

**St. Mary's School, Dwarka**  
**Winter Holiday Homework-2023**  
**Class XI**

**General Instructions:**

- 1) The work should be done neatly and in a systematic way.
- 2) The given questions are to be done in your respective subject notebooks

**Subject: English**

**Q1. Complete the following question according to the given instruction for each :-**

**Select the correct option to fill in the blanks:-**

**( $\frac{1}{2} \times 8 = 4$ )**

- i. Tourist: I would like to know about the tours your company offers.  
Travel Agent: Sir, could you tell me which \_\_\_\_\_ ?
  - a) places you are liking to visit
  - b) places you would like to visit
  - c) places you are to visit
  - d) places you are visiting
- ii. For the first time, the Indian Railways \_\_\_\_\_ to utilize track-laying machines that \_\_\_\_\_ help put in place one kilometer of railway lines each day.
  - a) was planned, might
  - b) will have planned, can
  - c) is planning, could
  - d) planned, may
- iii. The reason for Kalari being \_\_\_\_\_ than a mere martial art can be attributed to the fact that Brahmins practiced it. Their influence \_\_\_\_\_ Kalari impart an all-round training to the mind and body of the student.
  - a) more, has made
  - b) many, have made
  - c) much, is making
  - d) most, will make

**iv. Identify the error in the sentence given below:-**

A tsunami is *a series of wave in the water body caused at the displacement of a large volume of water*, generally in an ocean or a large lake.

| Incorrect      | Correct       |
|----------------|---------------|
| a) wave<br>at  | waves<br>by   |
| b) large<br>or | larger<br>and |
| c) at<br>an    | by<br>the     |
| d) is<br>an    | was<br>the    |

**Change into passive form.**

**v. The poachers had killed twenty-two hundred one-horned rhinos in Kaziranga last year.**

- a) Twenty-two hundred one-horned rhinos were killed by poachers in Kaziranga last year.
- b) Twenty-two hundred one-horned rhinos have been killed in Kaziranga by poachers last year.
- c) Twenty-two hundred one-horned rhinos had been killed by poachers in Kaziranga last year.
- d) Twenty-two hundred one-horned rhinos are killed by poachers in Kaziranga last year.

**vi. The author will launch the novel at the Book Fair tomorrow.**

- a) The novel will have launched by the author at the Book Fair tomorrow.
- b) The novel will be launched by the author at the Book Fair tomorrow.
- c) The novel will have been launched by the author at the Book Fair tomorrow.
- d) The novel will have being launched by the author at the Book Fair tomorrow.

**vii. Rearrange to form a meaningful sentence.**

- A. Govind Rawat applies for a
- B. to leave for his village above Joshinath
- C. every year in the month of May
- D. long leave from his office in Dehradun

- a) ADCB
- b) BADC
- c) CBAD
- d) CADB

**viii. Rearrange to form a meaningful sentence.**

- A. world has gone too far with the
- B. such as the mobile phones and internet

- C. innovation of new technologies
- D. it is an undisputable fact that the

- a) ACDB
- b) ABCD
- c) DACB
- d) DCBA

**Q2.** Your friend's daughter left for her coaching classes yesterday and has not been noticed again. Draft an advertisement under the caption 'Missing' for a local newspaper providing necessary details in not more than 50 words. (3)

**Q3.** The Indian handicraft industry forms a major part of the rich cultural heritage of the country. Yet, many people prefer industrial manufactured goods. Write a speech in 150-200 words on 'The Need to Promote Handicrafts Products in the Indian Market'. (4)

**Q4. Read the extract and answer the questions that follow:-** (½ x4=2)

(A) Upward to heaven, whence, vaguely form'd, altogether changed, and yet the same,  
I descend to lave the droughts, atomies, dust-layers of the globe,  
And all that in them without me were seeds only, latent, unborn;  
And forever, by day and night, I give back life to my own origin,  
And make pure and beautify it;

**i. What is the purpose of the rain when it comes down?**

- I. quench thirst of the parched land
- II. wash the smallest particle on earth
- III. clean the entire earth surface
- IV. fill the rivers with water

- a) I, II and III
- b) I, III and IV
- c) II, III and IV
- d) I, II and IV

**ii. The seeds benefit from the rain as it provides \_\_\_\_\_ .**

- a) minerals to the seeds
- b) refreshment to the seeds
- c) nourishment to grow
- d) life to the unborn seeds

- iii. **Antithesis is a figure of speech that places two completely contrasting ideas or clauses in juxtaposition. Which of the following phrases is an example of antithesis?**
- a) upward to heaven
  - b) latent unborn
  - c) day and night
  - d) pure and beautify
- iv. **Which phrase in the above stanza means the same as ‘not yet developed’?**
- a) vaguely
  - b) latent
  - c) lave
  - d) atomies

**(B) Answer the following questions in 40-50 words each.**

**(2x1=2)**

How is Bakhar’s account of the Battle of Panipat different from other history books?

**Q5. Answer the following questions in 120-150 words.**

**(5x1=5)**

“Hope is being able to see that there is light despite all of the darkness.” How does Andrew Mason in the lesson ‘Birth’ emerge victorious amidst many challenges?

### **Subject : Mathematics**

Q1. Given two points A(1, 4) and B(5, 2), find the equation of the circle with AB as the diameter. (3)

Q2. Find the equation of a circle that passes through the points (1, 2), (3, 4), and (5, 6) (3)

Q3. Given a right-angled triangle with vertices (0, 0), (3, 0), and (0, 4), find the equation of the circle inscribed in the triangle (3)

Q4. If a circle has the equation  $x^2 + y^2 - 10x + 8y + 25 = 0$ , determine whether the point (4, 3) lies inside, outside, or on the circle. (3)

Q5. Find the coordinates of the vertices of an equilateral triangle inscribed in the circle

$x^2 + y^2 - 8x + 6y - 20 = 0$ . (3)

### **Subject:Accountancy**

- Q.1 The company purchased a plant on July 01 2021, at the cost of Rs.3 00,000; it spent an additional Rs. 50,000 on the installation. The depreciation is charged at 15% p.a. based on the straight line method. The plant was then sold for Rs.1,50,000 on October 01, 2023. A new plant was installed on the same date amounting to Rs.4,00,000 including purchasing value. The accounts for the business are closed on December 31 yearly. You are to show the machinery account and provision for depreciation account for three years. (5)
- Q.2 Shri Krishnan Manufacturing Company purchased ten machines for Rs.75,000 each on July 01 2021. On October 01 2023, a machine was destroyed by fire, and the company admitted an insurance claim of Rs.45,000. On the same date, the company purchased another machine for Rs.1,25,000. The company charge 15% p.a. depreciation on a written down value basis. It also maintains the calendar year as its financial year. Prepare the machinery account for the business from 2021 to 2023. (5)
- Q.3 **The following balances were extracted from the books of M/s Ahuja and Nanda. Calculate the amount of:**  
(a) Cost of goods available for sale during the year  
(b) Cost of goods sold during the year  
Opening stock of 25,000, Credit purchases of 7,50,000, Cash purchases of 3,00,000, Credit sales of 12,00,000, Cash sales 4,00,000, Wages 1,00,000, Salaries 1,40,000, Closing stock 30,000, Sales return 50,000, Purchases return 10,000 (5)
- Q.4 Give journal entries for the following adjustments listed below: (5)  
(a) Outstanding salary was ₹ 3,500.  
(b) Rent unpaid for one month was ₹ 6,000 per annum.  
(c) Insurance prepaid for a quarter was ₹ 16,000 per annum.  
(d) Purchase of furniture costing ₹ 7,000 was entered in the purchases book.
- Q.5 On 1-4 -'17 book value of machine was ₹ 86,000. Depreciation is calculated at 20 % under reducing balance method. This machine was sold at 40 % profit on book value on 31- 12 -'17. From this Information write journal entry for sale of machine. (5)

## **Subject: Business Studies**

- Q.1 Maruti Suzuki strives to minimize the carbon footprint of its manufacturing facilities, products and supply chain operations. The Company believes that investing in environment friendly technologies makes business sense as it brings good returns in the medium to long term.
- The environment policy of the Company promotes energy conservation, 3Rs (Reduce, Reuse and Recycle), green procurement, environment friendly mobility and environment consciousness among its direct stakeholders. Going beyond compliance, the Company works closely with its parent company, Suzuki Motor Corporation, to introduce the latest environment friendly technologies in India, much ahead of statutory requirements. Maruti Suzuki became the first automobile company in India to register a Clean Development Mechanism (CDM) project with the United Nations Framework Convention on Climate Change (UNFCCC). In due course, the Company will earn tradable carbon credits. The Company sends all its hazardous waste to the cement industry for co-processing. All new vehicles are free of hazardous substances and comply with European End of Life vehicle regulations. The Company is working towards continuously improving the fuel efficiency of its cars.
- The Company has designed and implemented various initiatives to achieve zero injury and fatality. These included a rigorous work permit system and an online incident reporting system called Work Safe Online, through which incidents including near- miss cases are captured and reported. The Safety and Welfare Department ensures workplace safety, undertakes awareness and training programmes and executes a safety activity plan that is planned and rolled out each month. In addition to plant level safety committees, departmental safety committees have been formed. The Central Safety Leadership Council (CSLC) comprises top management from all business verticals and reviews safety performance of the Company on a quarterly basis.
- All contractors and service providers working within the Company premises are required to observe 'Safety, Health and Environment' conditions. Separate training and awareness sessions are organised to sensitize them on occupational safety.
- Quoting lines from the above passage, mention social responsibilities that Maruti Suzuki is fulfilling. (5)
- Q.2 Ten years ago only about a dozen Fortune 500 companies issued a CSR or sustainability report. Now the majority does. More than 8,000 businesses around the world have signed the UN Global Compact pledging to show good global citizenship in the areas of human rights, labor standards and environmental protection. The next generation of business leaders is even more likely to prioritize CSR. According to data released this month by Net Impact, the nonprofit that aims to help businesses promote sustainability, 65% of MBAs surveyed say they want to make a social or environmental difference through their jobs. Consumer Protection Act, 1986 and jago grahak jago campaigns have made consumers' aware of their rights and businesses cannot afford to ignore their duties towards consumers.

Today, amid a lingering recession that has dented corporate profits and intensified pressure from shareholders, companies are devising new CSR models. Rather than staffing a modest CSR department - and slapping it on the org chart as a small offshoot of the public relations (PR) or philanthropy division - many companies are instead trying to embed CSR into their operations because they have realized that social interest and business interest are closely connected.

Workers are no more illiterate. They are aware of their rights and in these situations, companies cannot afford to ignore their duties towards labour.

Quoting lines from the above passage clarify reality of social responsibility. (5)

Q.3 Mr. John has Rs.1,00,000 for investment purposes. Should he invest in equity shares, preference shares, public deposits or debentures? Justify your answer. (5)

Q.4 Ratnamani metals & tubes Ltd. is a multi-location, multi-product company, manufacturing tubes and pipes in stainless steel/exotic material in wide size ranges, for wide spectrum of applications. It now wants to cater to the Asian market and decided to invest in new hi-tech machines. Since the investment is large, the finance manager wants to raise funds through cheapest long-term source of finance. On the basis of the given information about Ratnamai Metals & Tubes Ltd., answer the following questions

a) Identify and explain the source of finance to be used by company to meet its funds requirement.

b) State any four merits of the source of finance identified in part (a) 5

Q.5 Automotive systems corporation Ltd. is one of the largest suppliers of road vehicles electronic and mechanical security system. The company has a diversified product portfolio encompassing from mechanical and electronic security system, electronic controllers for electric vehicles and plastic interiors across the globe. The company plans to set up a new unit to manufacture die casting parts and high-class surface finishing parts for auto and consumer durable industry. The company needs rupees seventy crore as additional capital to fund its new unit. Atul Jalan, the CEO of the company wanted to raise funds through issue of equity shares. On the other hand, the Finance Manager Nimi Sahdev said that the public issue may be expensive on account of various mandatory and non-mandatory expenses. Therefore, it was decided to borrow from a special financial institution.

On the basis of aforesaid information, answer the following questions:

a) Identify and explain the source of fund used by company to its new unit.

b) State any two merits of raising funds through the source specified in part(a) (5)

## Subject: Informatics Practices

**Q1 Consider the following table: Customers and write SQL Commands for the following:**  
(1x10=10)

| customer_id | first_name | last_name | age | country |
|-------------|------------|-----------|-----|---------|
| 1           | John       | Doe       | 31  | USA     |
| 2           | Robert     | Luna      | 22  | USA     |
| 3           | David      | Robinson  | 22  | UK      |
| 4           | John       | Reinhardt | 25  | UK      |
| 5           | Betty      | Doe       | 28  | UAE     |

- Display all columns of the Customers table.
- Select all records from the Customers table with last\_name 'Doe'
- Create the above table and insert the records as shown.
- Select age and country columns from customers table where the country is 'USA'
- Select all columns from Customers table with first name 'John'
- Select all columns from Customers table with age greater than 25
- Select all columns from Customers table with last\_name 'Doe' and country 'USA'
- Modify the age to 21 for customer id 1.
- Modify changes the value of the country column to NP for all rows.
- The SQL command changes the value of the first\_name column to **Johnny** and last\_name to **Depp** if customer\_id is equal to 1.

**Q2 Predict the output for the following:**

(1x6=6)

```
a)
dictionary = {}
dictionary[1] = 1
dictionary['1'] = 2
dictionary[1] += 1

sum = 0
for k in dictionary:
    sum += dictionary[k]
print (sum)
```



b)

```
dictionary = {1:'1', 2:'2', 3:'3'}
```

```
del dictionary[1]
dictionary[1] = '10'
del dictionary[2]
print (len(dictionary))
```

c)

```
list1 = ['physics', 'chemistry', 1997, 2000]
list2 = [1, 2, 3, 4, 5, 6, 7 ]
print "list1[0]: ", list1[0]      #statement 1
print "list1[0]: ", list1[-2]     #statement 2
print "list1[-2]: ", list1[1:]    #statement 3
print "list2[1:5]: ", list2[1:5]  #statement 4
```

d)

```
L1 = [1, 1.33, 'GFG', 0, 'NO', None, 'G', True]
val1, val2 = 0, "
for x in L1:
    if(type(x) == int or type(x) == float):
        val1 += x
    else if(type(x) == str):
        val2 += x
    else:
        break
print(val1, val2)
```

e)

```
L1 = [1, 2, 3, 4]
L2 = L1
L3 = L1.copy()
L4 = L3
L1[0] = [5]
print(L1, L2, L3, L4)
```

f)

```
words= ["Apple", "Banana", "Car", "Dolphin" ]
for word in words:
    #This loop is fetching word from the list
    print ("The following lines will print each letters of "+word)
```

for letter in word:

```
#This loop is fetching letter for the word
print (letter)
print("") #This print is used to print a blank line
```

**Q3 Find the errors in the following Python snippets:**

**(3)**

a)

```
for number in range(10):
    count = count + number
print("The count is:", count)
```

b)

```
for number in range(10):
    # use a if the number is a multiple of 3, otherwise use b
    if (Number % 3) == 0:
        message = message + a
    else:
        message = message + "b"
print(message)
```

c)

```
numbers = [1.5, 2.3, 0.7, -0.001, 4.4]
total = 0.0
for n in numbers:
    assert n > 0.0, 'Data should only contain positive values'
    total += n
print('total is:', total)
```

**Q4 Answer the following:**

- a) What are the advantages of Tuple over List? (1)
- b) What is indexing and negative indexing in Tuple? (1)
- c) What is the difference between a mutable data type and an immutable data type? (1)
- d) Write the characteristics of membership operator. (1)
- e) Write the equivalent Python expression for the following:  $x^3 + y^3 + \sqrt{\frac{xy}{2a}}$  (1)
- f) Write SQL command to create the following table STUDENT with the given constraints: (2)

| Field Name | Type    | Width | Constraints |
|------------|---------|-------|-------------|
| Rollno     | int     |       | Primary key |
| Stud_Name  | varchar | 25    |             |
| DOB        | date    |       |             |
| Subject    | varchar | 24    |             |
| Marks      | int     |       |             |

- g) How many ways are there in Python to represent an integer literal? (2)
- h) What do you mean by integrity constraint in a database? (2)

### **Q5 Practical Work:**

Execute all Type C programs of the chapters Lists and Dictionaries and paste the screenshots in the practical file.

### **Subject – Economics**

- Q1. State with reasons, whether the following items will have elastic or inelastic demand: (i) Matchbox; (ii) Cold Drink; (iii) Medicines; (iv) Salt; (v) Electricity; (vi) Cigarettes; (vii) Butter for a poor person. (5)
- Q2. The price elasticity of demand for good X is known to be twice that of good Y. Price of X falls by 5% while that of good Y rises by 5%. What is the percentage change in the quantities demanded of X and Y? (5)
- Q3. What are the different phases in the Law of Variable Proportions in terms of Total Product? Give reasons behind each phase. Use diagram. (5)
- Q4. Let the production function of a firm be:  $Q = 2L^2K^2$ . Find out the maximum possible output that the firm can produce with 5 units of L and 2 units of K. What is the maximum possible output that the firm can produce with zero unit of L and 10 units of K? (5)
- Q5. Why is the equality between marginal cost and marginal revenue necessary for a firm to be in equilibrium? Is it sufficient to ensure equilibrium? Explain. (5)