being immensely enjoyable and physically exhilarating, also develop traits such as teamwork and discipline at an early age.
4. But now when the concept of friends is gradually being limited to virtual friends on social networking sites, one shudders to think of the implications for the personality development of a child because the time spent with computers or mobile phones for entertainment can never really substitute for the holistic benefits of outdoor play. Such examples can be found in plenty.

5. Now if we compare the hustle and bustle of modern city life and the peace and calm of a rustic village life, we can see that in cities, life is a race with a variety of factors. It is a race that everyone tries their level best to win, but nobody actually wins as it never ends.
6. As for me, I think this age of rapid development has created at least as many problems as it has solved, if not more. The reason is that the basic goal of life, which should be the pursuit of happiness, has now been replaced by the pursuit of money. Money and happiness are considered analogous in our present society, but they actually are not so. In this mindless pursuit of money, nobody has time now to appreciate the beauty of life, which consists not of multi- billion-dollar skyscrapers, but a simple act of kindness to someone in a time of need.
7. So there is an urgent need to stop for a moment and think about where we are actually heading, is it development or destruction? Do we have to wait until people have grown so much apart from each other that we cannot see the suffering of our own species due to our mindless greed, or can we still mend our ways?
8. To answer this question, I will take the help of that most magnificent of human feelings-hope. I sincerely wish that we, as the most intelligent species on earth, would take our fair share of responsibility and sincerely think about the path we should follow. Though mankind will possibly last for a long time thanks to its determination and sheer ingenuity, we have to make sure we do not lose our humanity somewhere along the way

**Q1. On the basis of your understanding of the passage answer the following questions by choosing the most appropriate option. (1 x 7 = 7)**

- 1.1 According to the passage, it is like one side of the coin to say that life has changed owing to science as :
  - a) age of science has brought wonders and miracles.
  - b) different aspects of life have changed due to science.
  - c) there is another side of the coin to look at.
  - d) this side of coin is true and sufficient to look at.
- 1.2 Which of the following is not true about the internet?
  - a) It provides an easy access to information and knowledge.
  - b) It has made our lives simpler.
  - c) It has limited actual contact with teachers and friends.
  - d) It can easily give advice based on personal experience.
- 1.3 Internet hampers the holistic growth of a child by.....
  - a) Encouraging human traits of friendship, society and family
  - b) Enriching childhood experiences of outdoor games.
  - c) Providing virtual friends and gadgets.
  - d) Developing teamwork and discipline.
- 1.4 According to the passage, true happiness lies in.....
  - a) Simple acts of kindness.
  - b) Multi-billion-dollar skyscrapers.
  - c) Rapid development.
  - d) Pursuit of money.

1.5 The word 'Veritable' in para 2 means:

- a) Actual
- b) Latest
- c) Big
- d) Perfect

1.6 Antonym of holistic is

- a) Agonistic
- b) Optimistic
- c) Individualistic
- d) Pessimistic

1.7 'Money and happiness are considered analogous in our present society, but they actually are not so.' Justify this statement.

**Q2. Answer the following questions as briefly as possible. (1 x 5 = 5)**

1.1 It has severely limited actual contact with \_\_\_\_\_.

1.2 Money and \_\_\_\_\_ are considered analogous in our present society but they actually are not so.

1.3 We cannot see the suffering of our own species due to our \_\_\_\_\_.

1.4 I will take the help of that most magnificent of human feeling \_\_\_\_\_.

1.5 Pick out the words from the passage which mean the same as:

- a) Trembles
- b) Similar

A2- Read the following passage carefully.

1. In life, you'll always come across situations where there will be someone else who's better than you, especially when there is no one quality or standard that people can be judged on. There will always be someone who looks better, has more money or is more intelligent than you. How you choose to approach these situations, of course, depends on the perspective you take. People in themselves aren't intimidating, it's the opinions you form about them that make you feel so. Rather than judging people on a single attribute and getting intimidated, be comfortable with whom you are and approach other people as complete individuals rather than a bundle of good or bad attributes.
2. The key to not letting others intimidate you is to know your own worth. Don't let your sense of self be defined by what others think of you or how you compare yourself to them. Know what you are and be comfortable in your skin. Instead of feeling threatened and letting your ego in the way, you could benefit a great deal by being around people who might be better than you in some ways. Respect others for what they are and use these opportunities to learn from the strengths and virtues of others.
3. Don't get bogged down by what you don't have or can't do. We all have limitations. Learn to accept them and focus on your strengths. A lot of times, we come under pressure from what people we believe to be more popular and influential than us, in a bid to fit in with them. However, at times like these, it's important for you to stay true to yourself and say 'no' when you're expected to do something that makes you uncomfortable.

4. Your first response to an intimidating person or situation would probably be to avoid them altogether. However, avoidance only goes on to increase your anxiety. Confront these situations head on, with more and more practice, you'll start finding these situations easier to deal with. Always keep in mind that everybody has flaws and everyone has his/her own share of struggles, even if you aren't able to spot them. Our self-esteem gets lowered when we focus too much on our weaknesses and neglect what we get right. Change this pattern and start giving yourself credit for your strengths and successes.
- Q3. On the basis of your reading the passage, make notes using recognizable abbreviations wherever necessary. Use a format you consider suitable, supply a suitable title to it. (5)
- Q4. Make a short summary of the passage in about 80 words. (3)

### **SECTION – B : WRITING & GRAMMAR**

- Q5. You are going abroad. You want to sell your house, built three years ago. Draft an advertisement in not more than 50 words giving all the necessary information i.e. details of the house and its locality, Contact no. 91xxxxxxx. (4)
- Q6. Draft a poster on 'Respect Women' in about 50 words. (4)
- Q7. You are Mukul / Mahima of Alps Public School. Your school has organized a debate on "Social Media and Its Effects" and you will be participating from your school. Prepare your views against or in favour of the motion. (120-150 words) (6)

**Or**

There was a time when children could be seen playing outdoor games like Hide and Seek, Football etc. But now-a-days they are very much pre-occupied with chatting on mobiles, surfing the internet and watching TV Outdoor games are very necessary as they keep one physically fit. Write a speech to be delivered in the morning assembly on 'Games are very necessary for holistic growth' in about 120-150 words.

- Q8. Choose the best word from the options given to complete the following passage. (3)
- As soon as I saw the elephant, I knew certainly that I ought not (a) ..... him. But at the moment I (b) ..... round at the crowd that had followed me and were eager (c) ..... fun and meat.
- a) (i) shoots (ii) is shooting (iii) shot (iv) shoot
- b) (i) glances (ii) glanced (iii) is glancing (iv) will be glancing
- c) (i) follow (ii) follows (iii) following (iv) had followed
- Q9- Rearrange the following words or phrases to make meaningful sentences: (3)
- a) the/Indian/English/exploited/the/farmer
- b) pay/the/had to/poor farmers/high taxes/very
- c) the class / at once / ordered / you / are / to leave

Q10 The following passage has not been edited. There is one error in each line. Identify the wrong word and write it with the correction in the space given. (4)

	Incorrect	Correct
a) The tale of Melon City' is one of the best poem that	.....	.....
b) has been prescribed for class XI. Here a king, like	.....	.....
c) many other kings get an arch constructed.	.....	.....
d) He, together with courtiers, visits it.	.....	.....

**SECTION – C : LITERATURE**

Q11. Read the following extract and answer the questions that follow. (1 x 3 = 3)

They talked of love and preached of love,  
But did not act so lovingly,  
Was that the day!

- a) Who 'did not act so lovingly'?
  - i. Poet's parents
  - ii. Poet's friends
  - iii. Adults around the poet
  - iv. Poet's teachers
- b) About which day poet is talking?
  - i. The day poet loses his book
  - ii. The day poet loses his pencil
  - iii. The day poet loses his car
  - iv. The day poet loses his childhood
- c) Name the poet.

Q12. Read the given passage and answer the questions that follow. (1 x 3 = 3)

Meanwhile, the racing fund of Professor Gaitonde had arrived at a plan of action in Bombay. Indeed, as a historian he felt he should have thought of it sooner. He would go to a big library and browse through history books. That was the surest way of finding out how the present state of affairs was reached. He also planned eventually to return to Pune and have a long talk with Rajendra Deshpande, who would surely help him understand what had happened. That is, assuming that in this world there existed someone called Rajendra Deshpande! The train stopped beyond the long tunnel. It was a small station called Sarhad. An Anglo-Indian in uniform went through the train checking permits.

- a) Who was Professor Gaitonde and where did he hail from?
  - i. A historian from Pune.
  - ii. A historian from Bombay.
  - iii. Historian from Sarhad.
  - iv. A historian from Nagpur.

- b) Why was he going to the big library?
- i. To browse through history books to determine his plan of action.
  - ii. To browse through history books to find out more about Rajendra Deshpande.
  - iii. To browse through history books to find how the present state of affairs was reached.
  - iv. To browse through history books to find more about historic events.
- c) In which period the incident might have taken place?
- i. During the British-rule.
  - ii. During the Portuguese invasion
  - iii. Post-independence
  - iv. None of the above

Q13. Read the following passage and answer the questions given below: (4×1=4)

He went into the house for his bag, then together they set out for Number 12 Blaina Terrace. The night air was cool and deep with quiet mystery. Usually so perceptive, Andrew now felt dull and listless. He had no premonition that this night call would prove unusual, still less that it would influence his whole future in Blaenelly. The woman nodded and picked up the suitcase under the coat-rack. She wore a brown coat and a shapeless hat. 'Does she live far away?' I asked, seeing the difficulty she had going out of the house with the heavy case.

- a) What is the profession of Andrew?
- i. Lawyer
  - ii. Engineer
  - iii. Doctor
  - iv. Fireman
- b) Where did he live?
- i. Bryngower
  - ii. Blaenelly
  - iii. Harteiffs
  - iv. Jhsiojle
- c) Why was Andrew serious that evening?
- i. He had a disappointing evening with his girlfriend.
  - ii. He had seen some painful incidents of husbands suffering at the hand of wives.
  - iii. He was short of sleep.
  - iv. All of these.
- d) Who was waiting for him when he reached home late night?
- i. Bramwell
  - ii. Blodwen
  - iii. Christine Donald
  - iv. Joe Morgan

- Q14. Answer *ANY FIVE* of the following questions in 30-40 words each. (5×2=10)
- Who was King Tut? Why was a CT scan done on him?
  - The author's experience at Hor was in stark contrast to earlier accounts of the place. Justify.
  - How does the rain describe herself in the poem 'The Voice of the Rain'?
  - What do you think made Rajendra realize that facts can be stranger than fantasies?
  - Why is January 5, 2005 significant in Tutankhamun's Saga?
  - Explain 'Terribly transient feet'.
- Q15. Answer *ANY TWO* of the following questions in 30-40 words each. (2×2=4)
- With reference to the chapter 'Mother's Day', show the difference in the personalities of Mrs. Fitzgerald and Mrs. Pearson.
  - Did the boy Aram succeed in learning horse riding?
  - What impression would you form of a state where the King was 'just and placid'?
- Q16. Answer *ANY ONE* of the following questions in about 120-150 words: (6)
- Highlight the tremendous courage and forbearance shown by the two children during the struggle to keep the boat from sinking in the chapter 'We're Not Afraid To .....'.
  - What are the hallmarks of growing up according to Markus Natten with reference to the poem 'Childhood'?
- Q17. Answer *ANY ONE* of the following questions in about 120-150 words: (6)
- How did the King try to get out of the difficult situation? Did he succeed?
  - Compare and contrast the character of the uncle Khosrove and cousin Mourad.

**SHARDEIN SCHOOL**  
**ANNUAL EXAMINATION (2022-23)**  
**CLASS – XI**  
**SUBJECT : BUSINESS STUDIES**

**TIME : 03 HOURS**

**MM : 80**

**NAME :** \_\_\_\_\_

**ROLL NO.** \_\_\_\_\_

**General Instructions :**

- a. *This question paper contains 34 questions.*
- b. *Marks are indicated against each question.*
- c. *Answers should be brief and to the point.*
- d. *Answers to the questions 21-24 carrying 3 marks may be from 50 to 75 words.*
- e. *Answers to the questions 25-30 carrying 4 marks may be about 150 words.*
- f. *Answers to the questions 31- 35 carrying 6 marks may be about 200 words.*
- g. *Attempt all parts of the questions together.*

**MCQs : (1 Marks Each)**

- Q1. Activities which are meant for assisting trade are known as \_\_\_\_\_.
- |                         |                        |
|-------------------------|------------------------|
| a) auxiliaries to trade | c) banking and finance |
| b) profession           | d) advertising         |
- Q2. A person contributes capital but does not take part in the day to day activities of the business is called \_\_\_\_\_.
- |                     |                   |
|---------------------|-------------------|
| a) nominal partner  | c) active partner |
| b) sleeping partner | d) secret partner |
- Q3. The purpose of this study is to assess if the raw materials and technology required to pursue a particular business proposal are easily available.
- |                                |                                |
|--------------------------------|--------------------------------|
| a) Economic feasibility study  | c) financial feasibility study |
| b) Technical feasibility study | d) none of above               |
- Q4. The shares of a government company are purchased in the name of
- |                       |                      |
|-----------------------|----------------------|
| a) Board of directors | c) Shareholders      |
| b) president of India | d) None of the above |
- Q5. Which of the following terms are related with insurance
- |            |                     |
|------------|---------------------|
| a) Policy  | c) Surrender value  |
| b) Premium | d) All of the above |
- Q6. In case of insurance of a property, the insurable interest of the insured subject matter of the insurance must exist
- |                                     |                                      |
|-------------------------------------|--------------------------------------|
| a) At the time of taking the policy | c) Both (a) and (b)                  |
| b) Principle of subrogation         | d) At the time of happening of event |
- Q7. An ATM is an example of
- |                     |                 |
|---------------------|-----------------|
| a) B2B commerce     | c) B2C commerce |
| b) Intra B commerce | d) C2C commerce |



- Q8. It includes the behavior of the firm expected by the society but not codified by law. Identify the category of social responsibility referred here.
- Economic responsibility
  - Ethical responsibility
  - legal responsibility
  - All of above
- Q9. For which of the following source of finance, a company is required to mortgage its assets?
- Debentures
  - Equity shares
  - Retained earnings
  - Preference shares
- Q10. Who are the primary risk bearers of the company?
- Equity shareholders
  - Debenture holders
  - Preference shareholders
  - Creditors
- Q11. Which of the following statements correctly explains the distinction between equity shares a preference shares?
- Equity shareholders have the priority to receive dividends over preference shares
  - Equity dividend keeps on fluctuating and preference dividend remains fixed.
  - Equity shares don't enjoy voting rights over preference shares.
  - Equity shareholders are paid before the payment to preference shareholders.
- Q12. People who own, operate and take risk of a business venture is called
- Aptitude
  - Employee
  - Entrepreneur
  - Entrepreneurship
- Q13. Statement I Small business has generally a short gestation period.  
Statement II Small scale industries are considered good for countries that have less labour and surplus capital.  
Alternatives
- Statement I is correct and Statement II is wrong
  - Statement II is correct and Statement I is wrong
  - Both the statements are correct
  - Both the statements are incorrect.
- Q14. DIC stands for which of the following?
- District Industrial Centre
  - Development and Industrial Corporation
  - Department of Infrastructure and Capital Formation
  - None of the above
- Q15. Which of the following is not a type of intellectual property rights?
- Trademarks
  - Patent
  - Copyright
  - Business incubators and accelerators
- Q16. The wholesalers serve as a link between the
- Manufacturers and retailers
  - Manufacturers and consumers
  - retailers and consumers
  - None of the above
- Q17. Which of the following is incorrect regarding services provided by wholesalers to manufacturers?
- Regular availability of products
  - Bearing risk
  - Help in marketing function
  - Storage

Q18. Identify the first step in the export procedure.

- a) Receipt of enquiry and sending quotations
- b) Obtaining export license
- c) Receipt of order or indent
- d) Production or Procurement of goods

Q19. WTO was established on

- a) 1st April 1995
- b) 1st January 1995
- c) 1st July 1995
- d) 2nd July 1995

Q20. A shipment advice is issued by the

- a) Importer to the exporter
- b) company to the exporter
- c) to the shipping company
- d) to the importer

**SHORT ANSWER QUESTIONS : (3 Marks Each)**

Q21. Profit is found to be a leading objective of business but not the only one. Do you agree with the statement? Give reasons to justify your answer.

Q22. Describe in brief the features of global enterprises.

Or

To overcome the difficulties faced by public in public transport system, the government of India started the METRO project in which the government involved private sector participation to get the benefits of efficiency of private sector. The project was great success as lacs of people are enjoying the metro service to move from one place to other.

- a) State the type of enterprise mentioned in above last.
- b) Give any two feature of above mentioned enterprise.

Q23. Differentiate between owners fund and borrowed fund.

Q24. Goel and sons is a grocer based in Meerut, UP. It is an outlet retailing daily day to day ration and other branded products. They have been in business for last 20 years and therefore, have developed good reputation in the market. They provide information about the arrival, special features, etc of products to the customers and sell goods in small quantities, according to the requirements of these customers. They also have a special scheme where they supply good to the home within certain range of area on a purchase of some minimum amount of goods. On the basis of loyalty of customers, they sometimes sell goods to the regular customers on purchase now, pay later basis. The above case highlights some of the services retailer provides to the consumers. Identify and explain these services by quoting the lines.

Or

What difficulties would the consumer face if there is no retail shop?

## **SHORT ANSWER QUESTIONS : (4 Marks Each)**

- Q25. Describe briefly the various features of business activities.
- Q26. The conditions of services of the employees of these enterprises are governed by the provision of the Act itself. Identify the form of business organisation and state its any three features.

Or

Despite the economic importance given to a government company, it suffers from certain disadvantages. State briefly any three of them.

- Q27. A) Amit took a fire insurance policy for his factory situated in Faridabad. One day when he was at a PVR cinema hall in the evening, he received a call from the security guard of the factory. The security guard informed him that, a fire has broke out in the factory and it is spreading very fast. Since, Amit was enjoying the movie very much, he did not want to leave the theatre at that very time. Also, he thought that the loss will be well compensated by the insurance company, so he need not bother about anything. When he visited his factory, later on, he saw that everything has been burnt to ashes. He filed a claim for the loss with the insurance company. The surveyer who came from the insurance company to assess the amount of loss remarked, "if sincere efforts were made to put off the fire immediately, the quantum of loss would have been minimal."

In context of the above case:

Identify and explain the principle of insurance which has been violated.

B) Anita Bhat bought a place in shopping complex in Chandigarh to start a fashion boutique. She decided to take an insurance policy for the shop. At the time of taking the policy, she did not disclose to the insurer that the electric wiring of that shop was worn out and needed to be replaced immediately to avoid any kind of eventualities. A week after taking the insurance policy, unfortunately a fire broke out in her shop, due to short circuit and huge losses occurred.

Identify and explain the principle of insurance being violated in the above case.

- Q28. What do you mean by e-business ? explain any four benefits of e-business.
- Q29. ABC Chemicals Limited has become the leader in manufacturing and sale of 4 e-saving drugs in India. It provides medicines as per the prescribed standards and always prints correct dates of expiry on each batch of drugs. Every month, it organizes free medical camp for the residents of Mumbai slums. It strictly follows the provisions of Environment Protection Act. Mean Refineries (P) Ltd. has its factory in the midst of the over polluted old Delhi area. Its license under the Air Pollution Control Act has expired and it has crossed the emission standards of pollution. It creates lots of nuisance and dirt in the area and sells low quality oil at high rates. Study the given facts and answer:
- Which two social responsibilities have been overlooked by Mean Refineries?
  - What is the social responsibility of both the companies towards the government?

Or

Benevolent Pharmaceuticals Ltd is a socially responsible business. Its Board of directors always ensure that all the long term decisions are in accordance with the laws of the country and moreover in the interest of the public and stakeholders. In a financial debate on CNN news channel, its Chairman explained as to how expenditure on fulfilling social responsibilities of their business is not a burden. In the light of the above example. What are the different stakeholders in a business enterprise and what are the different ways by which responsibilities towards each of them ought to be fulfilled by the management of the company?

Write a detailed explanatory note.

Q30. Direction Read the following text and answer the question no. (i) to (iv) on the basis of the same.

Three friends, after completing their graduation, decided to open their own business and to create employment opportunities for others too. After their meeting with the manager of DIC, they attended entrepreneurship development programme. As a result of their entrepreneurship, Zayka Food Industries is created and operated successfully by them.

To create a feeling of belongingness in the customers and for branding purposes, they started to use 'hat' as a symbol on all their products. Soon, this became an intellectual property for the company. After getting a good response in the market, now one of them is planning to set up a new unit "Laajwaab Foods and Beverages Industry" in rural area of Odisha and opted for labour intensive technique, due to easy availability of cheap labour.

The finance manager has estimated the investment of 2 crore to acquire plant and machinery and 80 lakhs for meeting operating expenses of this new unit. The company did not want to dilute the ownership and did not want any interference from investors/ lenders. Also, it expects good cash flow return from the new unit.

For arrangement of finance and availing professional services that facilitates the development of new business, they approached a body which is located in their universities.

- a) Which category of SSI. "Lajawaab Foods and Beverage Industries" belongs to?
  - a. Micro enterprises
  - b. Medium enterprises
  - c. Small enterprises
  - d. Cottage industry
- b) Which of the following is not a feature of entrepreneurship?
  - a. Systematic activity
  - b. Dynamic process
  - c. Risk element
  - d. Profession
- c) The finance manager has estimated the investment of 2 crore to acquire plant and machinery and 80 lakh for meeting operating expenses of this new unit. The company did not want to dilute the ownership and did not want any interference from investors/lenders. Also, it expects good cash flow return from the new unit. Which form of capital would be better for the company?
  - a. Equity capital
  - b. Long-term loans
  - c. Preference capital
  - d. Loans from commercial bank

- d) "To create a feeling of belongingness in the customers and for branding purposes, they started to use 'hat' as a symbol on all their products." Which IPR is highlighted in the line?
- a. Patents
  - b. Copyrights
  - c. Trademarks
  - d. Trade secrets

**LONG ANSWER QUESTIONS : (6 Marks Each)**

Q31. Sudeep is pursuing a graphic designing course at a Technical Institute at Pune. In one of the class room discussion on 'career options' at the institute, he shares with his classmates that he is a member of a business by birth. Although, he does not have the right to take any decisions regarding the business. His uncle takes all decisions related to the business In context of the given case:

- a) Identify the form of business organisation being described in the above lines.
- b) Mention the status enjoyed by Sudeep in this form of business organisation.
- c) State any three other features of this form business organisation which are not mentioned in the above lines.

Q32. Kyra was aware of the fact that her father has invested in a company named 'Kuber Limited'. When she came across, an article about this company in this newspaper, it held her attention. The article was referring to the enormous losses that this company had suffered during the year due to mis appropriation of profits by its promoters. This news had upset Kyra, as her father had promised to buy her a new game from the money he was expecting as a return on investment from the company. When she shared the news with her father to her surprise, her father assured her by saying that the return on his investment from the company is guaranteed, regardless of the profits of the company. This is because he owns creditorship securities.

Identify the financial instrument being referred to in the above paragraph.

State any three other advantages of this source of finance besides the point mentioned in the given paragraph.

Or

Nilesh, works as a digital marketing campaign manager in a firm. Over the years, the business of his firm has increased by leaps and bounds as the marketing has gone digital. The firm obtains its stock of office stationery on a one month credit from the suppliers and at the same time the company offers 15 days credit period to its clients (business firms).

- a) Identify and explain the source of business finance being described in the above paragraph.
- b) State any two favourable factors because of which the firm is able to make credit purchases.
- c) Give any two limitations of the source of business finance as identified in part (a) of the question.

- Q33. 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 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.
- a) Identify the type of retailer been described in the given paragraph.
  - b) State any two features and any two limitations of such type of retailers.
- Q34. Explain the meaning of import Trade and the objectives of import Trade.

Or

What do you mean by international trade? Explain the benefits of international trade.

**SHARDEIN SCHOOL**  
**ANNUAL EXAMINATION (2022-23)**  
**CLASS – XI**  
**SUBJECT : POLITICAL SCIENCE**

**TIME : 03 HOURS**

**MM : 80**

**NAME :** \_\_\_\_\_

**ROLL NO.** \_\_\_\_\_

**General Instructions:**

- a. All questions are compulsory.
- b. Question numbers 1-12 are multiple choice questions of one mark each.
- c. Question numbers 13-18 are of 2 marks each. Answers to these questions should not exceed 50 words each.
- d. Question numbers 19-23 are of 4 marks each. Answers to these questions should not exceed 100 words each.
- e. Question numbers 24-26 are passage, cartoon and map-based questions. Answer accordingly.
- f. Question numbers 27-30 are of 6 marks each. Answers to these questions should not exceed 170 words.
- g. There is an internal choice in 6 marks questions.

**SECTION – A**

- Q1. India borrowed the Directive Principles of State Policy from the:
- |                         |                               |
|-------------------------|-------------------------------|
| a) Irish constitution   | c) Canadian Constitution      |
| b) British Constitution | d) South African Constitution |
- Q2. The term “Politics” is derived from:
- |                             |                            |
|-----------------------------|----------------------------|
| a) Latin word ‘Polis’       | c) Greek word ‘Polis’      |
| b) English word ‘Political’ | d) Greek word ‘City-State’ |
- Q3. The country that follows FPTP electoral system is
- |                    |              |
|--------------------|--------------|
| a) Israel          | c) the UK    |
| b) the Netherlands | d) Argentina |
- Q4. Identify the author of Hind Swaraj.
- |                   |                       |
|-------------------|-----------------------|
| a) J.L.Nehru      | c) Dr. Radha Krishnan |
| b) Mahatma Gandhi | d) Gokhale            |
- Q5. The longest tenure as the Prime Minister of India is enjoyed by
- |                      |                        |
|----------------------|------------------------|
| a) Jawahar Lal Nehru | c) Charan Singh        |
| b) V.P.Singh         | d) Lal Bahadur Shastri |
- Q6. The statement that “Men by nature are equal” is given by:
- |             |          |
|-------------|----------|
| a) Hobbes   | c) Locke |
| b) Rousseau | d) Laski |
- Q7. The members of parliament are free to raise any matter, which according to them is important, during
- |                         |                  |
|-------------------------|------------------|
| a) Adjournment motion   | c) Question hour |
| b) No-confidence motion | d) Zero hour     |

- Q8. People get proper justice in:
- |                 |                       |
|-----------------|-----------------------|
| a) Dictatorship | c) Totalitarian state |
| b) Monarchy     | d) Democracy          |

**Directions (Q.nos.9 and 10) In the questions given below, there are two statement marked as Assertion (A) and Reason (R). Read the statements and choose the correct option.**

**Codes:**

- a) Both A and R are true and R is the correct explanation of A.  
b) Both A and R are true, but R is not the correct explanation of A.  
c) A is true, but R is false.  
d) A is false, but R is true.
- Q9. Assertion(A) Freedom of speech is the most important civil liberty of people in a democratic polity.  
Reason (R) State can regulate free speech in the interest of public order.
- Q10. Assertion (A) The Constitutions of most of the democratic government around the world have incorporated to prohibit discrimination.  
Reason (R) There should not be discrimination on the ground of religion, race, caste so that it can attain equality.
- Q11. Consider the following statements and select the correct statements(s).
1. Balwant Rai Mehta Committee was appointed in 1957.
  2. Ashoka Mehta Committee was set up in 1977.
  3. L.M. Sanghvi Committee was set up in 1986.
  4. G.V.K. Rao Committee was set up in 1989.
- Which of the statement given above is /are correct.
- |                 |                     |
|-----------------|---------------------|
| a) 1,2 & 3 only | c) 1,2 & 4 only     |
| b) 1,3 & 4 only | d) All of the these |
- Q12. The Union territory that was given a special status in the year 1991 was
- |                |                |
|----------------|----------------|
| a) Delhi       | c) Chandigarh  |
| b) West Bengal | d) Lakshadweep |

### **SECTION – B**

- Q13. What is the Constitution? How can say that Constitution is a living document?
- Q14. The government as a part of politics can affect the daily life of humans both in a useful and a harmful way. How?
- Q15. What is the difference between equality and uniformity?
- Q16. What is the full membership of a state important?
- Q17. What assumptions do the people make about a nation?
- Q18. “Some concerning examples of religious discrimination remind us to continuing importance of secularism”. Justify the statement.



### SECTION – C

- Q19. Mention the amendment made in constitution of India in 1989.
- Q20. What is the relation between the Governor and the Legislative Assembly?
- Q21. How is the speaker of the Lok Sabha elected? What are his main functions?
- Q22. What are the powers and function of the Chairperson of the Rajya Sabha?
- Q23. Explain the financial relations between the Union and the States.

### SECTION – D

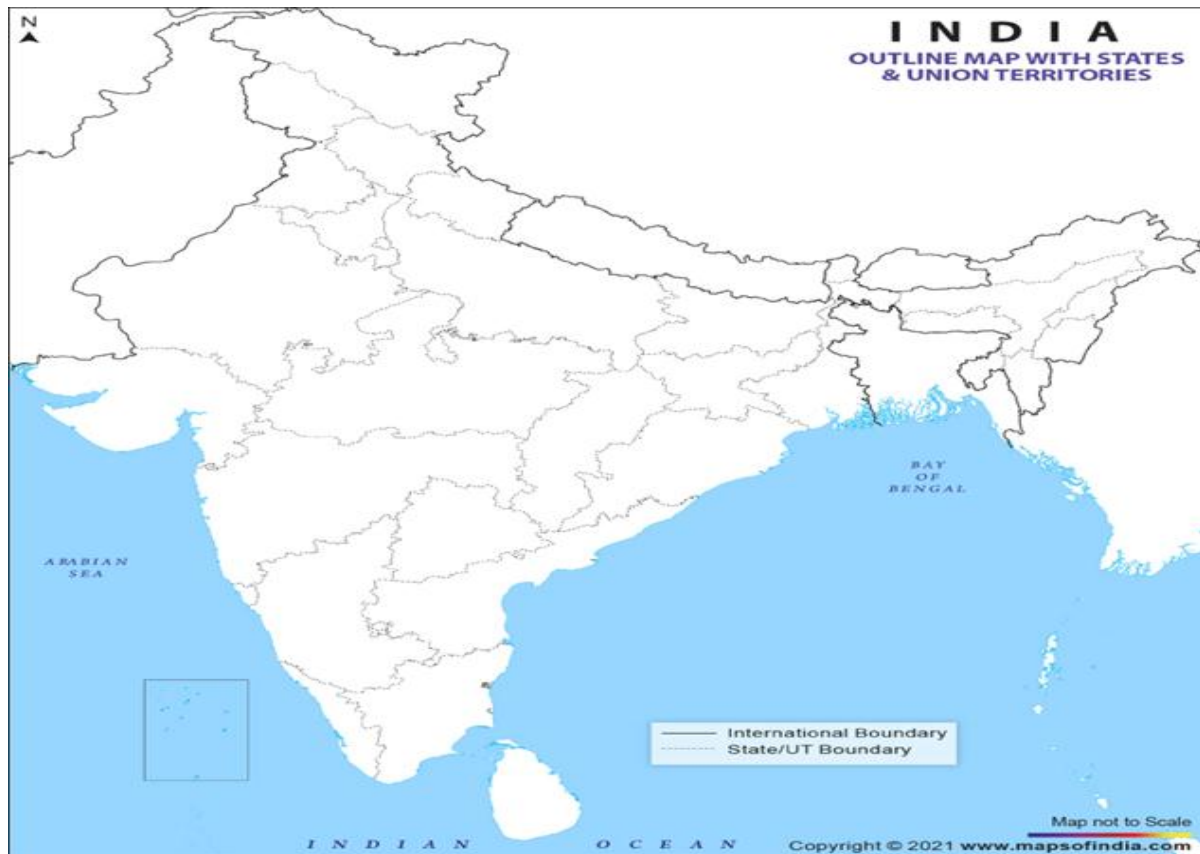
- Q24. Read the passage given below and answer the questions that follow.

The judges have a fixed tenure. They hold office till reaching the age of retirement. Only in exceptional cases, judges may be removed. But otherwise, they have security of tenure. Security of tenure ensures that judges could function without fear or favour. The Constitution prescribes a very difficult procedure for removal of judges. The Constitution makers believed that a difficult procedure of removal would provide security of office to the members of Judiciary.

- a) The Judiciary is not financially dependent on.....
  - a. Executive
  - b. Legislature
  - c. both a and b
  - d. Neither a nor b
- b) The Other judges of the supreme court and the high court are appointed by the .....after "consulting" the CJI.
  - a. Chief minister
  - b. President
  - c. Governor
  - d. Prime Minister
- c) On what grounds does the judge of Supreme Court and High Court be removed?
  - a. misbehavior
  - b. in capacity
  - c. both a and b
  - d. neither a or b
- d) What is the retirement age of the Judges of the supreme court?
  - a. 62 years
  - b. 65 years
  - c. 60 years
  - d. 70 years

Q25. In the political outline map of India given below, four states. Identify these states on the basis of information given below and write their correct names in your answer book with their respective serial number of the information used and the alphabet concerned as per the following format.

- Write the names of two princely states on the map of India.
- Write the names of two states which were born as new states?
- Write the names of one non-Hindi speaking states.
- A princely state of India which merged after 15 August 1947.



Q26. Study the picture and answer the following question given that follow.



- What does the cartoon represents and what message does the cartoon convey?
- Mention the function of the Prime Minister in relation with the Council of Ministers?
- How is the Council of Ministers appointed?

**SECTION – E**

Q27. Write the Preamble to the Indian Constitution.

Or

What measurements have been taken by India to secure social justice?

Q28. What is the Composition of Election Commission of India?

Or

Mention the characteristics of white colonial rulers' policy practised in South Africa till 1994?

Q29. What are the differences between Politics and Political Science?

Or

Describe the law-making procedure in the Parliament of India.

Q30. What is modern liberalism? What is the role the state in upholding freedom of its citizens

Or

What is the importance of local bodies in modern times?

**SHARDEIN SCHOOL**  
**ANNUAL EXAMINATION (2022-23)**  
**CLASS – XI**  
**SUBJECT : CHEMISTRY**

**TIME : 03 HOURS**

**MM : 70**

**NAME :** \_\_\_\_\_

**ROLL NO.** \_\_\_\_\_

**General Instructions :**

- a. These are 35 questions in this question paper with internal choice.
- b. Section A consist 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 3 long answer questions carrying 5 marks each.
- f. Section E consists of 2 case- based questions carrying 4 marks each.
- g. All questions are compulsory

**SECTION : A - MCQs : (1 Marks Each)**

- Q1. Number of atoms of oxygen present in 10.6 g  $\text{Na}_2\text{CO}_3$  will be
- |                           |                           |
|---------------------------|---------------------------|
| a) $10^{22}$              | c) $12.4 \times 10^{22}$  |
| b) $1.806 \times 10^{23}$ | d) $31.80 \times 10^{28}$ |
- Q2. The first use of quantum theory of explain the structure of atom was made by:
- |               |             |
|---------------|-------------|
| a) Heisenberg | c) Bohr     |
| b) Planck     | d) Einstein |
- Q3. Which of the following is a polar molecule?
- |                   |                   |
|-------------------|-------------------|
| a) $\text{SiF}_4$ | c) $\text{XeF}_4$ |
| b) $\text{BF}_3$  | d) $\text{SF}_4$  |
- Q4. Among the following the state functions (s) is / are:
- |                              |                                |
|------------------------------|--------------------------------|
| a) Internal energy           | c) Irreversible expansion work |
| b) Reversible expansion work | d) Molar enthalpy              |
- Q5. Electrolyte which is hydrolyzed and solution is neutral is:
- |                  |                                |
|------------------|--------------------------------|
| a) $\text{NaCl}$ | c) $\text{FeCl}_3$             |
| b) $\text{KI}$   | d) $\text{CH}_3\text{COONH}_4$ |
- Q6. Oxidation number of sodium in sodium amalgam is:
- |       |       |
|-------|-------|
| a) +2 | c) +1 |
| b) -2 | d) 0  |
- Q7. IUPAC name of  $\text{OHC}-\text{CHO}$  is:
- |              |                |
|--------------|----------------|
| a) Glyoxal   | c) Ethanediole |
| b) Ethandial | d) None        |
- Q8. The compound with the highest boiling point is:
- |                        |                   |
|------------------------|-------------------|
| a) n-hexane            | c) n-pentane      |
| b) 2,2-dimethylpropane | d) 2-methylbutane |
- Q9. Which pair of elements are chemically most similar?
- |           |           |
|-----------|-----------|
| a) Na, K  | c) Cu, Ag |
| b) Ti, Zr | d) Zr, Hf |

Q10.  $\text{NaH} + \text{H}_2\text{O} = \text{NaOH} + \text{H}_2$ .

In this reaction NaH is:

- a) Oxidised
- b) Neither oxidised nor reduced
- c) Reduced
- d) None

Q11. In which case is number of molecules of water maximum?

- a) 0.00224L of water vapours at 1 atm and 273 K
- b) 0.18 g of water
- c) 18 ml of water
- d)  $10^{-3}$  mol of water

Q12. Maximum number of electrons in a subshell with  $l = 3$  and  $n = 4$  is:

- a) 14
- b) 10
- c) 16
- d) 12

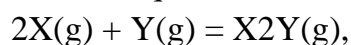
Q13. One of the following molecule contains no  $\pi$ - bonds?

- a)  $\text{SO}_2$
- b)  $\text{CO}_2$
- c)  $\text{NO}_2$
- d)  $\text{H}_2\text{O}$

Q14. Which of the following is intensive property ?

- a) Temperature
- b) Density
- c) Molarity
- d) All are correct

Q15. And the equilibrium of the reaction,



The number of moles of  $\text{X}_2\text{Y}$  and equilibrium is affected by the :

- a) Temperature and pressure
- b) Temperature only
- c) Pressure only
- d) Temperature, pressure and catalyst used

Direction (Q.no16-18) in the following questions and assertion is followed by a corresponding reason use the following keys to choose the appropriate answer.

- a) Both A and R are true and R is the correct explanation of A
- b) A is true but R is false
- c) A is false but R is true
- d) Both a and R are false

Q16. Assertion (A): the empirical mass of ethene is half of its molecular mass.

Reason R: the empirical formula represents the simplest whole number ratio of various items present in a compound.

Q17. Assertion(A): pent-1-ene and pent-2-ene are position isomers.

Reason R: position isomers differ in the position of functional group or a substituent.

Q18. Assertion (A): sodium chloride formed by the action of chlorine gas on sodium metal is a stable compound.

Reason R: this is because sodium and chloride ions acquire octate in sodium chloride formation.

### **SECTION : B – VERY SHORT QUESTIONS : (2 Marks Each)**

- Q19. Give two commercial uses of cathode rays?
- Q20. Write Lewis dot Symbols for the elements Mg, Na, B, O, N, Br?
- Q21. At 450K,  $K_p = 2.0 \times 10^{10}$  bar for the given reaction at equilibrium :  
 $2\text{SO}_2 + \text{O}_2 = 2\text{SO}_3$  . What is  $K_c$  at this temperature?

Or

A sample of HI is placed in a flask at pressure of 0.2 atm. at equilibrium the partial pressure of HI is 0.04 atm. what is  $K_p$  for the given equilibrium ?

- Q22. Define oxidation and reduction oxidants and reductants in terms of electrons ?
- Q23. Write bond-line Formula for : Isopropyl alcohol, 2,3-dimethylbutanal, heptan-4-one?
- Q24. How do you account for the formation of Ethane during chlorination of methane ?
- Q25. Write the structures of the compound :
- 3-Nitrocyclohexene
  - Cyclohex-2-en-1-ol

### **SECTION : C – SHORT ANSWER QUESTIONS : (3 Marks Each)**

- Q26. How will you convert benzene into :
- p- Nitrobromobenzene
  - m- Nitrochlorobenzene
  - Acetophenone
- Q27. Calculate the pH of a solution formed on mixing 0.2 M  $\text{NH}_4\text{Cl}$  and 0.1 M  $\text{NH}_3$ . The  $\text{p}K_b$  of ammonia solution is 4.75 .

Or

A buffer solution of pH 9 is to be prepared by mixing  $\text{NH}_4\text{Cl}$  and  $\text{NH}_4\text{OH}$ . calculate the number of moles of  $\text{NH}_4\text{Cl}$  that should be added to 2 L of 1 M  $\text{NH}_4\text{OH}$  solution,  $K_b = 1.8 \times 10^{-5}$

- Q28. Calculate the standard entropy change for  $X=Y$  Given  $\Delta H^\circ = 28.4\text{kJ}$  and equilibrium constant is  $1.8 \times 10^{-7}$  at 298 K.
- Q29.  $\text{PCl}_5$  exists but  $\text{NCl}_5$  does not, why?
- Q30. Why it is better to classify the elements on the basis of their atomic number rather than atomic mass ?

### **SECTION : D – LONG ANSWER QUESTIONS : (5 Marks Each)**

- Q31. Calculate the wavelength for the emission transition if it starts from the orbit having radius 1.3225 nm and ends at 211.6 pm. Name the series to which this transition belongs and the reason of the spectrum.

Or

A photon of wavelength  $4 \times 10^{-7}$  m strikes on metal surface, the work function of the metal being 2.13 eV calculate (a) the energy of the photon (eV), (b) the kinetic energy of the emission and (c) the velocity of the photo electron ( $1\text{eV} = 1.6020 \times 10^{-19}\text{J}$ ).

- Q32. Comments on the following statement :
- An exothermic reaction is always thermodynamically spontaneous.
  - Reaction with  $\Delta G^\circ < 0$  always have an equilibrium constant greater than 1.

Q33. Write structures of the following compounds:

- |                         |                             |
|-------------------------|-----------------------------|
| a) Propylbenzene        | d) 3-methylpentanenitrile   |
| b) 2,5- Dimethylheptane | e) 3- bromo-3-chloroheptane |
| c) 2,2- dichloroethanol |                             |

Or

What are electrophiles and nucleophiles ? explain with examples.

**SECTION : E – CASE BASED QUESTIONS : (4 Marks Each)**

Q34. Wurtz reaction is used to prepare higher alkanes. reaction proceed through the formation of free radicals some alkene may also be formed in the reaction. tertiary alkyl halide to not give wurtz reaction. aromatic compounds undergo substitution reactions rather than addition reactions aromaticity is due to the delocalisation of by electrons all aromatic compounds contain  $(4n+2)$   $\pi$ -electrons .

*Answer the following questions:*

- a) Which of the following alkane cannot be prepared by wurtz reaction ?
- |                    |              |
|--------------------|--------------|
| a. CH <sub>4</sub> | c. Isobutane |
| b. Neopentane      | d. All       |
- b) Which alkyl halide does not give wurtz reaction ?
- |                           |                             |
|---------------------------|-----------------------------|
| a. 1-Bromobutane          | c. 2-Bromobutane            |
| b. 1-Iodo-2-methylpropane | d. 2-Chloro-2-methylpropane |
- c) Which of the following does not show aromatic character ?
- |                           |                             |
|---------------------------|-----------------------------|
| a. Cyclopropenyl cation   | c. Cyclopentatrienyl cation |
| b. Cyclopentadienyl anion | d. Cycloocta tetraene       |
- d) Possible isomers of formula C<sub>6</sub>H<sub>14</sub> :
- |      |      |
|------|------|
| a. 5 | c. 9 |
| b. 4 | d. 6 |

Q35. Mole is the basis SI unit. Volume of one mole of a gas at STP is 22.4 L. Atomic mass of most of the elements is in fractions. It is due to the presence of isotopes. Molecular formula of a compound is equal to  $n \times$  empirical formula. The molecular mass of a compound is equal to  $2 \times V .D$ .

Answer the Following Questions:

- a) Which of the following compounds have same empirical and molecular formula?
- |                       |         |
|-----------------------|---------|
| a. CH <sub>4</sub>    | c. HCHO |
| b. CH <sub>3</sub> Cl | d. all  |
- b) 5.4 litre of a gas weigh 8 gram at STP. The gas is :
- |                   |                    |
|-------------------|--------------------|
| a. H <sub>2</sub> | c. O <sub>2</sub>  |
| b. O <sub>3</sub> | d. CH <sub>4</sub> |
- c) Two important isotopes of chlorine are :
- |  |  |
|--|--|
| a. Cl <sup>35</sup> and Cl <sup>37</sup> | c. Cl <sup>35</sup> and Cl <sup>33</sup> |
| b. Cl <sup>30</sup> and Cl <sup>37</sup> | d. Cl <sup>30</sup> and Cl <sup>32</sup> |
- d) SI unit of time is:
- |           |           |
|-----------|-----------|
| a. Hour   | c. minute |
| b. second | d. any    |

**SHARDEIN SCHOOL**  
**ANNUAL EXAMINATION (2022-23)**  
**CLASS – XI**  
**SUBJECT : MARKETING**

**TIME : 03 HOURS**

**MM : 60**

**NAME :** \_\_\_\_\_

**ROLL NO.** \_\_\_\_\_

**General Instructions :**

- a. Section A consist of 18 multiple choice questions carrying 1 mark each.
- b. Section B consists of 7 very short answer questions carrying 2 marks each.
- c. Section C consists of 5 short answer questions carrying 3 marks each.
- d. Section D consists of 3 long answer questions carrying 5 marks each.
- e. Section E consists of 2 case- based questions carrying 4 marks each.
- f. All questions are compulsory

**SECTION – A : EMPLOYABILITY SKILLS**

**MCQs : ANSWER ANY 4 QUESTIONS : (1 Marks Each)**

- Q1. The process of running a business with a new idea or in a different approach that benefits the buyer or consumer is known as
- a) Entrepreneurship
  - b) Planner
  - c) Businessman
  - d) None of the above
- Q2. What are the kinds of business activities
- a) Manufacturing business
  - b) Trading business
  - c) Service business
  - d) All of the above
- Q3. A \_\_\_\_\_ is one that promote economic development ensure that environment is protected.
- a) Green economy
  - b) Green Earth
  - c) Green environment
  - d) None of the above
- Q4. If you are aware of your own value like this like strength and short coming as an individual it donate the fact that you are
- a) Self confident
  - b) Self motivated
  - c) Self control
  - d) Self aware
- Q5. The process of making yourself look neat tidy and smart is known as
- a) Grooming
  - b) Playing
  - c) Exercise
  - d) Self confident
- Q6. Which menu commands include undo, cut ,copy and paste
- a) New
  - b) Edit
  - c) Save
  - d) Print



**SUBJECTIVE TYPE QUESTIONS : ANSWER ANY 3 QUESTIONS : (2 Marks Each)**

- Q7. What are the key problem and entrepreneur mein face while running a business?  
Q8. What are the shortcut bold and italic in the documet?  
Q9. What is sustainable development?  
Q10. Explain two qualities of self motivated people?  
Q11. What are the benefit of teamwork?

**SECTION – B : MARKETING**

**ANSWER ANY 5 QUESTIONS : (1 Marks Each)**

- Q1. \_\_\_\_\_ start before production of goods but continuous after selling of products.  
Q2. The intangible act and deeds. is offer from one party to another without the transfer of title is called \_\_\_\_\_  
a) Services c) Good  
b) Satisfaction d) Need  
Q3. Market consist of  
a) Potential buyers c) actual buyers  
b) Both a and c d) None of the above  
Q4. Scope of marketing is not limited to the product services but now one can market ideas, people, places , information, organisations and  
a) Goods c) Agents  
b) Experience d) None of above.  
Q5. In selling concept it is customer and not the seller that needs to be beware.  
True or False  
Q6. Wants backed by willingness and purchasing power is known as \_\_\_\_\_.

**ANSWER ANY 6 QUESTIONS : (1 Marks Each)**

- Q7. Segmenting the market typing the user and positioning the product are three \_\_\_\_\_ of modern marketing strategy.  
a) Supporter c) pillars  
b) Need d) Mix  
Q8. When the population are broken down according to the income employment and education etc is known as \_\_\_\_\_ segmentation.  
a) Democratic segmentation c) Family structure segmentation  
b) Socio economic segmentation d) Behaviour segmentation  
Q9. When a single segment focus has reached the point of full market penetration and after a single market segment successful the marketer opts \_\_\_\_\_ marketing strategy.  
a) differentiated marketing c) Undifferentiated marketing  
b) Multi segmentation marketing d) Both B and C

- Q10. Positioning is what you do to the\_\_\_\_\_of the prospect.
- Q11. Which of the following characteristics do not match with benefits segmentation?
- It is based upon measuring consumer value system.
  - It's Reliance on descriptive factors
  - It's 6 identify distinct consumer needs
  - It relies on casual factors.
- Q12. Targeting and positioning strategies are interrelated. True or false
- Q13. Targeting is the process of grouping of individual with similar needs. Correct the statement.

**ANSWER ANY 5 QUESTIONS : (1 Marks Each)**

- Q14. Advancement in technology leads to greater productivity high quality and \_\_\_\_\_cost of production for the business.
- Lower
  - Both
  - Higher
- Q15. External environment factors can be governed by the firm. True or false
- Q16. Which of the following is not a external micro environment factor
- Suppliers
  - Customer
  - Competitors
  - Government
- Q17. High rate of inflation and exchange rate\_\_\_\_\_business sentiment in a country.
- Encourage
  - Discourage
  - Promote
- Q18. Which segmentation is influenced by personality characters lifestyles and values.
- Q19. \_\_\_\_\_ market -individuals and household by the product for consumption
- Consumer
  - Reseller
  - Industrial
  - none of these.

**ANSWER ANY 5 QUESTIONS : (1 Marks Each)**

- Q20. True or false....
- The customer is the focal point of all marketing activity.
- Q21. The tool include press conference publication and news.
- Advertisement
  - public relation
  - Personal selling
  - Word of mouth
- Q22. When the firm decided to distribute their product through one or two major outlet example designer wear or high price automobiles is
- intensive distribution
  - Selective distribution
  - Exclusive distribution
  - None of these
- Q23. Which one of the four p is responsible for direct mail
- Product
  - Promotion
  - Price
  - Place
- Q24. Increases the features and quality you offer is a decision made by which marketing mix?
- Q25. Name all four C's



**VERY LONG ANSWER QUESTIONS : ANSWER ANY 2 QUESTIONS : (4 Marks Each)**

- Q40. Individual or group of consumer play diverse roles in different kinds of purchase situation there is no hard and fast role which buyer had to play it is possible that it difference purchasing decision they behave differently in different rows so there are different it rose which can be played by people in the consumer decision process. Name all eight rolls which can be played and out of this explain any four?
- Q41. In today's time in place of finance marketing has gain importance and has been considered more important than any other function of business if you agree with this statement explain it with valid reason?
- Q42. If you happen to be marketing manager in Gujarat milk federation, aap producer of number of milk products where will you put your products in the following consumer segment comprising kids, women, youth ,calorie conscious ,health conscious?

**SHARDEIN SCHOOL**  
**ANNUAL EXAMINATION (2022-23)**  
**CLASS – XI**  
**SUBJECT : PSYCHOLOGY**

**TIME : 03 HOURS**

**MM : 70**

**NAME :** \_\_\_\_\_

**ROLL NO.** \_\_\_\_\_

**General Instructions :**

- a. All questions are compulsory except where internal choice has been given.
- b. Question Nos. 1 -18 in Section A carry 1 mark each.
- c. Question Nos. 19-23 in Section B are Very Short Answer Type questions carrying 2 marks each. Answer to each question should not exceed 30 words.
- d. Question Nos. 24-27 in Section C are Short Answer Questions Type carrying 3 marks each. Answer to each question should not exceed 60 words.
- e. Question Nos. 28 – 31 in Section D are Long Answer Type I questions carrying 4 marks each. Answer to each question should not exceed 120 words.
- f. Question No. 32 in Section E is a Long Answer Type II question carrying 6 marks. Answer to this question should not exceed 200 words.
- g. Question Nos. 33 – 36 in Section F are based on two cases given. Each case has two questions carrying two marks each. Answer to each question should not exceed 30 words.

**SECTION – A : MCQs : (Each Question Carry 1 mark)**

- Q1. The behaviorist school of psychology was founded by
- a) JB Watson
  - b) Freud
  - c) Wertheimer
  - d) Maslow
- Q2. Naturalistic observation can be conducted in
- a) Hospitals
  - b) School
  - c) Homes
  - d) All of these
- Q3. Rajan has been appointed as a new Hindi teacher in a school. In order to develop rapport with the students he has understood the behaviour of the students. He will utilise..... Method for understanding their behaviour.
- a) Correlation
  - b) Observational
  - c) Experimental
  - d) Survey
- Q4. Which one of the following best describes enculturation?
- a) All learning that takes place without direct and deliberate teaching.
  - b) All learning that takes place with direct and deliberate teaching
  - c) It means slow evaluation of culture.
  - d) It means that culture evaluation is impacted by multiple factors.
- Q5. During his foreign trips Rajesh has witnessed a lot of gradual changing resulting from contact with other cultures.
- Which of the following best describes this process?
- a) Socialization
  - b) Enculturation
  - c) Civilization contact
  - d) Acculturation



**SECTION – B : VERY SHORT QUESTIONS : (Each Question Carry 2 mark)**

- Q19. Being a psychologist how would you define experiences in psychology ?  
Q20. Preeti is assigned a task to collect demographical information. What attributes she need to collect?

Or

What do you mean by experiment?

- Q21. Define Hypothetical deductive reasoning.  
Q22. Why are roads Important?

Or

Define illusion.

- Q23. What is positive reinforcement?

**SECTION – C : SHORT QUESTIONS : (Each Question Carry 3 marks)**

- Q24. Explain encoding in detail.  
Q25. Explain the basic characteristics of the language in detail.  
Q26. What do you know about the verbal and nonverbal channels of communication?  
Q27. How psychology is recognized as a social science? Oh

Or

Explain the quantitative method of data analysis.

**SECTION – D : LONG QUESTIONS - I: (Each Question Carry 4 marks)**

- Q28. Explain in brief about the somatic nervous system.

Or

Explain the term culture transmission.

- Q29. What are major challenges faced by adolescents ? Discuss the challenge of substance abuse.  
Q30. Discuss in brief attention deficits hyperactive disorder (ADHD).  
Q31. Explain the different forms of cognitive learning?

Or

What is a skill? what are the stages through which skill learning develops?

**SECTION – E : LONG QUESTIONS - II: (Each Question Carry 6 marks)**

- Q32. What is creative thinking? discuss the barriers to creative thinking and strategies to overcome this.

Or

Anger is the biggest enemy of a person. justify. Explain differential way to effectively manage anger.

## **SECTION – F : CASE BASED QUESTIONS - II: (Each Question Carry 2 marks)**

### ***Case I : Read the case and answer the questions that follow.***

Sweta is a child psychologist. She works on the behavioral activities of children. To conduct her research work she uses various types of method one popular method she used is observation. Observation can be done through observing the person or even from a distance. In this method she enjoys in which the person being observed may not be aware that he is being observed. Sweta wants to observe the pattern of interaction between teachers and students in a particular class she chooses nonparticipant observation. There are many ways of achieving this goal. You can install a video camera to record the classroom activities, which she can later analyze. Alternatively, she may also decide to sit in a corner of the class without interfering or participating in the children's everyday activity. The negative aspects of this type of setup is that someone for example, an outsider is sitting and observing may bring a change in the behavior of the students and the teacher and Decide to sit in a corner of the class without interference or participants in the children's everyday activities. The negative aspects of this type of setup is that someone for example an outsider is sitting and observing may bring a change in the behavior of students and the teacher and also this method is susceptible to the observer's bias. So she may consider two other types of observation for example, naturalistic observation, controlled observation, participant observation.

Q33. In the given case which fact is true about Sweta?

Q34. Which of the following is true about case studies?

### ***Case II : Read the case and answer the questions that follow.***

In an experiment a scientist split the human participants into three groups. One group was subjected to a loud and unpleasant noise but was able to terminate the noise by pressing a button four times; The second group was subjected to the same noise but the button was not functional; And the third group was subjected to no noise at all.

Later, all human participants were subjected to a loud noise and given a box with a button which, when manipulated would turn off the sound. In this experiment, those who had no control over the noise in the first part of the experiment did not even try to turn the noise off, while the rest of the subjects generally figured out how to turn the noise off very quickly.

Q35. Who among the following scientists first investigated the phenomenon given this case?

Q36. Identify the psychological phenomenon that has been demonstrated in this experiment.



**SHARDEIN SCHOOL**  
**ANNUAL EXAMINATION (2022-23)**  
**CLASS – XI**  
**SUBJECT : COMPUTER SCIENCE**

**TIME : 03 HOURS**

**MM : 70**

**NAME :** \_\_\_\_\_

**ROLL NO.** \_\_\_\_\_

**General Instructions :**

- a. This question paper contains five sections, Section A to E.
- b. All questions are compulsory.
- c. Section A have 18 questions carrying 01 mark each.
- d. Section B has 07 Very Short Answer type questions carrying 02 marks each.
- e. Section C has 05 Short Answer type questions carrying 03 marks each.
- f. Section D has 03 Long Answer type questions carrying 05 marks each.
- g. Section E has 02 questions carrying 04 marks each. One internal choice is given in Q35 against part c only.
- h. All programming questions are to be answered using Python Language only.

**SECTION – A : MCQs : (Each Question Carry 1 mark)**

- Q1. What is the full form of RAM.
- a) Read Access Memory
  - b) Raw Access Memory
  - c) Random Access Memory
  - d) Write Access Memory
- Q2. .... uniquely identifies a person on the basis of physical or behavior traits such as fingerprints, DNA etc
- a) touch screen
  - b) optical character
  - c) biometric sensor
  - d) reader QR code
- Q3. Who invented the mouse?
- Q4. ....gate has only one Input and it compliments an input signal.
- Q5. Which numbering system uses numbers and letters as symbols?
- a) decimal
  - b) Octal
  - c) binary
  - d) Hexadecimal
- Q6. Python was developed by .....
- a) Charles Babbage
  - b) Tim Berners Lee
  - c) Guido van Rossum
  - d) Robert E. Khan
- Q7. The extension of a python file is given as:
- a) .pt
  - b) .py or .pyw
  - c) .pwy
  - d) .yppy
- Q8. Why is python interpreted?
- Q9. How many times will the following code be executed?
- ```
a=5
while a>0:
    print(a)
    print("Thank You")
```
- a) 5 times
  - b) Infinite
  - c) Once
  - d) None of these



**SECTION – C : SHORT QUESTIONS : (Each Question Carry 3 mark)**

- Q1. Write a program to enter a number and check if it is a prime number or not.  
Q2. Write a program to swap two numbers without using a third variable.  
Q3. Consider list1=[1,2,3,4,5,6,7,8,9,10]

Write code in Python to:

- a) Remove last three elements from the list  
b) add element 23 at index value 10  
c) display the list in sorted order.  
Q4. Neeti has partially developed the code given below to create a dictionary comprising 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 _____:.(a)
```

```
if _____:.(b)
```

```
print(Key)
```

```
#display Months and days starting with "A" or "M"
```

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

```
if _____:.(c)
```

```
print(_____)#(d)
```

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

```
_____#(e)
```

```
print(Days)
```

- a) Write the function to get both keys and values.  
b) Write a condition to check if number of days is 31.  
c) Write a condition to check month should start with "A" or "M".  
d) Display month and days.  
e) Change number of days as 29 for the month of February.

Or

What is cyber stalking?

- Q5. List three points of network security components.

Or

How can we prevent identity theft?

**SECTION – D : LONG QUESTIONS : (Each Question Carry 5 mark)**

- Q1. Write the differences between the following:

- a) Copyright and Patent  
b) Plagiarism and Copyright Infringement  
c) Non- ethical Hacking and Ethical Hacking  
d) Active and Passive Footprints  
e) Free Software and free and Open - Source Software

- Q2. What is Social Media and What is the purpose of web browser?
- Q3. Write a program in python to find the maximum and minimum elements in the list entered by the user.

Or

Write a program that reads a line, then counts words and displays how many words are there in the line.

**SECTION – E : (Each Question Carry 4 mark)**

Q1. Convert these number system.

- a) (1101)<sub>2</sub> into decimal.
- b) (423)<sub>10</sub> into hexadecimal.
- c) (11001010)<sub>2</sub> into decimal.
- d) (220)<sub>8</sub> into binary.

Q2. Give the output for the following :

- a) print ('apple', 'mango', 'orange', 'banana', sep='@')
- b) A,B,C= 9,12,3

X= A- B/3 + C\*2 – 1

Y= A - B / (3+C) \* ( 2 - 1 )

Z= A- ( B / ( 3 + C ) \*2 ) – 1

print("X=", X)

print("Y=", Y)

print("Z=", Z)

Q3. Data= ["P", 20, "R", 10, "S", 30]

Times = 0

Alpha = " "

Add = 0

for C in range (1, 6, 2):

    Times = Times + C

    Alpha = Alpha + Data [C - 1] + "@"

    Add = Add + Data [C]

print ( Times, Add, Alpha)

Q4. i = 1

num = 65

while i <= 5:

    j = 1

    while j<=i:

        print (chr (num), end= " ")

        j = j + 1

        num = num +1

    print( )

    i = i + 1

**SHARDEIN SCHOOL**  
**ANNUAL EXAMINATION (2022-23)**  
**CLASS – XI**  
**SUBJECT : HISTORY**

**TIME : 03 HOURS**

**MM : 80**

**NAME :** \_\_\_\_\_

**ROLL NO.** \_\_\_\_\_

**General Instructions :**

- a. *Question Paper Comprises five sections, A, B,C,D and E. There are 34 questions in the question paper.*
- b. *Section A: Question No 1 to 21 are MCQ of 1 marks each.*
- c. *Section B: Question No 22 to 27 are short answer type questions, carrying 3 marks each. Answer to each question should not exceed 60-80 words.*
- d. *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.*
- e. *Section D: Question No-31 to 33 are source based questions with three sub questions and are of 4 marks each.*
- f. *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.*

**SECTION – A : MCQs : (Each Question Carry 1 mark)**

Q1. From which word Cuneiform is derived?

- |            |          |
|------------|----------|
| a) Latin   | c) Greek |
| b) Chinese | d) Mayan |

Q2. Which language replaced the sumerian language after 2400 BCC?

- |                     |                            |
|---------------------|----------------------------|
| a) Mesopotamian     | c) Akkadian                |
| b) Chinese Language | d) Middle Eastern Language |

Q3. In the 2000 BCE, the city that flourished as the royal capital of mesopotamia was

- |         |                |
|---------|----------------|
| a) UR   | c) Mohenjodaro |
| b) Mari | d) Kalibangan  |

Q4. Match the following:

List 1

- a) Cuneiform
- b) Alashiya
- c) Gilamesh
- d) Steles

List 2

1. Ruler of Uru
2. A system of writing
3. Stone Slabs with inscription or carving
4. Islands Of Cyprus

Q5. Identify the building:



- a) St. Michael's Benedictine abbey                      c) Hever Castle England  
b) Salisbury Cathedral England                      d) Nemours Castle France
- Q6. Which one of the following is a river that forms the boundary of the Roman Empire  
a) Mekong River                      c) Rhine River  
b) Amur River                      d) Yangtze River
- Q7. The Roman Empire got the best kind of wine from the city of  
a) Byzantium                      c) Campania  
b) Naples                      d) Sicily
- Q8. One of the gradual changes that affected the social and economic ties between the lords and the vassals was  
a) Agricultural Technology                      c) Land Use  
b) Environment                      d) New Towns
- Q9. The Land granted by the lord to the Knights was called  
a) Fief                      c) Seigneur  
b) Manor                      d) Feud
- Q10. According to French priests, the basis of classification among the three orders was  
a) Education                      c) Race  
b) Wealth                      d) Nature Of Work
- Q11. The Mongols travelled with their herds to pasture lands and lived in tents called  
a) Noyan                      c) Anda  
b) Gers                      d) Yasa
- Q12. During Genghis Khan's attempt to conquer China, North China was ruled by  
a) The Hsiao                      c) Jurchen  
b) Sung Dynasty                      d) Ogodei
- Q13. Ptolemy's Almagest was work on \_\_\_\_\_.  
a) Mathematics                      c) Astronomy  
b) Philosophy                      d) Sociology
- Q14. The author of the book 'The Prince' is  
a) Lorenzo Valla                      c) Gutenberg  
b) Machiavelli                      d) Alberti
- Q15. The earliest universities in the European continent were set up in the country of  
a) France                      c) Germany  
b) England                      d) Italy
- Q16. Britain recognized the USA as an independent country is  
a) 1781                      c) 1782  
b) 1783                      d) 1784

- Q17. Europeans wanted to at down native forests and replace them with
- |                     |                |
|---------------------|----------------|
| a) Sugarcane Fields | c) Corn Fields |
| b) Cotton Fields    | d) Rice Fields |
- Q18. Given below are two statements. One labeled as Assertion (A) and the other labeled as Reason (R).
- Assertion (A) Formal education was not the only way through which humanists shaped the minds of their age.
- Reason (R) Art, Architecture and Books were wonderfully effective transmitting humanist ideas.
- Codes:
- |                                                                      |
|----------------------------------------------------------------------|
| a) Both A and R are true and R is the correct explanation of A.      |
| b) Both A and R are true, but R is not the correct explanation of A. |
| c) A is true, but R is false.                                        |
| d) A is false, but R is true.                                        |
- Q19. After the Korean War, south Korea received economic assistance from
- |          |          |
|----------|----------|
| a) China | c) Japan |
| b) U.S.A | d) U.N.O |
- Q20. In 1867-68 CE \_\_\_\_\_ rule in Japan ended
- |               |                      |
|---------------|----------------------|
| a) The Shogun | c) The Nishijin      |
| b) The Meiji  | d) None of the above |
- Q21. Japanese borrowed their written script from
- |           |           |
|-----------|-----------|
| a) Russia | c) China  |
| b) Korea  | d) Taiwan |

**SECTION – B : SHORT QUESTIONS : (Each Question Carry 3 mark)**

- Q22. Write about the family norms of Mesopotamia?
- Q23. Who were equities and what was their role in the Roman Empire?
- Or
- If you had lived in the Roman Empire, where would you rather have lived in the towns or in the country side? Explain why?
- Q24. Why did Genghis Khan feel the need to fragment the mongol tribes into new social and Military groupings?
- Or
- What was the political set-up in the Nomadic Empire? Discuss.
- Q25. What do you understand by the scientific revolution in Europe during the period of the renaissance?
- Or
- What was the contribution of Galileo?
- Q26. What was the 'Frontier' mean to the Americans?
- Q27. What were the major developments before the meiji restoration that made it possible for Japan to modernise rapidly?

**SECTION – C : LONG QUESTIONS : (Each Question Carry 8 mark)**

Q28. Discuss the rules and regulations of the Yasa as evolved by Genghis Khan.

Or

Discuss the causes of the success of Genghis Khan.

Q29. Why did Europe's economic progress slow down by the early 14<sup>th</sup> century? Give Reasons?

Or

Which was the first order of medieval western Europe? Discuss its role in the Catholic Church.

Q30. What was the Great Australian Silence? How did it help to revive culture and traditions of the native of Australia?

Or

Discuss the features of the lifestyle of the native peoples Of North America.

**SECTION – D : CASE BASED QUESTIONS : (Each Question Carry 4 mark)**

Q31. Read the given source carefully and answer the questions that follows:

The Palace at Mari of King Zimrilim (1810-1760 BCE)

The great palace of Mari was the residence of the royal family, the hub of administration, and a place of production, especially of precious metal ornaments. It was so famous in its time that a minor king came from north Syria just to see it, carrying with him a letter of introduction from a royal friend of the king of Mari, Zimrilim. Daily lists reveal huge quantities of food were presented each day for the king's table: flour, bread, meat, fish, fruit, beer and wine. He probably ate in the company of many others, in or around courtyard, paved white.

You will notice from the plan that the palace had only one entrance, in the North. The large, open courtyard were beautifully paved. The king would have received foreign dignitaries and his own people in Audience hall, a room with wall paintings that would have awed the visitors. The palace was a sprawling structure, with 260 rooms and covered an area of 2.4 hectares.

- a) What was great palace of Mari used for? How many entrances does the palace has and in which direction?
- b) What was mainly produced in great palace of Mari?
- c) What were the varieties of food that king had each day? Whom did king receive in Audience hall?



Q32. Fukuzawa Yukichi (1835-1901), born in an impoverished Samurai family, he studied in Nagasaki and Osaka learning Dutch and Western sciences and later, English. In 1860, he went as a translator for first Japanese embassy to the USA. This provided material for a book on the West, written not in the classical but in the spoken style that became extremely popular. He established a school that is today the Keio University. He was one of the core Members of the Meirokusha, a society to promote Western learning.

In the Encouragement to learning (Gakumon no susume, 1872-76) he was very Critical of Japanese Knowledge'. All that Japan has to be proud of its scenery'. He Advocated not just modern factories and institutions but the cultural essence of the West-the spirit of civilisation. With this spirit it would be possible to build a new Citizen. His principle was: 'Heaven did not create men above men, nor sent men Below men.'

- a) Who was Fukuzawa Yukichi?
- b) Where did Yukichi work first? How he related to Meirokusha?
- c) What was Yukichi critical about and what was his principle?

Q33. Yasa, In 1221 CE, after the conquest of Bukhara, Genghis Khan had assembled the rich Muslim residents at the festival ground and had admonished them. He called them Sinners and warned them to compensate for their sins by parting with their hidden Wealth. The episode was dramatic enough to be painted and for a long time afterwards people still remembered the incident. In the late 16<sup>th</sup> century, 'Abdullah Khan, a distinct descendent of Jochi, Genghis Khan's eldest son, Went to the same festival ground in Bukhara. Unlike, Genghis Khan' however, ' Abdullah Khan went to perform his holiday prayers there.

His chronicler, Hafiz-Tanish, reported this performance of Muslim piety by his Master and included the surprising comment: 'this was according to the yasa Of Genghis Khan'.

- a) How did Genghis Khan want to compensate rich people's sins?
- b) Who was Abdullah Khan? Why did Abdullah Khan go to festival ground in Bukhara?
- c) Why did Hafiz-i Tanish report that piety was in accordance with yasa of Genghis Khan?

### **SECTION – E : MAP : (Carry 5 mark)**

Q34. Mark the following locations on the map of the Central Asia.

- a) Karakorum
- b) Turfan
- c) Delhi
- d) Samarqand
- e) Nishapur

**SHARDEIN SCHOOL**  
**ANNUAL EXAMINATION (2022-23)**  
**CLASS – XI**  
**SUBJECT : PHYSICS**

**TIME : 03 HOURS**

**MM : 70**

**NAME :** \_\_\_\_\_

**ROLL NO.** \_\_\_\_\_

**General Instructions :**

- a. There are 5 sections and 35 questions in all.
- b. All questions are compulsory.

**SECTION – A :**

**(1 x 18 = 18)**

- Q1. Which of the following physical quantities have neither units nor dimension
- |                      |                     |
|----------------------|---------------------|
| a) Relative velocity | c) relative density |
| b) Angle             | d) energy           |
- Q2. If the error in the measurement of radius of a sphere is 2% then the error in the determination of volume of the sphere will be
- |       |       |
|-------|-------|
| a) 4% | c) 6% |
| b) 8% | d) 2% |
- Q3. Speedometer measures the speed in
- |         |         |
|---------|---------|
| a) m/s  | c) Km/h |
| b) Cm/s | d) Km/h |
- Q4. A bomb is released by a horizontal flying aeroplane. The trajectory of the bomb is
- |             |                  |
|-------------|------------------|
| a) parabola | c) straight line |
| b) circle   | d) None          |
- Q5. A cyclist bends while taking the turn to
- |                           |                                        |
|---------------------------|----------------------------------------|
| a) reduce friction        | c) generate required centripetal force |
| b) reduce apparent weight | d) reduce speed                        |
- Q6. A body is being raised to a height from the ground. What is the sign of work done by the applied force
- |             |             |
|-------------|-------------|
| a) Positive | c) negative |
| b) None     | d) both     |
- Q7. A rope of negligible mass is wound round a hollow cylinder of mass 3 kg and radius 40 cm. If the rope is pulled with a force of 30 N then the angular acceleration produced in the cylinder is
- |       |       |
|-------|-------|
| a) 15 | c) 20 |
| b) 25 | d) 30 |
- Q8. The height of geostationary satellite is
- |             |             |
|-------------|-------------|
| a) 1000 km  | c) 32000 km |
| b) 36000 km | d) 850 km   |
- Q9. The maximum load, a wire can withstand without breaking when its length is reduce to half of its original length will
- |               |                |
|---------------|----------------|
| a) be double  | c) half        |
| b) four times | d) remain same |

- Q10. For turbulent flow, the value of Reynold number is
- a)  $R < 2000$
  - b)  $1000 < R < 2000$
  - c)  $> 2000$
  - d)  $1000$
- Q11. If an ideal gas undergoes isothermal process from some initial state to the final state then the change in internal energy during this process is
- a)  $dU = dQ$
  - b)  $dU = 0$
  - c)  $dU = -dW$
  - d)  $dU = dW$
- Q12. A real gas behave like an ideal gas if then
- a) both pressure and temperature are high
  - b) both pressure and temperature are low
  - c) pressure is high, temperature is low
  - d) pressure is low, temperature is high.
- Q13. A particle is executing SHM. The phase difference between velocity and displacement is
- a)  $0$
  - b)  $\pi$
  - c)  $\pi/2$
  - d)  $2\pi$
- Q14. Newton assume that sound propagation in a gas takes place under.
- a) Conditions
  - b) isobaric
  - c) adiabatic
  - d) isentropic
- Q15. Out of the following gases under similar conditions of temperature and pressure, the velocity of sound will be maximum in
- a) hydrogen gas
  - b) Oxygen gas
  - c) Nitrogen gas
  - d) Chlorine gas.

**Directions:**

***For question numbers 16,17 and 18, two statements giving below are labelled as Assertion(A) and Reason (R). Select the most appropriate answer from the options given below :***

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

- Q16. Assertion : A body cannot be accelerated when it is moving uniformly.  
Reason : When direction of motion of the body changes, then the body does not have acceleration.
- Q17. Assertion : There is no loss in energy in elastic collision  
Reason : Linear Momentum is conserved in elastic collision
- Q18. Assertion : As we go up the surface of the earth, we feel light weighted than on the surface of the earth  
Reason : The acceleration due to gravity decreases on going up above the surface of the earth.

**SECTION – B :****(2 x 7 = 14)**

- Q19. An object is moving with a constant acceleration. Draw velocity- time graph for the object.
- Q20. Calculate the area of a parallelogram whose two adjacent sides are formed by the vectors

$$A = 3 \mathbf{i} + 4 \mathbf{j}$$

$$B = -3 \mathbf{i} + 7 \mathbf{j}$$

- Q21. A wire of length  $L$  and cross sectional area  $A$  is made of a material of Young's modulus  $Y$ . If the wire is stretched by an amount  $x$  then what is the work done?
- Q22. State Pascal's law .How does it get changed in presence of gravity.
- Q23. Find an expression for the work done during an isothermal process.
- Q24. Define SHM
- Q25. Derive an equation of stationary wave for free reflection

Or

What is the simple harmonic progressive wave.

**SECTION – C :****(3 x 5 = 15)**

- Q26. A block of mass 2 kg is placed on the floor. The coefficient of static friction is 0.4. A force of 2.5 newton is applied on the block. Calculate the force of friction between the block and the floor .
- Q27. State conservation of angular momentum.
- Q28. What is the relation between orbital velocity and escape velocity. Derive it. 29.What is the most probable velocity .Write postulates of kinetic theory of gases. 30.Derive the expression for the kinetic energy and potential energy of a harmonic oscillator. Obtain the expression for the time period of a simple pendulum.

**SECTION – D :****(5 x 3 = 15)**

- Q29. State parallelogram law of vector addition. Give the analytical method for finding the resultant vector when two vectors are inclined at an angle
- Q30. The flow rate of water from a tap of diameter 1.25 cm is 0.48 litre per minute. The coefficient of viscosity of water is 0.001 Pascal- second.Prove by calculation that flow is streamlined at the given flow rate.

Or

What is the largest average velocity of blood flow in an artery of radius 0.002 meter if the flow must remain laminar. Take viscosity of blood to be 0.002 pascal second. Density of blood =1060 kg/cubic m

- Q31. If two balls of masses  $m_1$  &  $m_2$  moving with velocity  $u_1$  &  $u_2$  ( $u_1 > u_2$ ) collide elastically then obtain expression for the velocities after the collision. Discuss the case when  $m_1 = m_2$ .

**SECTION – E :**

**(4 x 2 = 8)**

***Case study:***

Q32. Larger the value of moment of inertia of a body, more is the rotational inertia of the body. This property has been put to a great practical use. The machine such as steam engine and the automobile engine etc that produce rotational motion have a disc with a large moment of inertia, called a fly wheel. Because of its large moment of inertia, the fly wheel resists the sudden increase or decrease of the speed of the vehicle. It allows a gradual change in the speed and prevents jerky motions. This ensures a smooth ride for the passengers on the vehicle.

- a) In SI, what is the unit of moment of inertia?
- b) What is the form of energy stored in fly wheel?
- c) What are the factors on which moment of inertia depends?
- d) Why the mass of a fly wheel is concentrated on its rim?

Q33. Heat is the form of energy which can flow from one body to another due to their temperature difference in form of radiations, molecular vibrations, molecular displacement etc. These processes of heat flow are collectively known as heat transfer. There are 3 modes of heat transfer- conduction, convection & radiation

- a) Why a metal surface will feel colder to touch than a wooden surface on a cold morning?
- b) How woollen clothes keep the body warm?
- c) Through which mode, heat travels through vacuum.
- d) What is the SI unit of thermal conductivity?

**SHARDEIN SCHOOL**  
**ANNUAL EXAMINATION (2022-23)**  
**CLASS – XI**  
**SUBJECT : ACCOUNTANCY**

**TIME : 03 HOURS**

**MM : 80**

**NAME :** \_\_\_\_\_

**ROLL NO.** \_\_\_\_\_

**General Instructions :**

- a. *This question paper contains 34 questions. All questions are compulsory.*
- b. *Question 1 to 20 carries 1 mark each.*
- c. *Questions 21 to 26 carry 3 marks each.*
- d. *Questions from 27 to 29 carries 4 marks each.*
- e. *Questions from 30 to 34 carry 6 marks each.*
- f. *There is no overall choice. However, an internal choice has been provided in 2 questions of three marks, 1 question of four marks and 2 questions of six mark*

**VERY SHORT ANSWER QUESTIONS. (One Mark Each)**

- Q1. Stock is valued at
- a) Cost or Net Realisable Value (Market Value), whichever is lower.
  - b) Cost or Net Realisable Value (Market Value) whichever is higher
  - c) Cost
  - d) Net realisable value
- Q2. Which of the following term increases the capital
- a) Drawings
  - b) Loss
  - c) Expenses
  - d) Profit
- Q3. Under the Accrual Basis of Accounting
- a) Does not give a true and fair view of profit and financial position.
  - b) Gives a true and fair view of profit and financial position.
  - c) May or may not give a true and fair view of profit and financial position.
  - d) None of above
- Q4. Purchase of machine by cash means
- a) Decrease in asset and decrease in liability.
  - b) Increase in asset and decrease in asset.
  - c) Increase in asset and decrease in liability.
  - d) Decrease in asset and increase in capital
- Q5. The liabilities of a form are Rs. 3000 and the capital of the proprietor is Rs. 7000. The total assets are
- a) Rs. 7000
  - b) Rs. 4000
  - c) Rs. 10000
  - d) none of above
- Q6. Simple petty cash book is like a
- a) Cash book
  - b) Journal
  - c) Statement
  - d) none of these

- Q7. Which type of ledger account are not carried forward to the next year
- Personal account
  - nominal account
  - real account
  - all of these
- Q8. On interested purchase of goods which of the following account is debited
- Input IGST account
  - input CGST account and input SGST account
  - input IGST account and input CGST account
  - input IGST account and input SGST account
- Q9. Which of the following expense is not a revenue expense?
- Salary
  - Electricity
  - Water
  - repair of second hand machinery purchased
- Q10. A business receives its bank statement showing the closing balance as Rs. 8500 overdrawn. It is found that there were unrepresented cheques of Rs. 2000 and uncredited deposits of Rs. 1500. Overdraft as per cash book is
- Rs. 5000
  - Rs. 9000
  - Rs. 8000
  - Rs. 12000
- Q11. A machine is purchased on 1st April 2021 for Rs. 80000. Expensive incurred on its installation is Rs. 20000. The residual value at the end of its expected useful life of 4 years is estimated at Rs 10000. The amount of depreciation under straight line method for the year ended 31st March 2022 will be
- Rs. 22500
  - Rs. 17500
  - Rs. 20000
  - Rs. 13125
- Q12. If the amount of any non liability can be determined with accuracy
- A liability should be provided
  - A reserve should be set aside
  - A provision should be made
  - none of these
- Q13. Trial balance is a
- Statement
  - Account
  - Summary
  - none of these
- Q14. Purchase of office furniture for Rs 1200 was debited to general expenses account. It is
- A clerical error
  - An error of omission
  - An error of principle
  - none of these
- Q15. What will be the amount of gross profit if adjusted purchases are Rs. 550000, sales Rs. 625000, carriage inward Rs. 7000, cartage outwards Rs. 2500 and closing stock Rs. 50000
- Rs. 65000
  - Rs. 60000
  - Rs. 62500
  - Rs. 55000
- Q16. If sales are 5 lakh and gross profit is 25% of Cost of goods sold. Find Cost of goods sold
- 400000
  - 200000
  - 300000
  - 350000





Q23. In the following Sales Book, determine the missing information.

| Date          | Particulars                                                                                                        | Invoice No. | L.F. | Details Rs.      | Amount |
|---------------|--------------------------------------------------------------------------------------------------------------------|-------------|------|------------------|--------|
| 2022<br>Apr 3 | M/s Gupta & Verma<br>30 shirts @ Rs. 1500 each<br>20 trousers @ Rs. 3000 each<br><br>Less : Trade Discount @ 10%   |             |      | -<br>-<br>-<br>- |        |
| Apr 20        | M/s Mohan Lal & Sons<br>50 shirts @ Rs. 1500 each                                                                  |             |      | -<br>-           |        |
| Apr 23        | M/s Rajesh & Sons<br>100 shirts @ Rs. 1750 each<br>10 overcoats @ Rs. 5000 each<br><br>Less : Trade Discount @ 10% |             |      | -<br>-<br>-<br>- |        |
| Apr 30        |                                                                                                                    |             |      |                  |        |

Or

Verma Bros. carry on business as wholesale cloth dealer. From the following, write up their Purchases Book for January, 2022.

| Date          | Particulars                                                                                                          |
|---------------|----------------------------------------------------------------------------------------------------------------------|
| 2022<br>Jan 3 | Purchased from M/s Birla Mills, Kolkata<br>100 pieces long cloth @ Rs. 800 each<br>50 pieces shirting @ Rs. 500 each |
| Jan 8         | Purchased for cash from M/s Ambika Mills, Ahmedabad<br>50 pieces muslin @ Rs. 1000 each                              |
| Jan 15        | Purchased from M/s Arvind Mills, Ahmedabad<br>20 pieces coating @ Rs. 2000 each<br>10 pieces shirting @ Rs. 500 each |
| Jan 20        | Purchased from M/s Bharat Computers Ltd., Kolkata<br>5 printers @ Rs. 4400 each                                      |

Q24. Pass journal entries from the following transactions

- Machinery purchase for Rs. 50000 paying CGST and SGST @ 9% against cheque payment
- Sold an old machine as scrap in cash for Rs. 5000 charging CGST and SGST @ 9% each
- Advertisement expenses of Rs. 40000 plus CGST and SGST @ 9% paid by cheque.

Q25. From the following information drop a trial balance in the books of Subhash traders as on 31st March 2022

|                                          |        |
|------------------------------------------|--------|
| Capital                                  | 140000 |
| Purchases                                | 36000  |
| Discount allowed                         | 1200   |
| Carriage inward                          | 11000  |
| Sale                                     | 60000  |
| Return inward                            | 300    |
| Return outward                           | 700    |
| plant and machinery                      | 115300 |
| Stock on 1st April 2021                  | 16700  |
| Debtors                                  | 20200  |
| Creditors                                | 12000  |
| Investments                              | 3600   |
| Commission receive                       | 1800   |
| Cash                                     | 100    |
| Cash at bank                             | 10100  |
| Stock on 31st March 2022 ( not adjusted) | 20500  |

Q26. State with the reason whether following our capital or revenue expenditures

- Second hand car was purchase for Rs. 1 lakh. Rs. 10000 was spend on its overhauling
- Rs. 25000 paid for the installation of new machines
- Cost of annual taxi speed and annual insurance premium paid on car

**SHORT ANSWER QUESTIONS. (04 Marks Each)**

Q27. Prepare Bank Reconciliation Statement of Krishan as on 31st March, 2022:

- Balance as per Bank Pass Book as on the date is 10,000.
- Bank collected a cheque of 500 on behalf of Krishan but wrongly credited itto Kishan's Account (another customer).
- Bank recorded a cash deposit of 2,589 as 2,598.
- Withdrawal column of the Pass Book undercasted by 100.
- Credit balance of 1,500 as on Page 10 of the Pass Book was recorded on Page 11 as a debit balance.
- Payment of a cheque of 350 was recorded twice in the Pass Book.
- Pass Book showed a credit for a cheque of Rs. 1,000 deposited by Shri Kishan (another customer of the Bank).
- Dividend collected by bank 125.

Q28. Calculate cost of goods sold and gross profit from the following information

|                       |       |
|-----------------------|-------|
| Opening stock         | 30000 |
| Purchases             | 54600 |
| Expenses on purchases | 6000  |
| Sales                 | 90000 |
| Expenses on sale      | 3000  |
| Closing stock         | 36600 |

Or

From the following information prepare trading account for the year end date 31st March 2022.

|                       |        |
|-----------------------|--------|
| Opening stock         | 100000 |
| Purchases             | 280000 |
| Closing stock         | 80000  |
| Wages                 | 2000   |
| Frieght inward        | 3600   |
| Carriage inwards      | 1000   |
| Gross profit on sales | 20%    |

Q29. Following are the balances in trial balance as on 31st March 2022

| Particulars                                       | Dr.      | Cr.      |
|---------------------------------------------------|----------|----------|
| 1. 10 % Loan to Ram ( Given on 1 August, 2021)    | 6,00,000 |          |
| 2. 8% loan from Ravi ( Taken on 1 November, 2021) |          | 90,000   |
| 3. 12 % Bank loan ( taken on 1 June 2021)         | 2,500    |          |
| 4. Interest on bank loan                          |          | 1,00,000 |

Prepare extracts of profit and loss account and balance sheet for the year end date 31st March 2022.

**LONG ANSWER QUESTIONS. (06 Marks Each)**

Q30. Prepare Two-column Cash Book of Vinod from the following transactions:

2021

- Oct. 1 Cash in Hand 25,000
- Oct. 1 Cash at Bank. 75,000
- Oct. 7 Bought goods against cheque 15,000
- Oct 8 Bought goods 5.000
- Oct. 10 Honoured our own acceptance by cheque 5.000
- Oct 14 Paid Miscellaneous expenses 150
- Oct. 18 Ramesh who owed 5,000 became bankrupt and paid us 50 paise in a Rs.
- Oct. 20 Received cash from Manohar 7500  
Allowed discount 250
- Oct. 23 Withdrew from bank.. 4,000
- Oct 24 Paid to Ghanshyam & Co. 3,000  
Received discount. 199  
25 Withdrew from bank for personal expenses
- Oct. 28 Withdrew from bank for personal use 3000
- Oct. 27 Sold goods 11000
- Oct. 28 Received cheque for goods sold 19000
- Oct 29 Received part payment from Akhil of 5,000 and deposited Rs. 3,000 out of it into bank

Q31. A firm purchased on 1st April, 2019 a second-hand machinery for 36,000 and spent 4,000 on its installation.

On 1st October in the same year, another machinery costing 20,000 was purchased. On 1st October, 2021, machinery bought on 1st April, 2019 was sold for 12,000 and a new machine was purchased for 64,000 on the same date. Depreciation is provided annually on 31st March @ 10% p.a. on the Written Down Value Method.

Show Machinery Account for 3 years ending on 31st March, 2022.

Or

Ajay Bros. purchased a plant on 1st April, 2020 for 7,00,000. Depreciation is charged @ 10% p.a. on the original cost. On 1st January, 2022, the plant was found unsuitable and sold for 4,20,000.

Prepare the Plant Account, Depreciation Account and Plant Disposal Account if depreciation is charged to Plant Account. The accounts are closed on 31st March every year.

Q32. Pass the Journal entries to rectify the following errors detected during preparation the Trial Balance:

- a) Purchases Book is under cast by 1,000.
- b) Wages paid for construction of office debited to Wages Account 20,000.
- c) A credit sale of goods 1,200 to Ramesh has been wrongly passed through the Purchases Book.
- d) Goods purchased for 5,000 were posted as 500 to the Purchases Account.
- e) An amount of 2,000 due from Mahesh Chand which had been written off a bad debt in previous year was unexpectedly recovered has been posted to the personal account of Mahesh Chand.
- f) A credit purchase of 1,040 from Ramesh was passed in the books as 1,400.

Or

Give the Journal entries to rectify the following errors using Suspense Account, where necessary:

- a) Goods of the value of 2,000 returned by Mr. Gupta were entered in the Sales Book and posted there from to the credit of his account.
- b) Goods worth 1,500 bought by the proprietor for his personal use without any payment being made as yet, was wrongly entered in the Purchases Book.
- c) A cheque for 500 received from Ashok was dishonored and has been posted to the debit of Sales Return Account.
- d) The total of one page of the Sales Book was carried forward to the next page as 680 instead of 860.
- e) An item of 500 relating to Prepaid Insurance Account was omitted to be brought
- f) Goods (Cost 5,000; Sales Price 6,000) distributed as free samples among prospective customers were not recorded anywhere.

Q33. From the following trial balance and other information prepare trading and profit and loss account for the year and date 31st March 2022 and balance sheet as at same date

| Particulars                            | Dr. (Rs.)        | Cr. (Rs.)        |
|----------------------------------------|------------------|------------------|
| Sundry Debtors                         | 3,20,000         | --               |
| Stock on 1 <sup>st</sup> April, 2018   | 2,20,000         | --               |
| Cash in Hand                           | 350              | --               |
| Cast at Bank                           | 15,450           | --               |
| Plant and Machinery                    | 1,75,000         | --               |
| Sundry Creditors                       | --               | 1,06,500         |
| General Expenses                       | 10,750           | --               |
| Sales                                  | --               | 13,45,000        |
| Salaries                               | 22,250           | --               |
| Carriage Outwards                      | 4,000            | --               |
| Rent                                   | 9,000            | --               |
| Bills Payable                          | --               | 75,000           |
| Purchases                              | 11,88,700        | --               |
| Discounts                              | 11,000           | --               |
| Premises                               | 3,45,000         | --               |
| Capital on 1 <sup>st</sup> April, 2018 | --               | 7,95,000         |
| <b>Total</b>                           | <b>23,21,500</b> | <b>23,21,500</b> |

Additional Information :

- Stock on 31st March 2022 was 124500
- Rent was unpaid to the extent of Rs. 850 and Rs. 1500 were outstanding for general expenses
- 4000 to be return of as bed that's out of the above debtors and 5% is to be provided for doubtful debts
- Depreciate Plant and Machinery by 10% and Premises by 2%.
- Manager is entitled to a commission of 5% on profit after charging his commission
- A fire broke out on 1st April, 2022 destroying goods costing 20,000

Q34. Show an Accounting Equation for the following transactions:

- D. Mahapatra commenced business with cash 50,000 and 1,00,000 by cheque; goods 60,000; machinery 1,00,000 and furniture 50,000.
- 1/3rd of the above goods sold at a profit of 10% on cost and half of the payment is received in cash.
- Depreciation on machinery provided @ 10%.(iv) Cash withdrawn for personal use 10,000.
- Interest on drawings charged @ 5%.
- Goods sold to Gupta for 10,000 and received a Bill Receivable for the same amount for 3 months.
- Received 10,000 from Gupta against the Bills Receivable on its maturity.

**SHARDEIN SCHOOL**  
**ANNUAL EXAMINATION (2022-23)**  
**CLASS – XI**  
**SUBJECT : PHYSICAL EDUCATION**

**TIME : 03 HOURS**

**MM : 70**

**NAME :** \_\_\_\_\_

**ROLL NO.** \_\_\_\_\_

**General Instructions :**

- a. *The question paper consists of 5 sections and 37 Questions. All Questions are compulsory.*
- b. *Section A consists of question 1-18 carrying 1 mark each and is multiple choice questions.*
- c. *Sections B consist of questions 19-24 carrying 2 marks each and are very short answer types and should not exceed 60-90 words. Attempt any 5.*
- d. *Sections C consist of Question 25-30 carrying 3 marks each and are short answer types and should not exceed 100-150 words. Attempt any 5.*
- e. *Sections D consist of Question 31-33 carrying 4 marks each and are case studies. There is internal choice available .*
- f. *Section E consists of Question 34-37 carrying 5 marks each and are long answer types and should not exceed 200-300 words. Attempt any 3.*

**SECTION – A : MULTIPLE CHOICE QUESTIONS (01Mark Each)**

- Q1. In which year the first Asian games were organised in India?
- |         |         |
|---------|---------|
| a) 1947 | c) 1950 |
| b) 1951 | d) 1952 |
- Q2. In which year, the IPL related to cricket was started?
- |         |         |
|---------|---------|
| a) 2000 | c) 2004 |
| b) 2006 | d) 2008 |
- Q3. Which one of the following is the headquarters of?
- |             |             |
|-------------|-------------|
| a) Lausanne | c) New York |
| b) Paris    | d) Bonn     |
- Q4. Who is known as father of modern?
- |                      |                       |
|----------------------|-----------------------|
| a) Sir Doran Ji Tata | c) Antonio Samaranch  |
| b) Robert Bach       | d) Baron De Coubertin |
- Q5. When an athlete performs for loves what type of strength is?
- |                       |                     |
|-----------------------|---------------------|
| a) Explosive Strength | c) Dynamic Strength |
| b) Static Strength    | d) None of these    |
- Q6. The ability to overcome resistance for longer duration is called?
- |                |              |
|----------------|--------------|
| a) Speed       | c) strength  |
| b) flexibility | d) endurance |
- Q7. In which year first winter Paralympic Games were held?
- |         |         |
|---------|---------|
| a) 1972 | c) 1976 |
| b) 1978 | d) 1984 |



## **SECTION – C : SHORT QUESTIONS (03 Marks Each)**

*Attempt Any 5 Questions :*

- Q25. What do you mean by the principle of sports training? Explain one of them.
- Q26. Discuss the importance of sports Psychology in brief.
- Q27. Explain in brief the traits of mesomorphist.
- Q28. Elucidate the importance of physical fitness and Wellness in brief.
- Q29. Define yoga in Detail.
- Q30. Explain the meaning of leadership in detail.

## **SECTION – D : CASE STUDY QUESTIONS (04 Marks Each)**

- Q31. Aman was a good athlete up to matriculation in fact he used to practice hard in the morning and in evening to achieve top position at National level but in spite of his good efforts he could not achieve any position at National level is athlete take coach also wanted him to win the gold he got frustrated over his poor performance due to over stress depression and insighty he started taking stimulance to enhance performance in the meantime his coach came to know about this fact he called him and suggested not to take touch prohibited substance in future Aman assured his coach not to take such substance in future.

Based on the above passage answer the following questions.

- a) What values did the athletic coach reflect through his initiative?
  - b) What qualities and virtues are shown by Aman?
  - c) What do you mean by stimulants?
- Q32. The topic for school annual debate this year is ‘Aims and Objectives of Physical Education’. While quite a few students feel the subject should be made compulsory, some students think having this as part of the curriculum will be a waste of time. The Principal has selected you to speak in favour of it and explain why physical education should be made a compulsory part of the syllabus.
- a) Explain physical education in brief.
  - b) How does physical education enhance social skills?
  - c) What are the qualities that physical education helps improve in a person?
- Q33. Physical education leads to developing leadership skills. PE sets up an attitude of team spirit and social working as well as teaches success and failure to be two sides of the same coin. This is vital for a leader to learn and practise. While sports and physical education has much to offer for the body, it also helps sharpen social and mental skills and can help generate passion for taking everybody along towards a common goal. A fit body can accommodate a fit mind. Keeping this in mind, answer the following questions:
- a) What attributes does PE develop in shaping up leaders?
  - b) Decision-making is learnt by leaders on the sports fields! Comment.
  - c) What skills does PE help develop that prove beneficial to a leader later?



**SECTION – E : LONG QUESTIONS (05 Marks Each)**

*Attempt Any 3 Questions :*

- Q34. What do you mean by warming? Enumerate the methods of warming up in detail.
- Q35. What do you mean by growth and development? differentiate between them.
- Q36. Define leadership explain the leadership qualities in physical education.
- Q37. Define physical education and explain its aim and objective in detail.

**SHARDEIN SCHOOL**  
**ANNUAL EXAMINATION (2022-23)**  
**CLASS – XI**  
**SUBJECT : PAINTING**

**TIME : 02 HOURS**

**MM : 30**

**NAME :** \_\_\_\_\_

**ROLL NO.** \_\_\_\_\_

**General Instructions :**

- a. Section A: Attempt eight questions out of 10
- b. Section B: Attempt all the question options are also given and to be answered in approximately 80-100 words.
- c. Section C. Attempt any two questions out of three and to be answered in approximately 200 words.

**SECTION – A : MULTIPLE CHOICE QUESTIONS**

**(8 x 1 = 8)**

- Q1. Name an element of art which is related to light and dark shades.
- a) Space
  - b) Line
  - c) Colour
  - d) Tone
- Q2. Which of the following painting from prehistoric era has hint of x-ray imagery
- a) A roaring animal
  - b) Wild Bison
  - c) Wizard dance
  - d) Hunting Scene
- Q3. What is the height of the 'Dancing Girl' from Mohenjodaro?
- a) 4.1 inches
  - b) 5.1 Inches
  - c) 33.8 inches
  - d) 10 inches
- Q4. An aureole is related to:
- a) A halo hollow around Buddha's head
  - b) Buddha in dhyan mud
  - c) Ushnisha
  - d) Urna
- Q5. Ajanta caves are located at:
- a) Mumbai, Maharashtra
  - b) Aurangabad, Maharash
  - c) Pune, Maharashtra
  - d) New Delhi
- Q6. Solanki dynasty belongs to which temple Sculpture from your course of study
- a) Cymbal player
  - b) Ravana shaking mount Kailash
  - c) Mother and child
  - d) Decent of ganga
- Q7. Lost wax casting process" or "Bronze casting method" is also known as
- a) Shiva's angular posture
  - b) Cire perdue method
  - c) Baking technique
  - d) Terracotta technique
- Q8. On the bank of which river is the Taj Mahal located at
- a) Raavi
  - b) Satluj
  - c) Ganga
  - d) Yamuna
- Q9. To which dynasty does the Qutub Minar belong
- a) Adil shah
  - b) Akbar
  - c) Aurangzeb
  - d) Qutub- din – aibak

Q10. Who was the founder of the Maurya dynasty?

- a) Ashoka
- b) Bindusara
- c) Kalinga
- d) Chandragupta Maurys

**SECTION – B : SHORT QUESTIONS**

**(5 x 2 = 10)**

Q11. Write a short note on the following painting with period, location and artistic medium "Mother GODDESS" or "Dancing Girl".

Q12. Aesthetically analyse the art work along with dynasty, period, medium and collection "Jain Tirthankara' OR Chauri bearer from Didar Ganj.

Q13. Describe the main features of Ajante art.

Q14. Describe the relief sculpture of "Ravana Shaking mount Kailash "from your course of study.

Q15. Validate the following comment describing the artistic aspects of the Taj Mahal: "Taj is the jewel of Muslim art in India and one of the universally admired masterpieces of the world's heritage."

**SECTION – C : LONG QUESTIONS**

**(2 x 6 = 12)**

Q16. Aesthetically appreciate the Qutub Minar of New Delhi.

Q17. Write a note on the bronze sculpture "Nataraj.

Q18. Write a note on the Ajanta painting "Bodhisattva Padampani".

**SHARDEIN SCHOOL**  
**ANNUAL EXAMINATION (2022-23)**  
**CLASS – XI**  
**SUBJECT : BIOLOGY**

**TIME : 03 HOURS**

**MM : 70**

**NAME :** \_\_\_\_\_

**ROLL NO.** \_\_\_\_\_

**General Instructions :**

- a. All questions are compulsory.
- b. The question paper has five sections and 33 questions.
- c. 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.
- d. There is no overall choice. However, internal choices have been provided in some questions.
- e. Wherever necessary, neat and properly labeled diagrams should be drawn.

**SECTION – A**

- Q1. Which among the following is not associated with a sexual reproduction?
- |                    |                  |
|--------------------|------------------|
| a) gamet formation | c) Fragmentation |
| b) Spore formation | d) budding       |
- Q2. Pteridophytes differ from bryophytes in having
- |                        |                            |
|------------------------|----------------------------|
| a) Archegonia          | c) vascular tissue         |
| b) motile antherozoids | d) alternate of generation |
- Q3. In some animal groups the body is found divided into compartments with serial repetition of at least some organs. This characteristic feature is called
- |                 |                  |
|-----------------|------------------|
| a) segmentation | c) metamerism    |
| b) metagenesis  | d) metamorphosis |
- Q4. In onion, food is stored in
- |                       |                        |
|-----------------------|------------------------|
| a) discoidal stem     | c) fleshy scale leaves |
| b) adventitious roots | d) scape type of stem  |
- Q5. When it I got leave is exposed to sunlight the light rays first pass through the epidermis and then through
- |                        |                      |
|------------------------|----------------------|
| a) lower epidermis     | c) spongy parenchyma |
| b) palisade parenchyma | d) vascular bundle   |
- Q6. A compound formed of a sugar and a nitrogen base, is called a
- |               |                 |
|---------------|-----------------|
| a) nucleotide | c) nucleic acid |
| b) nucleoside | d) disaccharide |
- Q7. The idea that photosynthetic organisms require a source of hydrogen was given by:
- |                       |               |
|-----------------------|---------------|
| a) Ruben and Kamen    | c) Van Niel   |
| b) Arnold and Emerson | d) Robin hill |
- Q8. The site of glycolysis in a cell is:
- |                |               |
|----------------|---------------|
| a) Cytoplasm   | c) Nucleus    |
| b) Chloroplast | d) Glyoxysome |



### SECTION – C

- Q22. Bring out 5 differences between Annelida and Arthropoda. Name the blood -sucking ectoparasite of Annelida.
- Q23. Describe the three zones distinguishable in the cortex of dicot stem.
- Q24. How is digestion aided in the stomach and intestine in frogs?
- Q25. Give the structural formula of adenine, adenosine and adenylic acid.
- Q26. a) Name the end products of fermentation.  
b) Write the role of oxygen in the electron transport system.  
c) What is respiratory quotient? What is the RQ for fat.

Or

Plants have no respiratory system give three reasons as to how plants can get a long without respiratory organs.

- Q27. Explain the mechanism of blood coagulation in respond to an injury.
- Q28. Write short notes on the following:
- Retina
  - Cochlea
  - Ear osscils

Or

Give a brief account of:

Mechanism of synaptic transmission

Mechanism of vision

Mechanism of hearing.

### SECTION – D

***Q.No 29 and 30 are case based questions. Each question has subparts with internal choice in one subpart.***

- Q29. Read the following passage and answer the any four question:

All organisms are composed of cells i.e. organisms are unicellular or multicellular. The discovery of microscope and its improvement leading to the electron microscope has revealed all the structural details of cells.

- Why cells are considered the fundamental is structural and functional units of life?
  - Mention two characteristic features of unicellular organisms.
  - Name the scientist who first observed and describe living cells.
  - Why do the shapes of cells vary?
  - Mention the approximate size of bacterial cells and human RBCs.
- Q30. Read the following passage and answer the question that follow:
- The lungs are situated in the thoracic chamber which is anatomically and air tight chamber answer the following question regarding this.
- Mention the boundaries of the thoracic chamber that make it an air tight chamber.
  - What is its significance?
  - Why is it essential for breathing?
  - Name the double membrane covering of the lungs and the fluid present between them what is the significance of this fluid?

**SECTION – E**

- Q31. a) Mention the distinctive characters of cyanobacteria.  
b) Draw a labelled diagram of a trichome of nostoc.

Or

- a) Name a virus that has (a) single standard RNA as genetic material and (b) double standard DNA as genetic material.  
b) Draw labelled diagram of them.
- Q32. Describe the basis on which Gap -1 phase, synthetic phase and Gap -2 phase of cell cycle are named. Mention any two characteristics of telophase and metaphase each.
- Q33. a) Describe the role of liver, lungs and skin in excretion.  
b) Terrestrial animals are generally either ureotelic or uricotelic, not ammonotelic, Why?

Or

- a) Draw a labelled diagram of a nephron showing blood vessels and tubule.  
b) Name the organ where urea is produced in human body.  
c) Describe the process of urine formation in kidney.

**SHARDEIN SCHOOL**  
**ANNUAL EXAMINATION (2022-23)**  
**CLASS – XI**  
**SUBJECT : ECONOMICS**

**TIME : 03 HOURS**

**MM : 80**

**NAME :** \_\_\_\_\_

**ROLL NO.** \_\_\_\_\_

**General Instructions :**

- a. *This question paper contains two sections: Section (A) Macro Economics and Section (B) Economic Development.*
- b. *Question Nos. 1- 10 and 18-27 are Multiple Choice Questions of 1 mark each.*
- c. *Question Nos. 11-12 and 28-29 are Short Answer Questions of 3 marks each to answered in 60-80 words.*
- d. *Question Nos. 13 -15 and 30- 32 are Short Answer Questions of 4 marks each to answered in 80 - 100 words.*
- e. *Question Nos. 16 -17 and 33 – 34 are Long Answer Questions of 6 marks each to answered in 100 - 150 words.*

**SECTION – A**

- Q1. Which of the following indicates a statistical study?
- |                       |                         |
|-----------------------|-------------------------|
| a) Collection of data | b) Presentation of data |
| c) Analysis of data.  | d) All of these         |
- Q2. In what type of papers pictures are drawn:
- |                |                   |
|----------------|-------------------|
| a) Graph paper | b) White paper    |
| c) Any         | d) None of these. |
- Q3. The most common measurement of central tendency is:
- |           |                   |
|-----------|-------------------|
| a) Median | b) Multiple       |
| c) Mean   | d) Weighted mean. |
- Q4. Where is correlation multiple placed:
- |                        |                      |
|------------------------|----------------------|
| a) Between 0 and + 1   | b) Between – 1 and 0 |
| b) Between – 1 and + 1 | d) None of these     |
- Q5. Statistics is:
- |                   |                  |
|-------------------|------------------|
| a) Facts          | b) Presentation  |
| c) Numerical data | d) None of these |
- Q6. Economic problem arises due to the fact that:
- |                         |                    |
|-------------------------|--------------------|
| a) Resources are scarce | b) Human is greedy |
| c) Wants are limited    | d) None of these   |
- Q7. Grouping method is used in case of:
- |           |                 |
|-----------|-----------------|
| a) mean   | b) Mode         |
| c) Median | d) All of these |
- Q8. Highest degree of correlation is:
- |       |         |
|-------|---------|
| a) -1 | b) 0    |
| c) 1  | d) N.D. |



Q9. Intersection point of ogive is equals to:

- a) Median
- b) Mode
- c) Mean
- d) None of these

Q10. Bar diagram is:

- a) One dimensional diagram
- b) Two dimensional diagram
- c) Diagram with no dimension
- d) None of these

Q11. On the basis of given data prepare a simple bar diagram.

|            |         |         |         |         |           |           |
|------------|---------|---------|---------|---------|-----------|-----------|
| Year       | 1951-60 | 1961-70 | 1971-80 | 1981-90 | 1991-2000 | 2001-2010 |
| Birth Rate | 45      | 35      | 30      | 28      | 24        | 20        |

Q12. On the basis of data given below prepare diagram of more than ogive and less than ogive.

|                 |      |       |       |       |       |       |       |
|-----------------|------|-------|-------|-------|-------|-------|-------|
| Marks           | 0-10 | 10-20 | 20-30 | 30-40 | 40-50 | 50-60 | 60-70 |
| No. of Students | 5    | 12    | 20    | 35    | 24    | 12    | 4     |

Q13. Calculate the mean of the data given below.

|                |       |       |       |       |       |
|----------------|-------|-------|-------|-------|-------|
| Class Interval | 10-20 | 20-30 | 30-40 | 40-50 | 50-60 |
| Frequency      | 4     | 10    | 25    | 8     | 2     |

Or

Find out median from the data given below.

|           |   |    |    |    |    |    |
|-----------|---|----|----|----|----|----|
| M.V.      | 5 | 15 | 25 | 35 | 45 | 55 |
| Frequency | 4 | 6  | 10 | 13 | 9  | 5  |

Q14. Read the given case carefully and answer the following questions on the basis of the same.

Correlation is positive or negative would depend upon the direction of change of the variables if both the variables are moving in the same direction that is if as one variable is decrease it the other on an average is also decreasing or if as one variable is increasing the other on an average is also increasing, correlation is said to be positive. If, on the other hand, the variables are varying in opposite direction that is as one variable is increasing the other is decreasing or vice-versa, correlation is said to be negative.

When only two variables are studied it is the problem of simple correlation. When three or more variables are studied, it is the problem of either multiple or partial correlation. In multiple correlation 3 or more variables are studied simultaneously. On the other hand partial correlation Veer recognize more than two variables, but consider only two variables to be influencing each other, the effect of the other influencing variables being kept constant.

If the amount of change in one variable tends to bear a constant ratio to the amount of change in the other variable, then the correlation is said to be linear. Correlation would be called non-linear or curvilinear if the amount of change in one variable doesn't bear a constant ratio to the amount of change in the other variable.

- a) If two variables no in the same direction it is called -----.
- b) What is simple correlation?
- c) When there is negative correlation?
- d) When there is linear correlation?

Q15. Explain any four problems while constructing an index number.

Or

Explain degrees of correlation.

Q16. Calculate Fisher's index number from the following.

| Commodity                  | A  | B  | C  | D  | E  |
|----------------------------|----|----|----|----|----|
| Base Year Price (P0)       | 10 | 25 | 30 | 15 | 20 |
| Current Year Price (P1)    | 15 | 40 | 45 | 30 | 25 |
| Base Year Quantity (Q0)    | 6  | 10 | 15 | 20 | 8  |
| Current Year Quantity (Q1) | 8  | 20 | 12 | 15 | 6  |

Or

Calculate Paasche's and Laspeyer's Price index number from the following.

| Commodity                  | A  | B  | C  | D  | E  |
|----------------------------|----|----|----|----|----|
| Base Year Price (P0)       | 10 | 25 | 30 | 15 | 20 |
| Current Year Price (P1)    | 15 | 40 | 45 | 30 | 25 |
| Base Year Quantity (Q0)    | 6  | 10 | 15 | 20 | 8  |
| Current Year Quantity (Q1) | 8  | 20 | 12 | 15 | 6  |

Q17. Calculate Correlation from the following variables using Karl Pearson's method.

|          |   |   |    |    |    |    |
|----------|---|---|----|----|----|----|
| <b>X</b> | 3 | 6 | 10 | 12 | 13 | 16 |
| <b>Y</b> | 2 | 5 | 6  | 12 | 14 | 15 |

Or

Find out Sperman's rank correlation.

|           |   |   |   |   |   |    |   |   |   |    |
|-----------|---|---|---|---|---|----|---|---|---|----|
| <b>J1</b> | 1 | 2 | 3 | 4 | 5 | 6  | 7 | 8 | 9 | 10 |
| <b>J2</b> | 2 | 5 | 8 | 7 | 1 | 10 | 4 | 3 | 6 | 9  |

### SECTION – B

Q18. Which of the following economic activities are included in the subject-matter of Economics?

- a) Economic Activities related to Unlimited Wants
- b) Economic Activities related to Limited Resources
- c) Both (a) and (b)
- d) None of these

Q19. Which is a central problem of an economy?

- a) Allocation of Resources
- b) Optimum Utilisation of Resources
- c) Economic Development
- d) All of these

Q20. Consumer's behaviour is studied in:

- a) Micro Economics
- b) Macro Economics
- c) Income Analysis
- d) None of these

- Q21. Which of the following statement is true?
- Utility means want-satisfying power
  - Utility is a function of intensity of desire
  - Desire of consumption gives birth to utility
  - All of these
- Q22. When TU becomes maximum, MU is:
- Positive
  - Negative
  - Zero
  - None of these
- Q23. Under perfect market competition price is fixed by:
- Market forces
  - Consumers
  - Producers
  - All of these
- Q24. Price remains the same in:
- Im perfect market
  - Perfect market
  - Monopoly market
  - Oligopoly market.
- Q25. There is absence of \_\_\_\_\_ in perfect market.
- Transport cost
  - Homogenous goods
  - Producer goods
  - All of these
- Q26. There is \_\_\_\_\_ relationship between and supply.
- Positive
  - Negative
  - Both (a) and (b)
  - None of these
- Q27. When MR becomes zero, TR becomes:
- Minimum
  - Maximum
  - Zero
  - Infinite
- Q28. Define revenue. State the relationship between marginal revalue and average revenue.
- Q29. What to do you understand by Theory of supply? Explain with its assumptions.
- Q30. The market price of a good changes from Rs. 20 to Rs. 5. As a result, the quantity demanded increases by 15 units. The price elasticity of demand is 0.5. Find out the initial and final levels of quantity demanded.

Or

The market price of a good changes from Rs. 20 to Rs. 25. As a result, the quantity supplied increases by 15 units. The price elasticity of spply is 1. Find out the initial and final levels of quantity supplied.

- Q31. Read the given case carefully and answer the following questions on the basis of the same.

The term supply is often confused with stock of the commodity. However, the two terms are different. Stock refers to the total quantity of a particular commodity that is available with the firm particular time. Whereas supply is the part of stock that is willing to sale in the market particular period of time. Can never be less than supply. There are many factors that affect supply of a good like price of a good, price of other goods, price of factor inputs. Supply of a commodity can be express in terms of schedule and curve. Economist have studied the behavior of a seller. As a result of their study, they have explain law of supply. Law of supply States the direct relationship between the price and quantity supplied, other things remain the same.

- a) What is difference between supply and quantity supplied?
- b) What are the factors that affect supply of a commodity?
- c) What are the ways through which quantity supplied can be shown?
- d) What happens if other things change?

Q32. Complete the given table.

| <b>Units Produced</b> | <b>TP</b> | <b>AP</b> | <b>MP</b> |
|-----------------------|-----------|-----------|-----------|
| 1                     | 100       | -         | -         |
| 2                     | -         | -         | 140       |
| 3                     | -         | 140       | -         |
| 4                     | 480       | -         | -         |

Or

Explain the law of increasing returns of variable proportions with its reasons.

Q33. Explain producer's equilibrium using Marginal Revenue and Marginal Cost approach.

Or

With the help of table and diagram show that at the point of equilibrium Marginal cost and Marginal Revenue becomes equal.

Q34. Explain how price is determined under perfect market competition?

Or

If supply of a product increases but demand remains the same explain what will in equilibrium price and equilibrium quantity.

**SHARDEIN SCHOOL**  
**ANNUAL EXAMINATION (2022-23)**  
**CLASS – XI**  
**SUBJECT : MATHS (APPLIED)**

**TIME : 03 HOURS**

**MM : 70**

**NAME :** \_\_\_\_\_

**ROLL NO.** \_\_\_\_\_

**General Instructions :**

- a. This question paper contains five sections A, B, C, D and E. Each section is compulsory.
- b. Section A carries 20 marks weightage, Section B carries 10 marks weightage, Section C carries 18 marks weightage, Section D 20 marks weightage and Section E carries 3 case-based with total weightage of 12 marks.
- c. Section-A comprises of 20 MCQs of 1 mark each.
- d. Section-B comprises of 5 VSA Type Questions of 2 marks each.
- e. Section-C comprises of 6 SA Type Questions of 3 marks each.
- f. Section-D comprises of 4 LA Type Questions of 5 marks each.

**SECTION – A**

Q1. Convert 250 into binary numbered.

- |             |                  |
|-------------|------------------|
| a) 11110110 | b) 11111010      |
| c) 1111101  | d) None of these |

Q2. Simplify :  $\left(\frac{81}{16}\right)^{\left(-\frac{3}{4}\right)} \left[ \left(\frac{25}{9}\right)^{\left(-\frac{3}{2}\right)} \div \left(\frac{5}{2}\right)^{-3} \right]$

- |      |                  |
|------|------------------|
| a) 1 | b) 0             |
| c) 2 | d) None of these |

Q3. Solve for x :  $\log x + \log 5 = 2 \log 3$

- |                  |                  |
|------------------|------------------|
| a) $\frac{2}{3}$ | b) 1             |
| c) $\frac{9}{5}$ | d) None of these |

Q4. If 30<sup>th</sup> March 2020 was Monday. What would be the day after 61 days?

- |             |           |
|-------------|-----------|
| a) Saturday | b) Monday |
| c) Tuesday  | d) Friday |

Q5. Two finite sets have M and K elements. If the number of subsets of the first set is 112 more than the number of subsets of the second set, then find the value of M and K.

- |                 |                 |
|-----------------|-----------------|
| a) M = 2, K = 3 | b) M = 5, K = 4 |
| c) M = 6, K = 7 | d) M = 7, K = 4 |

Q6. The Cartesian product of A x A has 9 elements among which are round (-1, 0) and (0,1). Find the set A.

- |                   |                  |
|-------------------|------------------|
| a) A = {-1, 0, 1} | b) A = {1, 0, 1} |
| c) {-1, 0, -1}    | d) None of these |





**SECTION – C**

Q26. A cylindrical water tank of diameter 1.4 m and height 2.1 m is being fed by a pipe of diameter 3.5 cm through which water flows at the rate of 2 m/s. Calculate the time it takes to fill the tank.

Or

Taps A and B can fill a tank in 4 hours and 6 hours respectively and tap C (at the bottom) can empty it in 12 hours. If all the three taps are opened together when the tank is empty. Find after how many hours the tank will be full.

Q27. The sum of two numbers is 6 times their Geometric Mean so that the number are in the ratio  $(3 + 2\sqrt{2}) : (3 - 2\sqrt{2})$ .

Q28. Rohit is husband of Vanshika. Sumita is sister of Rohit. Anushka is sister of Vanshika. How Anushka is related to Rohit?

Q29. if  $e^x + e^y = e^{x+y}$ , prove that  $\frac{dy}{dx} = -e^{y-x}$

Q30. Mr. Saxena from Bhopal MP has an electricity connection of 5 KW. He consumed 1264 units in one month. Calculate his electricity bill for that month Tariff plan given below.

|                          |      |        |         |      |
|--------------------------|------|--------|---------|------|
| No. of units (in Kwh)    | 0-50 | 51-100 | 101-300 | >300 |
| Price per units (in Rs.) | 4.05 | 4.95   | 6.30    | 6.50 |

Fixed change = Rs. 250 per KW per month, Surcharge = Nil, Energy Duty = Rs. 0.63 per unit

Q31. Examine continuity of the function  $f(x) = 5x - 3$  at  $x = -3$ .

**SECTION – D**

Q32. A man borrowed a sum of money and agrees to pay off by paying Rs. 3,150 at the end of the first year and Rs. 4,410 at the end of the second years. If the rate of compound interest is 5% per annum. Find the sum borrowed.

Q33. The sum of three numbers in GP if subtract 1,7,21 from the numbers in that order we obtain an A.P. Find in the numbers.

Or

Find the sum of first n terms of the series.

$$7 + 77 + 777 + \dots$$

Q34. Find the mean, variance and standard deviation for the following data.

|             |      |       |       |        |         |         |         |
|-------------|------|-------|-------|--------|---------|---------|---------|
| Classes     | 0-30 | 30-60 | 60-90 | 90-120 | 120-150 | 150-180 | 180-210 |
| Frequencies | 2    | 3     | 5     | 10     | 3       | 5       | 2       |

Q35. Manufacturer A sells a washing machine to a dealer B for Rs. 12,500. The dealer B sells it to a consumer at a profit of Rs. 1,500. If the sales are intra-state and the rate of GST is 12%. Find

- a) The amount of tax (under GST) paid by the dealer B to the Central Government.
- b) The amount of tax (under GST) received by the State Government.
- c) The amount that the consumer pays for the machine.



## SECTION – E

### Case Study – I

Q36. A panel of two judges P and Q graded seven dramatic performances by independently awarding marks as follows:

| Performance | 1  | 2  | 3  | 4  | 5  | 6  | 7  |
|-------------|----|----|----|----|----|----|----|
| Marks by P  | 46 | 42 | 44 | 40 | 43 | 41 | 45 |
| Marks Q     | 40 | 38 | 36 | 35 | 39 | 37 | 41 |

- a) Based on the above information, answer the following questions : to Mean of the marks given by judge P is
- b) Mean of the marks given by judge Q is
- c) Difference between Standard Deviations of the marks given by Judge P and Judge Q is

### Case Study – II

Q37. Two students Anil and Ashima appeared in an examination. The probability that Anil qualify the examination is 0.05 and that Ashima will qualify is 0.10. The probability that both will quality is 0.02. Find the probability that

- a) Both Anil and Ashima will not qualify the exam
- b) Atleast one of them will not qualify the exam and
- c) Only one of them will qualify the exam

### Case Study – III

Q38. In a survey of 60 peoples, it was found that 21 people liked product A. 26 liked product B and 29 liked product C. If 14 people liked products A and B, 12 people liked product C and 14 people liked product B and C and 8 people liked all the three products. Find

- a) How many people liked product C only?
- b) How many people like atleast one of the three products?
- c) How many people do not like any of the three products?

**SHARDEIN SCHOOL**  
**ANNUAL EXAMINATION (2022-23)**  
**CLASS – XI**  
**SUBJECT : MATHS (CORE)**

**TIME : 03 HOURS**

**MM : 80**

**NAME :** \_\_\_\_\_

**ROLL NO.** \_\_\_\_\_

**General Instructions :**

- a. This Question paper contains – five sections A, B, C, D and E. Each section is compulsory. However, there are internal choices in some questions.
- b. Section A has 19 MCQ's and 01 Assertion-Reason based questions of 1 mark each.
- c. Section B has 5 questions of 2 marks each.
- d. Section C has 6 Short Answer -type questions of 3 marks each.
- e. Section D has 4 Long Answer type questions of 5 marks each.

**SECTION – A**

Q1.  $(A')' = ?$

- |               |         |
|---------------|---------|
| a) $\cup - A$ | b) $A'$ |
| c) $\cup$     | d) $A$  |

Q2. Two functions f and g are said to be equal if f

- a) the domain of f = the domain of g
- b) the co-domain of f = the co-domain of g
- c)  $f(x) = g(x)$  for all x
- d) All of above

Q3. The value of  $\cos 5\pi$  is

- |       |                  |
|-------|------------------|
| a) 0  | b) 1             |
| c) -1 | d) None of these |

Q4. The value of  $\sqrt{(-25)} + 3\sqrt{(-4)} + 2\sqrt{(-9)}$  is

- |        |         |
|--------|---------|
| a) 13i | b) -13i |
| c) 17i | d) -17i |

Q5. The value of x and y if  $(3y - 2) + i(7 - 2x) = 0$

- |                                       |                                       |
|---------------------------------------|---------------------------------------|
| a) $x = \frac{7}{2}, y = \frac{2}{3}$ | b) $x = \frac{2}{7}, y = \frac{2}{3}$ |
| c) $x = \frac{7}{2}, y = \frac{3}{2}$ | d) $x = \frac{2}{7}, y = \frac{3}{2}$ |

Q6. if  $(x+3)/(x-2) > 1/2$  then x lies in the interval

- |                   |                  |
|-------------------|------------------|
| a) $(-8, \infty)$ | b) $(8, \infty)$ |
| c) $(\infty, -8)$ | d) $(\infty, 8)$ |

Q7. If repetition of the digits is allowed, then the number of even natural numbers having three digits is

- |        |        |
|--------|--------|
| a) 250 | b) 350 |
| c) 450 | d) 550 |



Q19. If  $\alpha + \beta = \frac{\pi}{4}$ , then the value of  $(1 + \tan \alpha)(1 + \tan \beta)$  is

- a) 1
- b) 2
- c) -2
- d) Not defined

Q20. Directions : In the following question, a statement of Assertion is given followed by a corresponding statement of Reason just below it.

Assertion (A) : The set  $D = \{x : x \text{ is a prime number which is a divisor of } 60\}$  in roster form is  $\{1, 2, 3, 4, 5\}$ .

Reason (R) : The set  $E =$  the set of all letters in the word 'TRIGONOMETRY', in the roster form is  $\{T, R, I, G, O, N, M, E, Y\}$ .

of the statements, mark the correct answer as

- a) Both assertion and reason are true and reason is the correct explanation of assertion.
- b) Both assertion and reason are true but reason is not the correct explanation of assertion.
- c) Assertion is true but reason is false.
- d) Assertion is false but reason is true.

### SECTION – B

Q21. In a survey of 60 people, it was found that 25 people read newspaper H, 26 read newspaper T, 26 read newspaper I, 9 read both H and I, 11 read both H and T, 8 read both T and I, 3 read all three newspapers. Find the number of people who read exactly one newspaper.

Q22. Define Modulus and Signum function and draw their graphs.

Q23. Find modulus and argument of  $\frac{1}{1+i}$ .

Or

Convert the complex number  $\frac{-16}{(1+i\sqrt{3})}$  into polar form.

Q24. Find the sum to n terms of the sequence 8, 88, 888, 8888 .....

Q25. Find the equation of the ellipse with major axis along X-axis and passing through the points (4, 3) and (-1, 4).

### SECTION – C

Q26. A committee of 7 has to be formed from 9 boys and 4 girls. In how many ways can this be done when the committee consists of

- a) exactly 3 girls
- b) atleast 3 girls
- c) atmost 3 girls

Or

Find the number of words with or without meaning which can be made using all the letters of the word AGAIN. If these words are written as in a dictionary what will be the 50<sup>th</sup> word.



### Case Study II

Q37. The following is the distribution of number of students having marks in the given range of class intervals.

|           |       |       |       |       |       |       |        |
|-----------|-------|-------|-------|-------|-------|-------|--------|
| Classes   | 30-40 | 40-50 | 50-60 | 60-70 | 70-80 | 80-90 | 90-100 |
| Frequency | 3     | 7     | 12    | 15    | 8     | 3     | 2      |

- Find the mean for the following distribution.
- Find the variance for distribution.
- What is the standard deviation for the data?

### Case Study III

Q38. Five people are playing with a deck of 52 playing cards. When a hand of 7 cards is drawn from a well shuffled deck of 52 cards. Based on information answer the following.

- Find the probability that cards drawn contain all kings.
- What is the probability that cards drawn contains 3 kings.
- Find the probability that cards drawn contains at least 3 kings.