

## Class 6th Autumn Holidays Homework

### Maths

Q1. Prepare your MDP(Multi- Disciplinary Project)on the topic "Health and Yoga".

Q2. Complete your Learner's Diary.

Q3. Give five examples from your day to day life where you use fractions.

Q4. Represent the following fractions on the number line:  $1/4$  ,  $3/5$  ,  $-4/7$  ,  $-3/8$ .

Q5. What is fraction? Discuss various types of fractions.

Q6. Arya, Abhimanyu, and Vivek shared lunch. Arya has brought two sandwiches, one made of vegetable and one of jam. The other two boys forgot to bring their lunch. Arya agreed to share his sandwiches so that each person will have an equal share of each sandwich. (a) How can Arya divide his sandwiches so that each person has an equal share? (b) What part of a sandwich will each boy receive?

Q7. Kanchan dyes dresses. She had to dye 30 dresses. She has so far finished 20 dresses. What fraction of dresses has she finished?

Q8. Write the natural numbers from 2 to 12. What fraction of them are prime numbers?

Q9. Write the natural numbers from 102 to 113. What fraction of them are prime numbers?

Q10. Express the following as mixed fractions : (a)  $20/3$  (b)  $11/5$  (c)  $17/7$  (d)  $28/5$  (e)  $19/6$  (f)  $35/9$

### English

1. Write ten Homophones and differentiate between them using pictures. Also make sentences using these homophones.
2. Write the names of any two Asanas and write their steps.

### Science

- Multidisciplinary Project: (Yoga and Health)
  - Enlist 10 benefits of yoga on mind and body.
  - Prepare a poster showing the steps of Surya Namaskar.
  - Explain any 5 Asanas in yoga with diagrams.

Prepare Learner's diary in described format.

Make a working model for science exhibition (voluntary)

### Social Science

Paste pictures of the four seasons in India. Write four lines on the season you love the most.

2. Paste five pictures of festival of Dussehra.

3. Prepare a small diary on your hobbies.

4. Take a political map of India and mark all the states on it.

5. Watch news every day and enjoy your holidays.

### Hindi

1. कारक किसे कहते हैं ? इसके भेद के नाम भी लिखो ।
2. भाववाचक संज्ञा के 10 उदाहरण लिखकर वाक्य बनाओ ।
3. योग के महत्व पर पाँच पंक्तियाँ लिखिए ।
4. योग से संबंधित पाँच चित्र बनाओ ।

### Sanskrit

1. सूक्तिस्तबकः पाठ के सभी श्लोकों को कण्ठस्थ करो
2. " बालक " शब्द के रूपों को सभी विभक्तियों में याद करो
3. "पठ्" धातु के रूपों को सभी लकारों में लिखो व याद करो
4. योगस्य कानिचित् पञ्च वाक्यानि रचयत
5. योगविषये कमप्येकं श्लोकं लिखत ( नोट : प्रश्न 4 और 5 MDP)

### Art

1. Draw a poster drawing on A.I .or Cyber security or exam stress in A3 size sheet and colour it using any colour (water colours or crayon colours).
2. Draw a beautiful landscape on A4 size sheet and paint it using water colours.
3. Diya decoration with color or mirror and dori.(any one)

## Class 7th Autumn Holidays Homework

### Maths

- Q1. Prepare your MDP(Multi- Disciplinary Project)on the topic “Food and Nutrition ”.
- Q2. Complete your Learner’s Diary.
- Q3. Write a project on development of number system
- Q4. Represent the following rational numbers on the number line:  $1/6$  ,  $3/7$  ,  $-4/7$  ,  $-3/8$ .
- Q5. What is a rational number? Give examples
- Q6. List five rational numbers between: (i)  $-1$  and  $0$  (ii)  $-2$  and  $-1$  (iii)  $-4/5$  and  $2/3$  and (iv)  $-1/2$
- Q7. Rewrite the following rational numbers in the simplest form: (i)  $-8/6$  (ii)  $25/45$  (iii)  $-44/72$  (iv)  $-8/72$
- Q8. Write the following rational numbers in ascending order: (i)  $-3/5$  ,  $2/5$  and  $1/5$  (ii)  $-3/7$  ,  $-7/3$  and  $3/4$
- Q9. Satpal walks  $2/3$  km from a place P, towards east and then from there  $15/7$  km towards west. Where will he be now from P?
- Q10. What is standard form of a rational number? Give five examples.

### English

1. Make a poster on EAT HEALTHY STAY HEALTHY.
2. Write a dialogue between a burger and an apple telling their merits and demerits.

### Hindi

- एम..डी.पी परियोजना कायय फूम कीजजये ।
- संज्ञा ,सर्यनाम ,वर्शेषर् ,क्रिया वर्शेषर् की परिभाषा भेद सहित याद किके हिंदी वर्षय की उत्तिपुजततका में लिखिए ।
- प्रततहदन बसंत पाठ्य पुततक एर्ं बाि मिभाित से दस -दस कहिन शब्दों के अर्ं अपनी उत्ति पुजततका में लिखिए ।
- दशििा फूम का सुंदि का चित्र बनाइए ।
- दो हदनके अर्काशके लिए प्रािायय जी पत्र लिखिए ।
- (नोट -शिदकािीन अर्काशके सभी कायय आप सभी अपनी -अपनी हिंदी की उत्तिपुजततका में िी किंगे ।)

### Social Science

According to the instructions given to all the students

1. A project on the traditional food of different states under the subject Food and Nutrition under MDP. To prepare.
2. All students will write the terms of geography, history, civics in note copy.
3. Fill out all the world maps of the syllabus and put them in your notebook.

### Science

1. Multi-disciplinary project: Topic: Food and Nutrition
  - A. Enlist 10 practices to maintain hygienic environment.
  - B. Make a healthy food pyramid consisting of nutrients.
  - C. Draw a poster or model on human digestive system. Or Working model for science exhibition.Prepare learner’s diary.

### Sanskrit

शरद कालीन अवकाश गृह कार्य

कक्षा -सप्तमी विषय- संस्कृत

1.51 से 100 तक संस्कृत गणना अभ्यास पुस्तिका में लिखें।  
2. इश् एवं भू धातु शब्द रूप पाँचों लकारों में लिखकर याद करें।

3. केषाञ्चित् पञ्च फलानां चित्राणि रचयत

4. दैनिक आहार सामग्रीणाम् पञ्च नामानि लिखत

## Art

1. Draw a poster drawing on A.I .or Cyber security or exam stress in A3 size sheet and colour it using any colour (water colours or crayon colours).
2. Draw a beautiful landscape on A4 size sheet and paint it using water colours.
3. Diya decoration with color or mirror and dori.(any one)

## Class 8th Autumn Holidays Homework

### Maths

1. Prepare your MDP(Multi- Disciplinary Project)on the topic "Pollution".
- Q2. Complete your Learner's Diary.
- Q3. Subtract  $5x^2 - 4y^2 + 6y - 3$  from  $7x^2 - 4xy + 8y^2 + 5x - 3y$ .
- Q4. Add:  $7xy + 5yz - 3zx$ ,  $4yz + 9zx - 4y$ ,  $-3xz + 5x$ .
- Q5. Obtain the product of (i)  $xy$ ,  $yz$ ,  $zx$   
(ii)  $2p$ ,  $4q$ ,  $8r$  (iii)  $a$ ,  $-a^2$ ,  $a^3$  (iv)  $a$ ,  $2b$ ,  $3c$ ,  $6abc$  (v)  $m$ ,  $-mn$ ,  $mnp$
- Q6. Simplify the expressions and evaluate them as directed: (i)  $x(x - 3) + 2$  for  $x = 1$ ,  
(ii)  $3y(2y - 7) - 3(y - 4)$  for  $y = 2$
- Q7. Multiply (i)  $(x - 4)$  and  $(2x + 3)$   
(ii)  $(x - y)$  and  $(3x + 5y)$
- Q8. Simplify  $(a + b)(2a - 3b + c) - (2a + 3b)c$ .
- Q9. What is quadrilateral. Discuss various types of quadrilaterals and their properties by drawing figures.
- Q10. Multiply (i)  $(a + 7)$  and  $(b - 5)$   
(ii)  $(a^2 + 2b^2)$  and  $(5a - 3b)$

### Science

- Dear students in your Autumn break revise all chapters and complete all your written work.
- Solve these questions in your science notebook.

Fill in the blanks

1. Fertilization in human beings is takes place in the \_\_\_\_\_
2. The human embryo grows and develops in the \_\_\_\_\_
3. In a mosquito, the egg hatch to produce \_\_\_\_\_
4. Hydra reproduces by the process of \_\_\_\_\_
5. As a result of fertilization \_\_\_\_\_ is formed.
6. Organisms in which male and female gametes are present in the same organism are called \_\_\_\_\_
7. The tube that carries the sperm to the urethra is called \_\_\_\_\_
8. The mode of reproduction which involves only one parent is \_\_\_\_\_
9. e process of cell changing their size, shape and form specialized cells is called \_\_\_\_\_
10. Human are \_\_\_\_\_ While birds are \_\_\_\_\_
11. Sex cells are also called \_\_\_\_\_. In animals the male sex cell is called \_\_\_\_ And the female sex cell is called an \_\_\_\_\_
12. \_\_\_\_\_ is the male sex hormone , \_\_\_\_\_ and \_\_\_\_\_ is the female sex hormone.
13. The \_\_\_\_\_ is connected to the foetus by the umbilical cord.
14. Foetus is protected by the \_\_\_\_\_ and \_\_\_\_\_
15. Fallopian tube be is also called \_\_\_\_\_

Multiple Choice Questions

### Question 1

In human beings, after fertilisation, the structure which gets embedded in the wall of uterus is

(a) ovum

- (b) embryo
- (c) foetus
- (d) zygote

**Question 2**

Reproduction by budding takes place in

- (a) hydra
- (b) amoeba
- (c) paramecium
- (d) bacteria

**Question 3**

Viviparous organisms are the ones which

- (a) Produce eggs
- (b) Produce young ones
- (c) Both a and b
- (d) None of these

**Question 4**

A sperm consists of

- (a) Head and Tail
- (b) Head ,middle, Tail
- (c) Head
- (d) None of these

**Question 5**

The cell formed after fertilisation is called

- (a) Foetus
- (b) Embryo
- (c) Zygote
- (d) None of these

**Question 6**

Which of the following sequences is in the correct order?

- (a) Zygote -> Embryo -> Foetus -> Baby
- (b) Zygote -> Embryo -> Baby -> Foetus
- (c) Embryo -> Zygote -> Baby -> Foetus
- (d) Foetus -> Zygote -> Embryo -> Baby

**Question 7**

Which of the following is/are types of asexual reproduction?

- (a) Budding
- (b) Binary fission
- (c) Spore formation
- (d) All the above

**Question 8**

In humans, the development of fertilised egg takes place in the

- (a) ovary
- (b) testis
- (c) uterus
- (d) oviduct

**Question 9**

The animals which lay eggs are called as

- (a) Oviparous animals
- (b) Viviparous animals
- (c) Domestic animals
- (d) Wild animals

**Question 10**

Which of these are the male reproductive organs in humans?

- (a) sperms
- (b) testes
- (c) ova
- (d) ovaries

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Which of these are the male reproductive organs in humans?

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- (b) testes
- (c) ova
- (d) ovaries

2. Draw all the diagrams of L-6 Reproduction in animals

3. Prepare a simple working model for Science Exhibition.

**Social Science**

1) Prepare the MDP file on the following:-

- I. Write five difference on public and private hospitals
- II. Write any five proverbs on health is wealth.
- III. Locate any five major hospitals on the map of Delhi.

IV Write any five measures of water conservation.

2) Do the questions and answers of the lesson — “Civilising the Native Educating the nation”

3. Read the Newspaper and note down the important news.

4. Read the autobiography / biography of women who relentlessly worked for the upliftment of the society and rights of women.

ENJOY your Holidays.

**Hindi**

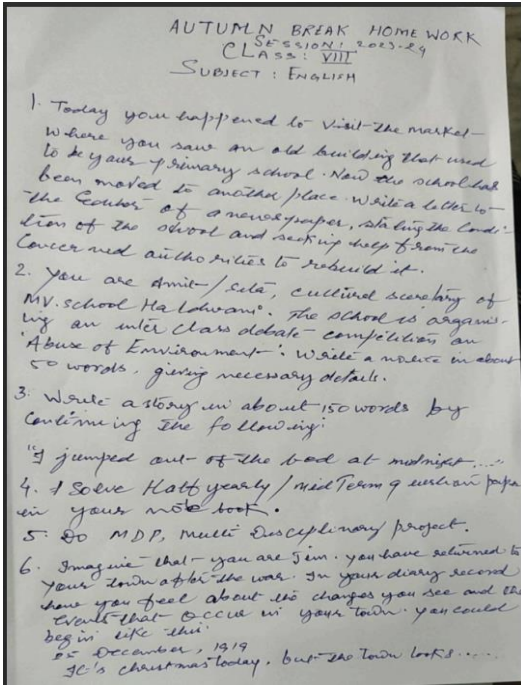
1. हमें प्रतिदिन व्यायाम क्यों करना चाहिए इससे होने वाले लाभों के बारे में 10 पंक्तियाँ लिखिए ।

2. व्यायाम संबंधी चित्र तैयार कर उनके नाम लिखो

3. अपनी हिन्दी की पाठ्य पुस्तक से द्वंद्व और द्विगु समास के 10-10 उदाहरण लिखो

4. अपने आस-पास फैली गंदगी की सफाई के लिए नगर निगम अध्यक्ष को पत्र लिखिए ।

**English**



### Sanskrit

1. संस्कृत में स्व परिचय लिखें।
2. अस् धातु रूप पाँचों लकारों में लिखें।
3. कृत्वा, तुमुन, अनीयर प्रत्यय के 5-5 उदाहरण संस्कृत पुस्तिका पाठ 9, 10 से छाँटकर लिखें।
4. दैनिक व्यायामस्य पञ्च वाक्यानि रचयत
5. व्यायामस्य महत्व विषये पञ्च वाक्यानि रचयत ( प्रश्न 4 और 5 MDP)

### Art

1. Draw a poster drawing on A.I. or Cyber security or exam stress in A3 size sheet and colour it using any colour (water colours or crayon colours).
2. Draw a beautiful landscape on A4 size sheet and paint it using water colours.
3. Diya decoration with color or mirror and dori. (any one)

### Class 9th Autumn Holidays Homework

#### Social Science

Map skill -. Locate and label the following on an outline map of India.

- i. Tropical evergreen forest.
- ii. Tropical deciduous forest.
- iii. Thorny forest and shrubs.
- iv. Mountain forests
- iv. Mangrove forests

Note. Show each on separate map.

2. Paste pictures and write short note on following :-

(a). Leopard. ( b). Golden langur ( c ) Roofed turtle. ( d) Boar. € Indian Bison.

3. Write about different steps of election.

### English

1. Dialogue writing between mother and daughter telling about uses and misuses of technology (internet/ excessive use of mobile phones).
2. Write five poetic devices with three examples each from your textbook.
3. Write your experience how did you spend your autumn break holidays in the form of 'Diary entry'

## Hindi

प्रश्न 1. निम्नलिखित संकेत बिंदुओं के आधार पर 100 शब्दों में शीर्षक सहित एक लघु कथा लिखिए-

एक बूढ़ा किसान था। उसके चारों पुत्र आपस में झगड़ा करते थे। किसान बहुत दुखी था। उसने एक दिन अपने चारों पुत्रों को बुलाया, दुखी मन से कहा, " आपस में झगड़ा करना नहीं करना चाहिए और तुम लोगों को मिल जुल कर रहना चाहिए।" पिताजी की बातें सुनकर चारों पुत्र वहाँ से चले गए। पर लड़ाई-झगड़े का सिलसिला जारी रहा, फिर एक दिन उस बूढ़े किसान ने एक उपाय सोचा.....

प्रश्न 2. निम्नलिखित विषयों पर 250 शब्दों का अनुच्छेद लिखिए।

1. नई शिक्षा नीति 2020

संकेत बिंदु - नई शिक्षा नीति 2020 का परिचय, भाषाई विविधता को बढ़ावा और संरक्षण, पाठ्यक्रम और मूल्यांकन, निष्कर्ष

2. जी-20

संकेत बिंदु - प्रस्तावना, G20 की स्थापना, G20 का सांगठनिक परिचय, 2023 के G20 शिखर सम्मेलन की महत्ता, उपसंहार

प्रश्न 3. अर्थ के आधार पर वाक्य के आठों ( 8) भेदों को लिखकर उनके दो-दो उदाहरण लिखें।

प्रश्न 4. अलंकार के सभी भेदों के दो - दो उदाहरण लिखकर कंठस्थ कीजिए।

प्रश्न 5. आप किसी एक कविता/ कहानी की रचना स्वयं से करें।

## SCIENCE

1. Solve PT2 paper in notebook.
2. Prepare notes for Lesson-12, Improvement of food resources.
3. Write the experiments in practical file.
4. Revise notes of all chapters.
5. Make working model for Science exhibition. (Voluntary)

## BIOLOGY

1. Write two biology experiments in practical file.
2. Revise Chapter 5 and 6 for test.
3. Make a poster/model on any one topic:  
Plant cell, animal cell, cell division, neuron or any topic of choice. OR Make a working model for science exhibition.
4. Complete your notebook if work is pending.

## MATHS

1. COMPLETE YOUR LAB ACTIVITY FILE.
2. DO A PORTFOLIO ASSIGNMENT GIVEN IN CLASS.

## ARTIFICIAL INTELLIGENCE

NOTE: - Revise all the lessons and complete the work given below.

1. What is Artificial intelligence and all 3 domains
2. Supervised Learning and unsupervised learning
3. Neural networks and Deep learning
4. Learning based approach and rule-based approach
5. Reinforcement Learning
6. AI project Cycle
7. 4W Problem Canvas



8. Explain Google Assistant and Amazon Alexa
9. Define • Self Management • Self Awareness • Self confident • Self Motivation • Problem Solving
10. 10. 7'C of effective communication

### Art

1. Draw a still life on A4 size sheet by arranging a composition using two or more objects which are easily available at your home.
2. Draw a folk art painting of your choice on A4 size sheet. Example - Warli art.
3. Diya decoration with mirror and dori.( any one ).

### Class 10th Autumn Holidays Homework

### SCIENCE

1. Solve PT2 paper in notebook.
2. Solve at least 2 sample papers.
3. Write the experiments in practical file.
4. Revise notes of all chapters.
5. Make working model for Science exhibition.  
(Voluntary)

### Hindi

पोर्टफोलियो कार्य पूर्ण कीजिये ।

### English

1. Write about your favourite poet and his poem other than your textbook.
2. Write five poetic devices with three examples each from your textbook.
3. You are Radha/ Raghu C-15 Mayur Vihar, Delhi. Write a letter to the editor of a newspaper on the consequences of climatic changes due to various man made reasons. Take hints : deforestation, pollution, encroachments , unplanned urbanisation and industrialisation .

### Maths

1. Consider the numbers  $4^n$ , where n is a natural number. Check whether there is any value of n for which  $4^n$  ends with the digit zero.  
[3]
2. Find the LCM and HCF of 6 and 20 by the prime factorization method.  
[2]
3. Find the HCF and LCM of 6, 72 and 120, using the prime factorization method.  
[2]
4. Given that  $HCF(306, 657) = 9$ , find  $LCM(306, 657)$ .  
[2]
5. Check whether  $6^n$  can end with the digit 0 for any natural number n.  
[3]
6. Explain why  $7 \times 11 \times 13 + 13$  is composite number.  
[2]
7. Prove that  $\sqrt{5}$  is irrational.  
[3]
8. Prove that  $3 - 2\sqrt{5}$  is irrational.  
[2]

### POLYNOMIALS

1. Find the zeroes of the quadratic polynomial  $x^2 + 7x + 10$ , and verify the relationship between the zeroes and the coefficients.  
[3]
2. Find the zeroes of the polynomial  $x^2 - 3$  and verify the relationship between the zeroes and the coefficients.  
[2]

3. Find a quadratic polynomial, the sum and product of whose zeroes are  $-3$  and  $2$ , respectively.
4. Find the zeroes of the following quadratic polynomials and verify the relationship between the zeroes and the coefficients.  
 i.  $X^2 - 2x - 8$  (ii)  $4s^2 - 4s + 1$  (iii)  $6x^2 - 3 - 7x$   
 [3+3+3]
5. Find a quadratic polynomial each with the given numbers as the sum and product of its zeroes respectively.  
 i.  $0, 5$  (ii)  $1, -1$  (iii)  $-4, 1$   
 [2+2+2]

#### PAIR OF LINEAR EQUATION IN TWO VARIABLES

1. Check whether the pair of equations  
 $x + 3y = 6$  and  $2x - 3y = 12$  is consistent.  
 If so, solve them graphically.  
 [3]
2. Half the perimeter of a rectangular garden, whose length is  $4$  m more than its width, is  $36$  m. Find the dimensions of the garden.  
 [3]
3. Draw the graphs of the equations  $x - y + 1 = 0$  and  $3x + 2y - 12 = 0$ . Determine the coordinates of the vertices of the triangle formed by these lines and the x-axis, and shade the triangular region.  
 [3]
4. Solve the following pair of equations by substitution method:  
 $7x - 15y = 2$  and  $x + 2y = 3$   
 [2]
5. Solve  $2x + 3y = 11$  and  $2x - 4y = -24$  and hence find the value of 'm' for which  $y = mx + 3$ . [2]
6. Five years hence, the age of Jacob will be three times that of his son. Five years ago, Jacob's age was seven times that of his son. What are their present ages?  
 [3]
7. Use elimination method to find solutions of the following pair of linear equations :  
 $2x + 3y = 8$  and  $4x - 6y = 7$   
 [2]
8. A lending library has a fixed charge for the first three days and an additional charge for each day thereafter. Saritha paid Rs 27 for a book kept for seven days, while Susy paid Rs 21 for the book she kept for five days. Find the fixed charge and the charge for each extra day. [4]
9. (i) For which values of  $a$  and  $b$  does the following pair of linear equations have an infinite number of solutions?  
 $2x + 3y = 7$   
 $(a - b)x + (a + b)y = 3a + b - 2$   
 (ii) For which value of  $k$  will the following pair of linear equations have no solution?  
 $3x + y = 1$   
 $(2k - 1)x + (k - 1)y = 2k + 1$   
 [4+3]
10. Solve the following pair of equations by reducing them to a pair of linear equations :  
 $6x + 3y = 6xy$  and  $2x + 4y = 5xy$   
 [2]

#### QUADRATIC EQUATIONS

1. The area of a rectangular plot is  $528 \text{ m}^2$ . The length of the plot (in metres) is one more than twice its breadth. We need to find the length and breadth of the plot.  
 [3]
2. The product of two consecutive positive integers is  $306$ . We need to find the integers.  
 [3]
3. Rohan's mother is  $26$  years older than him. The product of their ages (in years)  $3$  years from now will be  $360$ . We would like to find Rohan's present age.  
 [3]
4. Find the roots of the quadratic equation  $6x^2 - x - 2 = 0$ .  
 [2]

5. Find two numbers whose sum is 27 and product is 182. [2]  
 6. Find two consecutive positive integers, sum of whose squares is 365. [2]  
 7. Find the roots of the following quadratic equations, if they exist, using the quadratic formula:  
 (i)  $3x^2 - 5x + 2 = 0$  (ii)  $x^2 + 4x + 5 = 0$  (iii)  $2x^2 - 2\sqrt{2}x + 1 = 0$  [2+2+2]  
 8. Find the values of k for each of the following quadratic equations, so that they have two equal roots. (i)  $2x^2 + kx + 3 = 0$  (ii)  $kx(x - 2) + 6 = 0$  [2+2]  
 9. Sum of the areas of two squares is 468 m<sup>2</sup>. If the difference of their perimeters is 24 m, find the sides of the two squares. [3]

#### ARITHMETIC PROGRESSION

1. Find the 10th term of the AP : 2, 7, 12, . . . [2]  
 2. Which term of the AP : 21, 18, 15, . . . is - 81? Also, is any term 0? Give reason for your answer. [3]  
 3. Determine the AP whose 3rd term is 5 and the 7th term is 9. [2]  
 4. Check whether - 150 is a term of the AP : 11, 8, 5, 2 . . . [2]  
 5. The 17th term of an AP exceeds its 10th term by 7. Find the common difference. [2]  
 6. Which term of the AP : 3, 15, 27, 39, . . . will be 132 more than its 54th term? [3]  
 7. How many three-digit numbers are divisible by 7? [3]  
 8. How many multiples of 4 lie between 10 and 250? [2]  
 9. Find the sum of first 22 terms of an AP in which d = 7 and 22nd term is 149. [2]  
 10. Find the sum of first 51 terms of an AP whose second and third terms are 14 and 18 respectively. [3]  
 11. Find the sum of the first 40 positive integers divisible by 6. [2]  
 12. Find the sum of the first 15 multiples of 8. [2]  
 13. Find the sum of the odd numbers between 0 and 50. [2]

#### TRIANGLES

- Q.1: In the given figure, DE || BC. Find EC. (1)  
 Q.2: Let  $\Delta ABC \sim \Delta DEF$  and their areas be, respectively, 64 cm<sup>2</sup> and 121 cm<sup>2</sup>. If EF = 15.4 cm, find BC. (1)  
 Q.3: ABC is an isosceles triangle right angled at C. Prove that  $AB^2 = 2AC^2$ . (2)  
 Q.8: State and prove Basic Proportionality Theorem. (4)

#### COORDINATE GEOMETRY

- Q.1: Find the distance between the given pairs of points (a, b), (-a, -b) (1)  
 Q.4: Find the coordinates of a point A, where AB is the diameter of a circle whose centre is (2, -3) and B is (1, 4). (2)  
 Q.5: Find the coordinates of the point which divides the join of (-1, 7) and (4, -3) in the ratio 2 : 3. (2)  
 Q.6: Find the point on the x-axis which is equidistant from (2, -5) and (-2, 9). (3)  
 Q.8: Find a relation between x and y such that the point (x, y) is equidistant from the point (3, 6) and (-3, 4). (3)  
 Q.9: Show that the points (1, 7), (4, 2), (-1, -1) and (-4, 4) are the vertices of a square. (3)  
 Q.10: Find the ratio in which the line segment joining A(1, -5) and B(-4, 5) is divided by the x-axis. Also find the coordinates of the point of division. (4)

#### INTRODUCTION TO TRIGONOMETRY

- Q.1: In  $\Delta ABC$ , right-angled at B, AB = 24 cm, BC = 7 cm. Find: sin A, cos A. (2)  
 Q.2: If  $\sin A = 3/4$  calculate tan A. (2)  
 Q.3: Evaluate  $2 \tan^2 45^\circ + \cos^2 30^\circ - \sin^2 60^\circ$  (2)

Q.4: Show that  $\cos 38^\circ \cos 52^\circ - \sin 38^\circ \sin 52^\circ = 0$  (2)

Q.5: Express  $\cot 85^\circ + \cos 75^\circ$  in terms of trigonometric ratios of angles between  $0^\circ$  and  $45^\circ$ . (2)

Q.6: If  $\sin(A - B) = 1/2$  and  $\cos(A + B) = 1/2$  where  $0^\circ < A + B \leq 90^\circ$ ,  $A > B$ , find A and B. (3)

Q.7: Prove that  $(\sin A + \operatorname{cosec} A)^2 + (\cos A + \sec A)^2 = 7 + \tan^2 A + \cot^2 A$  (3)

Q.8: Prove that  $\sec A (1 - \sin A)(\sec A + \tan A) = 1$ . (3)

Q.10: Prove that  $(\operatorname{cosec} \theta - \cot \theta)^2 = 1 - \cos \theta / 1 + \cos \theta$  (3)

#### SOME APPLICATIONS OF TRIGONOMETRY

Q.1: A tower stands vertically on the ground. From a point on the ground, which is 15 m away from the foot of the tower, the angle of elevation of the top of the tower is found to be  $60^\circ$ . Find the height of the tower.

(2)

Q.2: A circus artist is climbing a 20 m long rope, which is tightly stretched and tied from the top of a vertical pole to the ground. Find the height of the pole, if the angle made by the rope with the ground level is  $30^\circ$ .

(2)

Q.3: The shadow of a tower standing on a level ground is found to be 40 m longer when the Sun's altitude is  $30^\circ$  than when it is  $60^\circ$ . Find the height of the tower.

(3)

Q.4: From a point on the ground, the angles of elevation of the bottom and the top of a transmission tower fixed at the top of a 20 m high building are  $45^\circ$  and  $60^\circ$  respectively. Find the height of the tower. (4)

Q.5: The angle of elevation of the top of a building from the foot of the tower is  $30^\circ$  and the angle of elevation of the top of the tower from the foot of the building is  $60^\circ$ . If the tower is 50 m high, find the height of the building.

(4)

Q.6: From the top of a 7 m high building, the angle of elevation of the top of a cable tower is  $60^\circ$  and the angle of depression of its foot is  $45^\circ$ . Determine the height of the tower. (4)

Q.7: The angles of depression of two ships from the top of a lighthouse and on the same side of it are found to be  $45^\circ$  and  $30^\circ$ . If the ships are 200 m apart, find the

height of the lighthouse. (4)

#### CIRCLES

Q.1: How many tangents can a circle have? (1)

Q.2: A tangent PQ at a point P of a circle of radius 5 cm meets a line through the centre O at a point Q so that  $OQ = 12$  cm. Find PQ. (1)

Q.3: Prove that the tangent at any point of a circle is perpendicular to the radius through the point of contact. (3)

Q.4: Prove that the lengths of tangents drawn from an external point to a circle are equal. (3)

Q.5: A quadrilateral ABCD is drawn to circumscribe a circle. Prove that  $AB + CD = AD + BC$  (3)

Q.6: In the given figure, XY and X'Y' are two parallel tangents to a circle with centre O and another tangent AB with point of contact C intersecting XY at A and X'Y' at B.

Prove that  $\angle AOB = 90^\circ$ . (4)

Q.7: Prove that the angle between the two tangents drawn from an external point to a circle is supplementary to the angle subtended by the line-segment joining the points of contact at the centre. (4)

Q.8: Prove that the parallelogram circumscribing a circle is a rhombus.

#### Social Science

1. Make a project on consumer awareness with the following topics:-

(i). Why consumer movements started in India

(ii). Origin of consumer movement in India.

(iii). COPRA (Consumer Protection Act) 1986.

(v). Right to safety.

(vi). Right to information.

((vii) organisation that monitors and issues quality certificate to procedures of various goods.

2. Revise following chapters:-

(a). Political parties.

(b). Print culture and the modern world.

Map skills

Locate the following on outline map of India.

I. 1920 Nagpur session

- II. 1920 Calcutta session
- III. 1927 Madras session
- IV. Kheda
- V. Champaran.

## ARTIFICIAL INTELLIGENCE

Que1. How does the face lock system work in a smartphone?

- Ans. 1. The face lock system in a smartphone detects and captures the image.
2. It saves the features of the face at the beginning or the first time when the lock is applied.
3. After that whenever the features matched it will unlock the smartphone.

Que 2. What do you mean by Intelligence?

Ans. Intelligence refers to the ability to think, perceive information and apply knowledge within the behavioral environment. Intelligence can be defined as :

- Ability to interact with the real-world – To perceive, understand and act
- Reasoning and Planning – Modelling the external world, given input
- Learning and Adaption – Continuous learning and adapting graph.

Que 3. Explain the training data and testing data with an example.

Ans. Testing Data: The existing data or previous data collected through various activities or sources is known as training data and prediction data is known as testing data.

For example, If someone wants to predict the salary of an employee based on previously drawn salaries into the machine, the previous salary is training data and prediction salary data is known as testing data.

Training Data: training data is a subset of our actual dataset that is fed into the machine learning model to uncover and learn patterns. It trains our model in this way.

Typically, training data is bigger than testing data. This is due to the fact that we want to give the model as much data as possible in order to uncover and learn important patterns. When we feed data from our datasets to a machine learning algorithm, it learns patterns and makes choices.

Que 4. Explain rule-based approach in detail.

Ans.

- A Rule-based approach is generally based on the data and rules fed to the machine, where the machine reacts accordingly to deliver the desired output.
- It follows the relationship or patterns in data defined by the developer.
- The machine follows the instructions or rules mentioned by the developer and

performs the tasks accordingly

- It uses coding to make a successful model.

Que 5. Explain learning-based approach in detail.

Ans.

- The machine is fed with data and the desired output to which the machine designs its own algorithm (or set of rules) to match the data to the desired output fed into the machine to train.
- In the learning-based approach, the relationship or pattern in data is not defined by the developer.
- This approach takes random data which is fed into the machine and it is left to the machine to figure out the patterns or required trends.
- In general this approach is useful when the data is not labelled and random for a human to use them
- Thus, the machine looks at the data, tries to extract similar features out of it and clusters the same datasets together.
- In the end as output, the machine tells us about the trends which are observed in the training data
- This approach is used to train the data which is unpredictable or the users have no idea about it.

Que 6. What do you mean by deep learning?

Ans. Deep learning is a subset of Artificial Intelligence which works on a huge amount of data and trains the model according to the data received. It is the most advanced branch of Artificial Intelligence.

Que 7. What do you mean by data science? Illustrate your answer with an example?

Ans. 1. Data science is one of the domains of AI. It processes the data for the AI systems. It collects the data input, maintains them into accurate datasets, and prepares the output in the proper and appropriate format. The final output or information extracted through data science can be used to make a decision.

For example, price comparison websites like PriceGrabber, PriceRunner, Jungle, Shopzilla, and DealTime are totally driven by data, compares the price of a product from different vendors and then the user can make a suitable decision.

Que 8. Mention the ways to collect data.

Ans. The following ways are very common to collect data:

- i. Surveys
- ii. Web Scrapping
- iii. Sensors
- iv. Cameras
- v. Observations
- vi. API

vii. Call or SMS or Email

viii. Feedback

Que 9. what do you mean by chatbots?

Ans. . A chatbot is a software application used to conduct an on-line chat conversation via text or text-to-speech, in lieu of providing direct contact with a live human agent.

Que 10. What do you mean by decision tree?

Ans.

- A decision tree is a very useful for modelling in business.
- It follows a tree like structure of decisions with all possible outputs
- The top most node of decision tree is known as root node.
- Every node is connected with lines.
- It follows top-bottom approach.
- The root node is always on top and the terminal node is at the bottom.

NOTE

- DO Above Work in AI Notebook
- Learn All the Chapters

**Art**

1. Draw a still life on A4 size sheet by arranging a composition using two or more objects which are easily available at your home.
2. Draw a folk art painting of your choice on A4 size sheet. Example - Warli art.
3. Diya decoration with mirror and dori.( any one ).

**Class 11th Autumn Holidays Homework**

**ACCOUNTANCY**

<b>1</b>	Dhawan is running a construction business and has got a contract in which he has received an order of constructing a shopping mall. He wants to show it as his asset in the Balance Sheet. Is he correct in doing so?	
<b>2</b>	Gaurav Chopra started a business on 1st April, 2016 by investing Rs.75,000 and took a loan from bank of Rs.75,000. On 1st Oct., 2016, he introduced additional capital of Rs.75,000 and had withdrawn Rs.45,000 during the year for domestic purposes. On 31st March, 2017, his assets were Rs. 3,75,000. Find out her capital on 31st March, 2017 and profit earned during the year.	
<b>3</b>	Define accounting.	
<b>4</b>	A company shows its assets at undervalued cost in its Balance Sheet. Which principle is ignored by the company?	
<b>5</b>	Under which principle, quality of staff management is not recorded in the books of accounts?	

<p><b>6</b></p>	<p>Show the accounting equation on the basis of following transactions and prepare a Balance Sheet on the basis of last equation:</p> <p>(Rs.)</p> <ol style="list-style-type: none"> <li>1. Opening Balance: Cash Rs.20,000; Bank Rs.5,000; Creditors Rs.5,000; Capital Rs.50,000; Stock Rs.20,000; Debtors Rs.10,000.</li> <li>2. Purchased goods for cash Rs.7,500 and on credit for Rs.5,000</li> <li>3. Goods costing Rs.10,000 sold at 20% profit, half of the amount received in cash</li> <li>4. Bad debts 1,000</li> <li>5. Cash stolen away 3,500</li> <li>6. Amount received by cheque from debtors 5,000</li> <li>7. Paid to creditors by cheque 5,000</li> <li>8. Goods sold on credit (Cost price Rs.4,000) 5,000</li> <li>9. Goods withdrawn for personal use 1,000</li> <li>10. Interest allowed on capital 2,500</li> <li>11. Received commission 2,500</li> </ol>	
<p><b>7</b></p>	<p>Using following balances and transactions show accounting equation: Cash Rs.6,000, Bank</p>	



	<p>Balance Rs.1,500, Debtors Rs.3,000, Goods Rs.4,500, Furniture Rs.3,000, Creditors Rs.5,250 and Capital Rs.12,750.</p> <p>(Rs.)</p> <p>(i) Purchased goods for cash 1,500</p> <p>(ii) Purchased goods from Ram Saran 1,500</p> <p>(iii) Returned goods to Ram Saran 300</p> <p>(iv) Bad Debts 750</p> <p>(v) Goods lost by fire 750</p> <p>(vi) Amount received by cheque from debtors 1,500</p> <p>(vii) Goods costing Rs.3,000 sold at 20% profit, half the amount received in cash</p> <p>(viii) Purchased goods for cash Rs.2,250 and on credit for Rs.1,500</p> <p>(ix) Paid to creditors by cheque Rs.1,500</p> <p>(x) Interest allowed on capital Rs.750</p>																
<b>8</b>	<p>Gautam started a business relating to software solutions on 1st April, 2017 with a capital of Rs.1,50,000. On 31st March, 2018 his assets worth Rs.3,60,000 and liabilities Rs.1,20,000. Find out his closing capital and profit earned during the year.</p>																
<b>9</b>	<p>Why are rules of Debit and Credit same for Liabilities and Capital?</p>																
<b>10</b>	<p>Profit earned increases proprietors'/owners' capital. Is it true?</p>																
<b>11</b>	<p>Mr. Gupta made a drawing of ₹25,000 and used this amount to pay hospital bills of his poor cousin. Where are drawings recorded in capital account?</p>																
<b>12</b>	<p>Prepare the Credit Vouchers from the source vouchers of M/s Arijit Singh &amp; Sons on the basis of following transactions:</p> <table border="1"> <thead> <tr> <th>2020</th> <th>Particulars</th> <th>(₹)</th> </tr> </thead> <tbody> <tr> <td>May 6</td> <td>Sold goods for ₹1,900 vide Cash Memo No. 86 plus CGST and SGST @6% each</td> <td></td> </tr> <tr> <td>May 9</td> <td>Sold old office table for ₹500 for Cash Receipt No. 754 plus CGST and SGST @6% each</td> <td></td> </tr> <tr> <td>May 28</td> <td>Withdrawn cash from Bank for office use vide Cheque No. 936</td> <td>4,000</td> </tr> <tr> <td>May 29</td> <td>Cash received from Karan (Debtor) vide Cash Receipt No. 957</td> <td>8,000</td> </tr> </tbody> </table>	2020	Particulars	(₹)	May 6	Sold goods for ₹1,900 vide Cash Memo No. 86 plus CGST and SGST @6% each		May 9	Sold old office table for ₹500 for Cash Receipt No. 754 plus CGST and SGST @6% each		May 28	Withdrawn cash from Bank for office use vide Cheque No. 936	4,000	May 29	Cash received from Karan (Debtor) vide Cash Receipt No. 957	8,000	
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13	After the implementation of GST, consumers of goods and services need not to pay many taxes. Name such taxes																																																				
14	A wholesaler of refrigerators in Nagpur supplies refrigerators to the city of Pune. In his invoice, he charges IGST from the retailer. Is he correct?																																																				
15	Define Goods and Services Tax (GST).																																																				
16	<p><b>Q. 1.</b> Enter the following transactions in the Journal of Mudit:</p> <table border="0" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left; width: 15%;"></th> <th style="text-align: left; width: 80%;"></th> <th style="text-align: right; width: 5%;">(₹)</th> </tr> </thead> <tbody> <tr> <td></td> <td>2020</td> <td></td> </tr> <tr> <td>Jan. 1</td> <td>Commenced business with cash</td> <td style="text-align: right;">1,75,000</td> </tr> <tr> <td></td> <td>    building</td> <td style="text-align: right;">1,00,000</td> </tr> <tr> <td>Jan. 2</td> <td>Goods purchased for cash ₹75,000 plus CGST and SGST @6% each</td> <td></td> </tr> <tr> <td>Jan. 3</td> <td>Sold goods to Rohan ₹30,000 plus CGST and SGST @6% each</td> <td></td> </tr> <tr> <td>Jan. 4</td> <td>Paid wages</td> <td style="text-align: right;">500</td> </tr> <tr> <td>Jan. 6</td> <td>Sold goods for cash ₹10,000 plus CGST and SGST @6% each</td> <td></td> </tr> <tr> <td>Jan. 10</td> <td>Paid for trade expenses ₹700 plus CGST and SGST @6% each</td> <td></td> </tr> <tr> <td>Jan. 12</td> <td>Cash received from Rohan</td> <td style="text-align: right;">30,000</td> </tr> <tr> <td></td> <td>    Discount allowed</td> <td style="text-align: right;">3,600</td> </tr> <tr> <td>Jan. 14</td> <td>Goods purchased from Sudhir ₹27,000 plus CGST and SGST @6% each</td> <td></td> </tr> <tr> <td>Jan. 18</td> <td>Cartage paid</td> <td style="text-align: right;">1,000</td> </tr> <tr> <td>Jan. 20</td> <td>Drew cash for personal use</td> <td style="text-align: right;">5,000</td> </tr> <tr> <td>Jan. 22</td> <td>Goods used for household ₹2,000. These goods were purchased on paying CGST and SGST @6% each</td> <td></td> </tr> <tr> <td>Jan. 25</td> <td>Cash paid to Sudhir</td> <td style="text-align: right;">29,000</td> </tr> <tr> <td></td> <td>    Discount allowed by him</td> <td style="text-align: right;">1,240</td> </tr> </tbody> </table>			(₹)		2020		Jan. 1	Commenced business with cash	1,75,000		building	1,00,000	Jan. 2	Goods purchased for cash ₹75,000 plus CGST and SGST @6% each		Jan. 3	Sold goods to Rohan ₹30,000 plus CGST and SGST @6% each		Jan. 4	Paid wages	500	Jan. 6	Sold goods for cash ₹10,000 plus CGST and SGST @6% each		Jan. 10	Paid for trade expenses ₹700 plus CGST and SGST @6% each		Jan. 12	Cash received from Rohan	30,000		Discount allowed	3,600	Jan. 14	Goods purchased from Sudhir ₹27,000 plus CGST and SGST @6% each		Jan. 18	Cartage paid	1,000	Jan. 20	Drew cash for personal use	5,000	Jan. 22	Goods used for household ₹2,000. These goods were purchased on paying CGST and SGST @6% each		Jan. 25	Cash paid to Sudhir	29,000		Discount allowed by him	1,240	
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17	<p>Journalise the following transactions in the books of Harpreet Bros.:</p> <p>(i) Rs.1,000 due from Rohit are now bad debts.</p> <p>(ii) Charge depreciation @ 10% p.a. for two months on machine costing Rs.30,000.</p> <p>(iii) Provide interest on capital of Rs.1,50,000 at 6% p.a. for 9 months.</p> <p>(iv) Rahul became insolvent, who owed Rs.2,000, a final dividend of 60 paise in a rupee is received from his estate.</p>																																																				
18	<p>Manisha started a new business, Pass the journal entries for the following transactions: 2020 (Rs)</p> <p>May 1 Started business with cash 85,000</p> <p>May 3 Goods purchased for cash 9,000</p>																																																				

	<p>May 3 Sold goods for cash 12,000</p> <p>May 4 Goods bought from Akansha 13,000 May 6</p> <p>Office rent paid to the landlord 4,000 May 10 Paid salary to Bablu (Office Boy) 3,000</p> <p>May 12 Machinery purchased from Priya Engineerings 25,000 May 15 Paid to Akansha on account 6,000</p> <p>May 19 Sold goods 4,000</p> <p>May 23 Stationery purchased 1,500</p> <p>May 24 Drawings made 6,000 May 26 Goods lost by fire 3,000</p> <p>May 28 Opened a bank account in PNB 12,000</p> <p>May 30 Borrowed from Muthoot Corp. 10,000</p>																											
<p><b>19</b></p>	<p>Prepare Cash Book with Bank Column of Bharti from the following transactions: 2023 (Rs)</p> <table border="0"> <tr> <td>Dec. 1 Cash in Hand</td> <td style="text-align: right;">2,20,000</td> </tr> <tr> <td>    Cash at Bank</td> <td style="text-align: right;">60,000</td> </tr> <tr> <td>Dec. 3 Deposited in Bank</td> <td style="text-align: right;">80,000</td> </tr> <tr> <td>Dec. 7 Cash Purchases Rs.16,000 plus CGST and SGST @6% each</td> <td></td> </tr> <tr> <td>Dec. 8 Paid Commission by cheque</td> <td style="text-align: right;">Rs.12,000</td> </tr> <tr> <td>Dec. 9 Withdrew from bank for private use</td> <td style="text-align: right;">Rs. 2,500</td> </tr> <tr> <td>Dec. 12 Received from Ved in full settlement of his account Rs. 6,000, half of the amount was deposited into bank on the same day</td> <td></td> </tr> <tr> <td>Dec. 16 Interest collected by Bank</td> <td style="text-align: right;">Rs.14,000</td> </tr> <tr> <td>Dec. 20 Cash Sales Rs. 42,000 plus CGST and SGST @6% each</td> <td></td> </tr> <tr> <td>Dec. 22 Salaries paid 40,000</td> <td></td> </tr> <tr> <td>Dec. 22 Good sold to Sona &amp; Co. Rs.36,000 plus CGST and SGST @6% each</td> <td></td> </tr> <tr> <td>Dec. 23 Received cheque from Sona &amp; Co. after discount of Rs. 4,620</td> <td></td> </tr> <tr> <td>Dec. 26 Deposited the cheque received from Sona &amp; Co. into Bank</td> <td></td> </tr> </table>	Dec. 1 Cash in Hand	2,20,000	Cash at Bank	60,000	Dec. 3 Deposited in Bank	80,000	Dec. 7 Cash Purchases Rs.16,000 plus CGST and SGST @6% each		Dec. 8 Paid Commission by cheque	Rs.12,000	Dec. 9 Withdrew from bank for private use	Rs. 2,500	Dec. 12 Received from Ved in full settlement of his account Rs. 6,000, half of the amount was deposited into bank on the same day		Dec. 16 Interest collected by Bank	Rs.14,000	Dec. 20 Cash Sales Rs. 42,000 plus CGST and SGST @6% each		Dec. 22 Salaries paid 40,000		Dec. 22 Good sold to Sona & Co. Rs.36,000 plus CGST and SGST @6% each		Dec. 23 Received cheque from Sona & Co. after discount of Rs. 4,620		Dec. 26 Deposited the cheque received from Sona & Co. into Bank		
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<p><b>20</b></p>	<p>Prepare Double-column cash book from the following transactions for the month of December, 2022: 2017 (Rs.)</p> <p>Dec. 1 Cash in hand Rs.17,500</p> <p>    Cash at bank Rs.5,000</p> <p>Dec. 3 Purchased goods for cash Rs.3,000 plus CGST and SGST @6% each</p> <p>Dec. 5 Received cheque from Jasmeet Rs.10,000</p> <p>Dec. 8 Sold goods for cash Rs.7,000 plus IGST @12%</p> <p>Dec. 10 Jasmeet's cheque deposited into bank</p> <p>Dec. 12 Purchased goods for 20,000 and paid by cheque plus IGST @5%</p> <p>Dec. 15 Paid electricity expenses through bank 1,000</p> <p>Dec. 18 Cash sales to Mahanta Enterprise Rs.7,000 plus CGST and SGST @6% each</p> <p>Dec. 20 Deposited into bank 10,000</p> <p>Dec. 24 Paid interest Rs.500</p> <p>Dec. 29 Paid rent Rs.2,000.</p> <p>Dec. 30 Withdrew cash for personal use Rs.1,200</p>																											

	Dec. 31 Paid salary Rs.6,000	
<b>21</b>	Enter the following transactions of June 2018, in two column cash book: 2022	(Rs)
	June 1 Started business with cash	38,000
	June 1 Opened a bank account	28,300
	June 1 Cash purchases	5,500
	June 2 Paid rent by cheque	6,600
	June 1 Sold goods to Hardik	10,000
	June 3 Received a crossed cheque from Hardik for sales amounting to	5,000
	June 3 Sold goods for cash, amount received by cheque	20,000
	June 4 Purchased goods from Bunny paid by cheque which was received for sales	20,000
	June 15 Paid salaries by cheque	10,000
	June 15 Withdrew cash for personal use	2,100
	June 18 Withdrew cash from Bank for office use	2,600
	June 20 Sold goods to Luna amount received by cheque	15,000
	June 22 Endorsed the cheque received from Luna to Ruby for settlement of her account of Rs.18,000	
	June 26 Cash Sales	18,000
	June 28 Cash deposited into bank	8,900
	June 30 Purchased furniture	10,400
	June 30 Bank collected dividend	2,000
<b>22</b>	The following are the credit purchases of M/s Modi Book Depot, Delhi for the month of June, 2018. Enter them into Purchases Book and post them into the ledger:  <b>June 5 Bought from Mohan Books, Delhi:</b> 100 Copies of 'Commerce' by Prof. Kamla @ Rs 125 each. 50 Copies of 'Advanced Accounts' by Prof. Jain @ Rs.150 each. Less: 20% Trade discount. <b>June 10 Purchased one Laptop worth ₹25,000 from Aakash Brothers. June 15 Bought from Rajiv Publishers, Delhi:</b> 100 Copies of 'Commercial Law' by Prof. Mehra @ Rs.155 each. 100 Copies of 'Statistics' by Prof. Khan @ Rs.155 each. <b>June 25 Bought from Chitra Book Depot, Kurukshetra:</b> 25 Copies of 'Income Tax' by Prof. Jain @ Rs.140 each. 25 Copies of 'Company Law' by Prof. Mehra @ Rs.135 each. <b>June 30 Bought from Vikas Books Bhandar, Ambala for cash:</b> 60 Copies of 'Accountancy' by Jain & Gupta @ Rs.80 each. 60 Copies of 'Economics' by Khan & Jain @ Rs.80 each. Less: 20% Trade Discount.	
<b>23</b>	Journalise the following transactions of Star Kid Publications and post the entries into the ledger: 2018 <b>(Rs)</b> Apr. 05 Started business with cash 4,00,000 Apr. 08 Opened a bank account with Syndicate Bank 1,60,000 Apr. 12 Goods purchased on credit from Raj Publishers 60,000 Apr. 12 Purchased office machines, paid by cheque 40,000 Apr. 18 Rent paid by cheque 10,000 Apr. 20 Sales of goods on credit to M/s Shobhit & Sons 20,000 Apr. 22 Cash sales 30,000 Apr. 25 Cash paid to Raj Publishers 60,000 Apr. 28 Received a cheque from M/s Shobhit & Sons 20,000 Apr. 30 Salaries paid in cash 12,000	
<b>24</b>	From the following particulars, prepare Bank Reconciliation Statement as on 31 <sup>st</sup> December, 2022: (i) Debit balance as per Cash Book Rs 10,000. (ii) A cheque for Rs 500 issued in favour of Karan has not been presented for payment.	

	<p>(iii) A bill for Rs.700 retired by bank on our behalf under a rebate of ₹20, the full amount of the bill was credited in Cash Book.</p> <p>(iv) A cheque for Rs 295 deposited in bank has been dishonoured.</p> <p>(v) A sum of ₹800 deposited in the bank has been credited as Rs 80 in the Pass Book.</p> <p>(vi) Payment side of Cash Book has been undercast by Rs 200.</p> <p>(vii) A bill receivable for Rs 1,000 (discounted with the bank in November 2018) dishonoured on 31st December, 2018 but the dishonour was not recorded in the Cash book.</p>
25	<p>On 31<sup>st</sup> December, 2018 the cash book of Rohan showed an overdraft of ₹5,600. From the following particulars, make out a Bank Reconciliation Statement:</p> <p>(i) Cheques drawn but not cashed before 31st December, 2018 amounted to Rs 3,946.</p> <p>(ii) Cheques paid into the bank but not credited before 31st December, 2018 amounted to Rs.4,891.</p> <p>(iii) A Bill Receivable for ₹520 previously discounted with the bank had been dishonoured and bank charges debited in the Pass Book amounted to Rs 55.</p> <p>(iv) Debit is made in the Pass Book for ₹120 on account of interest on overdraft.</p> <p>(v) The bank has collected interest on investment and credited Rs 760 in the Pass Book.</p>
26	<p>From the following particulars, ascertain the bank balance as per Cash Book as on 30<sup>th</sup> April, 2022:</p> <p>(i) Credit Balance as per Pass Book Rs 45,000.</p> <p>(ii) Cheques amounted to Rs 7,500 were deposited into bank, but only cheques of Rs 5,700 were cleared and credited by the bank upto 30th April, 2018.</p> <p>(iii) Two cheques of Rs 2,700 and Rs 4,500 were issued, but only one cheque of Rs 2,700 was presented for payment upto 30th April, 2018.</p> <p>(iv) Rs 1,500 have been credited by bank for interest on securities.</p> <p>(v) Rs 600 insurance premium paid by bank under standing order.</p> <p>(vi) Bank Charges Rs 150.</p>
27	<p>Prepare a Bank Reconciliation Statement from the following particulars as on 31st July, 2018 when Pass Book shows a debit balance of R.7,500.</p> <p>(i) Cheques issued but not presented for payment ₹6,000.</p> <p>(ii) Cheques issued and presented for payment but omitted to be recorded in Cash Book Rs 3,000.</p> <p>(iii) Cheque deposited but not collected Rs 1,500.</p> <p>(iv) Interest on overdraft Rs 300.</p> <p>(v) A cheque of Rs 1,500 debited in the Cash Book but omitted to be banked.</p> <p>(vi) A cheque of Rs 600 credited in the Pass Book but was not recorded in the Cash Book.</p> <p>(viii) Bank charges Rs 150</p>

## Chemistry

Go through chapter Equilibrium, do all the questions given in ncert in notebook.

## BIOLOGY

1. Complete investigatory project and submit on the day of reopening.
2. Solve half yearly paper of shift 1 and 2
3. Make model for science exhibition on the given topics.
4. Solve 2 CCT questions from each chapter of half yearly syllabus.
5. Prepare 10 MCQs from each chapter of half yearly syllabus.

## Mathematics

1. Do any one of the **projects** given below
  - a) Mathematics and Biology: Study of science of heredity
  - b) Prepare a project based on FIBONACCI sequence, their properties and similar patterns found in nature.
  - c) Mathematics and Chemistry: Study structure of Organic Compounds.
  - d) Collection of statistical data and analysing it for standard deviation and mean deviation.
2. Do any of the following **activities**

## ECONOMICS

1. Distinguish between movement along the supply curve and shift in supply curve with help of suitable figures.

2. Explain the effect of change in technology on the supply of a good.
3. What do you mean by the term supply? Discuss the law of supply with the help of table and diagram.
4. Distinguish between extension of supply and increase in supply with the help of diagram.
5. Define price elasticity of supply. Briefly explain the percentage method of measuring it.
6. Define elasticity of supply. On the basis of value of coefficient of elasticity of supply, how many type of situation can you imagine? Represent those situations diagrammatically.
7. The market price of good changes from 5rs to 20rs. As a result the quantity supplied by a firm's increases by 15 units. The price elasticity of the firm supply curve is 0.5 find the initial and final output levels of the firm.
8. The market price of 10rs a firm a firm supplies 4 units of output the market price increase to 30rs. The price elasticity of the firms supply is 1.25. What quantity will the firm supply at the new price?
9. Complete your project file ( Topic given in syllabus)
10. Solve half yearly question paper

## ENGLISH

### SECTION-A READING

*Read the passage given below.*

1. Delhi tried very hard but it wasn't enough. In the run-up to D-Day, the sound of firecrackers had not been heard. The Supreme Court ban on sales had made procuring them difficult, but many people, including school children, had resolved to buck tradition for clean air. And till 7 pm on Diwali, most neighbourhoods were quiet. Around that time the first sound of firecrackers going off was heard, and gradually it rose to a crescendo. But it was nowhere near the blitzkrieg of the past, not even half of that. And well before midnight, it was all over.
2. The bad news broke at dawn. It was a visibly smoggy morning. Air pollution levels had peaked to "severe" on Diwali night and remained dangerously high till Friday afternoon as reflected in the real-time monitoring data of Central Pollution Control Board (CPCB) and Delhi Pollution Control Committee (DPCC).
3. The CPCB, however, pointed out a silver lining. It said the air quality index (AQI) this year was better than the ones on Diwali in the past two years in spite of hostile meteorological conditions. On Diwali last year (October 30, 2016), the average AQI for the city was in the "severe" category at 426 while the year before that (November 11, 2015), it had been in the "very poor" category at 327. This time, it was marginally lower at 326.
4. There are so many factors impacting air quality – from the speed and direction of the wind to burning of crop stubble in neighbouring states – that it is difficult to definitively identify the main culprit. What, however, has to be acknowledged is that at least a majority of people have the will to stick to what may appear to be unpalatable decisions for better quality of life.
5. The data, however, is making informed observers worry-particularly the massive peaks in PM (Particulate Matter) 2.5 (fine, respirable pollution particles) and PM 10 (coarse pollution particles) levels on Thursday night after 10 pm. Delhi peaked to 656 micrograms per cubic metres around midnight.
6. However, the data also shows that in spite of unfavourable meteorological conditions, the air quality on Diwali this year was better than last year. It had not been so good in the two days preceding Diwali due to intrusion of humid air from the south-east coupled with prevailing calm wind conditions. The average mixing height (the height to which smoke or air will rise, mix and disperse) recorded on October 18 and 19 were 547 metres and 481 metres, respectively, according to CPCB. It should be at least 1000 metres for proper dispersal

1.1 On the basis of your reading of the passage, answer the following questions by choosing the best of the given choices.(1×6)

Question (A) In the run-up to D-Day, the sound of firecrackers had not been heard because the-----

- (i) Supreme Court banned the sales of firecrackers.
- (ii) children resolved to back tradition for clean air.
- (iii) neighbourhoods did not like the sound of firecrackers.
- (iv) children were afraid of the sound of firecrackers.

Q--(B)The 'bad news' that broke at dawn was that---

- (i) there was smog in the sky.
- (ii) the air pollution levels were dangerously high.

(iii) CPCB released real time figures that were alarming.

(iv) All of the above.

Q-(C)The AQI levels after Diwali this year were--

(i) the same as in other years.

(ii) higher than other years.

(iii) lower than other years.

(iv) could not be ascertained.

Q--(D) There will be no air pollution if---

(i) school children do not burst crackers on Diwali.

(ii) there is a strong wind on Diwali night.

(iii) if the motor vehicles do not run on Diwali.

(iv) None of the above.

Q--(E)'Crescendo' in para 1 mean

(i) to happen successfully

(ii) an increase in intensity

(iii) better quality of life

(iv) metrological conditions

Q- (f) Unpalatable in para 4 means :

(i) 6,000 metres for proper dispersal

(ii) feeling happy

(iii) dispersal

(iv) not pleasant

1.2 Answer the following.(1×3Marks)

(a) The massive peaks in PM (Particulate Matter) 2.5 and PM 10 (coarse pollution particles) on the Diwali day made the observers worried. [True/False] Fill the blanks---. (b) In the run-up to

D-Day in Delhi the sound of firecrackers gradually rose to a .....

(c) Delhi peaked to 656 ..... per cubic metres around midnight.

1.3 Find words from the passage which have a meaning similar to the following.(1×2marks)

(a) unfavourable (paragraph 3)

(b) influencing (paragraph 4)

QUESTION-2 Read the passage carefully and make notes. (8Marks)

The effects of plastic bags on the environment are really quite devastating because there is no disposal method that will really help eliminate the problem. While reusing them is the first step, most people don't do it, because most of them are not durable enough to survive multiple use.

The biggest problem with them is that once they have been soiled, they end up in the trash, which then ends up in the landfill or is burned. Either solution is very poor for the environment. Burning emits toxic gases that harm the atmosphere while landfills hold them indefinitely as part of the plastic waste problem throughout the globe.

One of the greatest problems is that an estimated 300 million plastic bags end up in the Atlantic Ocean alone. These bags are very dangerous for sea life, especially those of the mammal variety. Any hunting mammal can easily mistake the size, shape and texture of the plastic bag for a meal and find its airway cut off. Needless deaths from plastic bags are increasing every year.

The environmental balance of the waterways is being thrown off by the rate of plastic bags finding their way into the mouths and intestinal tracts of sea mammals. As one species begins to die off at an abnormal rate, every other living organism in the waterways is impacted.

The indefinite period of time that it takes for the average plastic bag to break down can be literally hundreds of years. Every bag that ends up in the woodlands of the country threatens the natural progression of wildlife. Because the breakdown rate is so slow, the chances that the bag will harmlessly go away are extremely slim. Throughout the world plastic bags are responsible for suffocation and deaths of woodland animals as well as inhibiting soil nutrients.

The land litter that is made up of plastic bags has the potential to kill over and over again. It has been estimated that one bag has the potential to unintentionally kill one animal per every three months due to unintentional digestion or inhalation.

While it's a noble thought to place the plastic bags in the recycling bin every week, studies have proven that there are very few recycling plants that actually recycle them. Most municipalities either burn them or send them off to the landfill after sorting. This is because it can be expensive to recycle this type of plastic. It doesn't melt down easily and is often not fit to be reused in its original form. The premise of recycling these bags is nice. Yet funding for the upgrading of the recycling units just has not happened and thus less than one per cent of all bags are sent to recycling plants worldwide. Most are left to become a pollution problem in one way or another. There are always alternatives to plastic bags and the search for more alternatives continues. Paper bags are a possible option but they also take their toll on the environment. The use of trees to increase the production of paper products will also have a negative environmental effect. Reusable plastic bags are being introduced into regions that want to outlaw the plastic bags altogether. These are stronger and more durable and can be used for three to five trips to the market.

Of course, the reusable cloth bag is fast becoming a favourite among environment supporters. While, thus far, no bag is without its issues, these are the bags that are currently recommended for use to help protect environmental concerns.

(2.1) On the basis of your reading of the given passage make notes on it using (headings and sub-headings) Use recognisable abbreviations wherever necessary. Supply an appropriate title to it. (5Marks)

(2.2) Write a summary of the given passage in 80 words. (3Marks)

Question-3 GRAMMAR (1×4=4 Marks)

3.1 CHOOSE THE CORRECT DETERMINERS/ TENSE:.

(A) You are going to take life away from-----man, with-----belief that you will give it back.

a) a, the

b) the, the

c) a, a

d) X, the

B) Unfortunately, our local library had -----books on the subject, so I'm going to the city library tomorrow hoping to find -----more.

a. much, a little

b. few, some

c. little, many

d. a little, a lot

C) I-----the bell six times but no one opened the door.

a. have rung

b. rang

c. ring

d. was ringing

D) I-----working all afternoon and have just finished the assignment.

a. have been

b. had been

c. am

d. shall be. \_\_\_\_

SECTION-B \_\_\_\_\_ (WRITING AND LITERATURE-20M)

QUESTION-4 Writing (3+5=8Marks)

4.1 As the President of Leo Club of Temple Town, prepare a poster on behalf of Lions Club and Leo Club for 'Diwali Mela' to be held at Nehru Stadium, mentioning some of the attractions. (Word limit 50 Words) 3 Marks)

4.2 .Manish has to participate in debate supporting the motion that life in the country (a village) is preferable to life in the city. Below you can see his notes. Use the information to develop Manish's speech in 150-200 words.

COUNTRY (A VILLAGE) peace and quiet—soothing air—fresh and pure green fields all around—lovely sight helpful neighbours

CITY

vehicles—smoke

industries—smoke-pollution

crowded streets

people hurry—never relax(5 Marks)

4.3 You are Mukul / Mahima of Alps Public School. Your school has organized a debate on "Social Media and It's Effects" and you will be participating in your school. Prepare your views against or in favour of the motion. (120 – 150 words) (5marks)

4.4 You are Krishna/ Tisha, Secretary, Greenland Enterprises Ltd, Delhi-110006. Your Chairman has asked you to draft an advertisement for a local daily under the classified columns for the vacant posts of one accountant and two office assistants.

Draft an advertisement.

Question 5 READ THE GIVEN EXTRACT CAREFULLY:

I'm the Poem of Earth, said the voice of the rain, Eternal I rise impalpable out of the land and the bottomless sea.

Upward to Heaven, Whence vaguely form'd, altogether changed, and yet the same.

5.1 ANSWER THE QUESTIONS:.

(1/2×4=2Marks).

1. Why does the rain tell the poet that she cannot be touched?

A. because she is water

B. because she rises in the form of water vapour

C. because she is in the form of clouds

D. None of the above

2. Which poetic device has been used in it; "I am the Poem of Earth" Eternal, Impalpable?

A. personification



- B. alliteration
- C. metaphor
- D. None of the above

3. What happens to the earth when the rain falls back on the surface of earth?

- A. it provides water
- B. it beautifies and purifies the earth
- C. it helps in greenary
- D. it provides water to flora and fauna

4. How does the rain help the seeds inside the earth?

- A. provides life and helps them grow
- B. provides water
- C. provides life
- D. None of the above.

5.2 Do the following Questions:

Q-1 Why was the poet not able to recall his Childhood ?

Q-2 What do you notice about the beginning and ending of the poem 'The Laburnum Top'?

Q-3 Why did the narrator want to forget the address?

Q-4 Why did the boys hide the horse ?

Q-5 What advice does Mrs.Fitzgerald give to her neighbour Mrs.Pearson in the art of managing her family?

Q-6 Give the Central idea of the poem 'Childhood' and 'Father to son'

Q-7 Summarise the following Chapters:

- A. Silk Road
- B) The Tale of Melon city.

Q-8 Solve the Half Yearly Question Paper in English Notebook.(20 Marks will be given for this assignment)

Prepare for Periodic Test-II

X-X-X-X-X

## GEOGRAPHY

1. According to the instructions given to all the students

6.Geomorphic process

7.Landforms

Lessons

Notes of

Have to prepare.

2. Half yearly question paper is to be solved in note copy

- 3. Fill out all the maps of the world and India of the syllabus and put them in your notebook.

## PHYSICS

1. According to the instructions given to all the students

6.Geomorphic process

7.Landforms

Lessons

Notes of

Have to prepare.

2. Half yearly question paper is to be solved in note copy.

- 4. Fill out all the maps of the world and India of the syllabus and put them in your notebook.

## COMPUTER SCIENCE

Q1. Write two menu driven program using loop and if elif ..else.

Q2. Write at least 10 python program of For loop and If else.

Q3. Write the python program of the following pattern

```
1
1 2
1 2 3
1 2 3 4
1 2 3 4 5
```

\* \* \* \* \*

\* \* \* \*

\* \* \*

\* \*

\*

Q4. Write all the above said program in Practical file only.

### INFORMATICS PRACTICES

Q1. Write two menu driven program using loop and if elif ..else.

Q2. Write at least 10 python program of For loop and If else.

Q3. Write the python program of the following pattern

1

1 2

1 2 3

1 2 3 4

1 2 3 4 5

\* \* \* \* \*

\* \* \* \*

\* \* \*

\* \*

\*

Q4. Write all the above said program in Practical file only.

### Hindi

- 1- मुंशी प्रेमचंद , कृष्णा सोबती ,कबीरदास ,और भिानी प्रसाद ममश्र जी का जीिन पररचय देते ह ए इनके योगदान का भी िणयन करें ।
- 2- नाटक , कहानी , कविता , सुंस्मरण णि रेखचचत्र की पररभाषा उदाहरण सहहत मलखें ।
- 3- आपके मोहल्ले में बबजली प्राय राबत्र के समय कई- कई घुंटों के मलए चली जाती है । बबजली सुंकट से उत्पन्न कहिनाइयों से अिगत कराते ह ए बबजली विभाग के सुंबुंचित अचिकारी को पत्र मलखखए ।
- 4- स्रिित्त मलखें णि 10 हदनों की डायरी मलखें ।
- 5- श्रीरामचररतमानस के सभी 7 काुंडों का साराुंश अपने शब्दों में मलखखए ।
- 6- ननम्रमलखखत विषयों पर रचनात्मक लेख मलखे मेरे बचपन के हदन मेरे जीिन का लक्ष्य

### BUSINESS STUDIES

1. Sole the Half Yearly question paper

2. Write again the Work Sheets shared earlier

### History

#### Class XI History

1. Solve the question paper of half yearly exam correctly
2. Revise and learn all taught lessons i e from lesson 1 to 7.
3. Map work locate 20 places on the outlined political map of world
4. Prepare 10 questions from each taught lessons with their answer

#### Class XII. History

1. Solve half yearly question paper correctly
2. Prepare a project file for CBSE exam as per topic given in the class
3. Prepare 10 questions from each taught lesson with their answer.
4. Revise and learn all taught lessons

## Class 12th Autumn Holidays Homework

### Physics

1. Solve half yearly question paper in notebook.
2. Solve any two sample papers and make sure that all topics of related chapters of half yearly exams are included.
3. Prepare investigatory project file.

### English

1. Solve Half Yearly Question Paper in your English Notebook Properly. 10 Marks Will be given for Internal Assessment.
  2. You are Chetan Sharma, a commerce graduate from Delhi University. You are seeking a suitable job. You came across an advertisement in The Times of India, inviting young and dynamic fresh graduates as sales assistants in a reputed company. Apply for the said job to Box No. 8365, C/o The Times of India, New Delhi.
  3. You are Asma/Ashish, the head girl/boy of XYZ international school. Your school is soon going to publish the annual magazine next month. Write a notice for the notice board of your school inviting students to submit write-ups
  4. Your water supply will be suspended for eight hours (10 am to 6 pm) on 6th of May for cleaning of the water tank. Write a notice in about 50 words advising the residents to store water for a day. You are Karan Kumar/Karuna Bajaj, Secretary, Janata Group Housing Society, Palam Vihar, Gurgaon.
  5. Write an Article in 150-200 words on "The Healthy Habits to lead a healthy life".
  6. Your state government has banned the use of plastic bags. You are Amarjeet, a reporter of The National Herald. Write a report in 100-125 words on how the ban is being ignored and what damage the indiscriminate use of plastic bags is causing to the environment.
  7. Write a report as an eyewitness to the fire accident that occurred in your neighbourhood. Your report should be within 100-125 words. Invent the necessary details. You are Rashi/ Raman of 15, Ballimaran, Delhi.
  8. Write a letter to the Editor of National Herald, New Delhi about water scarcity in your locality suggesting ways to improve the position of water supply. You are Ramnath/ Reema of Ghaziabad.  
You are Hemant/Himakshi. Write a letter to the Editor of The Times of India, New Delhi expressing your anguish over the problems faced by people due to non-availability of medicine and beds in hospitals, crisis arising in pandemic situation.
- # Read all the Chapters thoroughly once again and complete all the pending work in fair notebook only.

### Geography

1. All students have to prepare geography practical file as per the given instructions.
2. Half yearly and one pre-board papers have to be done in note copy.
3. Fill out all the maps of the world and India of the syllabus and put them in your notebook.

### Business Studies

CHAPTER 01: NATURE AND SIGNIFICANCE OF MANAGEMENT	
<b>1</b>	<p><b>Assertion (A):</b> Management is a goal oriented process. <b>Reason (R):</b> Management unites the efforts of different individuals in the organization towards achieving these goals.</p> <p>(i) Both Assertion (A) and Reason (R) are true and Reason (R) is the correct explanation of Assertion (A). (ii) Both Assertion (A) and Reason (R) are true and Reason (R) is not correct explanation of Assertion (A). (iii) Assertion (A) is true but Reason (R) is false. (iv) Assertion (A) is false but Reason (R) is true.</p>

2	<p><b>Assertion (A): Management helps in achieving organisational objectives only</b>  <b>Reason (R): A manager motivates and leads his team in such a manner that individual members are able to achieve organizational goals.</b></p> <p>(i) Both Assertion (A) and Reason (R) are true and Reason (R) is the correct explanation of Assertion (A).  (ii) Both Assertion (A) and Reason (R) are true and Reason (R) is not correct explanation of Assertion (A).  (iii) Assertion (A) is true but Reason (R) is false.  (iv) Assertion (A) is false but Reason (R) is true.</p>	
3	<p><b>In management planning, organizing, staffing, directing and controlling functions are performed in the same sequence at every level. After controlling, the planning starts again.</b>  <b>Identify the feature of management</b></p> <p>(i) Management is multi-dimensional  (ii) Continuous Process  (iii) Group Activity  (iv) Intangible force</p>	
4	<p>Various individuals perform their role as per their status and department, and then only management function can be executed. It can't be performed in isolation. Identify the feature of management</p> <p>(i) Goal oriented process  (ii) Continuous Process  (iii) Group Activity  (iv) Intangible force</p>	
5	<p><b>Identify the reason which makes management important in the light of the fact that it is generally seen that individuals in an organization resist change, as a change often means moving from a familiar, secure environment into a newer and a more challenging one.</b></p>	
	<p><b>QUESTION NO.6 TO 9 ARE BASED ON THE PARA GIVEN BELOW. CHOOSE THE CORRECT OPTION GIVEN BELOW FOR EACH QUESTION:</b>  <b>Mayra Ltd. received a new order of 30,000 toys. Mr. Abhilash, the production manager is expected to deliver goods in fifteen days otherwise the contract will be null and void. To retain the customers, Abhilash outsourced the production of 15,000 toys and delivered the order on time. The outsourcing of production resulted in increase in cost by 50%. Mayra Ltd. uses environment friendly methods of production and disposes off the waste material by either recycling it or using the same for landfill in such a manner that the aquatic life is not disturbed."</b></p>	
6	<p>Which concept of management is being adhered to here by Mr. Abhilash?</p>	

	(a) Effectiveness (b) Efficiency (c) Both a. and b. (d) None of these	
7	Which concept of management is being overlooked by Mr. Abhilash?  (a) Effectiveness (b) Efficiency (c) Both a. and b. (d) None of these	
8	At which level of management is Mr. Abhilash working? (a) Top level (b) Middle level (c) Lower level (d) Shop floor level	
9	Which objective of management is fulfilled by Mayra Limited? (a) Organisational (b) Personal (c) Social (d) None of these	
10	XYZ Power Ltd. set up a factory for manufacturing solar lanterns in a remote village as there was no reliable supply of electricity in rural areas. The revenue earned by the company was sufficient to cover the costs and the risks. The demand of lanterns was increasing day by day, so the company decided to increase production to generate higher sales. For this they decided to employ people from the nearby villages as very few job opportunities were available in that area. The company also decided to open schools and crèches for the children of its employees. 1. Identify and explain the objectives of management discussed above	
	<b>CHAPTER 02: PRINCIPLES OF MANAGEMENT</b>	
1	<b>Lloyd company limited manufacturer's motorcycle and cars. It has two separate divisions for both of them. Each division has its own in-charge, plans and execution resources. On the account of the working of two divisions overlap. Which principle of management violated by the Lloyd company limited.</b> (a) Unity of command (b) Scalar chain (c) Unity of direction (d) Discipline	
2	<b>Mr. Goyal, HR, manager of a company, select each person scientifically, assigns work to its employees according to his/her physical, mental and intellectual capability, He also gives them to required training so that they may produce more and earn more. This will ensure their prosperity for the both company and the workers.</b> <b>Identify the principal of management highlighted in the above case.</b> (a) Development each and every person to his her greater efficiency and prosperity (b) Subordination of individual interest to general interest. (c) Produce more and earn more (d) Physical, mental and intellectual capability development of workers	
3	<b>Assertion (A): Techniques are procedures or methods which involves series of steps to be taken to desired goals.</b> <b>Reason (R) principles are the guideline to take decisions or action while practicing techniques.</b> (a) Both (A) and (R) are true. (b) A is true but (R) is false. (c) (A) is false but (R) is true.	
4	<b>Assertion (A): Ram is given the responsibility to produce 1000 Covid-19 Test Tubes per day, but he is not given the authority to purchase raw material. In absence of raw material in the store work could not be completed.</b> <b>Reason (R): Ram cannot be blamed because he was not given the matching authority to complete the work on time.</b> (a) Both (A) and (R) are true and (R) is the correct explanation of (A) (b) Both (A) and (R) are true but (R) is not the correct explanation of (A) (c) (A) is true but (R) is false. (d) (A) is false but (R) is true.	
5	<b>Briefly explain the following techniques of Scientific Management as given by F.W. Taylor:</b> <b>a. Method study b. Functional foremanship c. Standardization d. Differential piece wage system.</b>	

6	<p>Radhika opens a jewelry showroom in Jaipur after completing a course in jewelry designing. She has employed eleven persons in her showroom. For greater productivity, she divides the work into small tasks and each employee is trained to perform his/her specialized job. The sales persons are allowed to close a deal with a buyer by giving a maximum of 10% discount, whereas the decision to give any further discount rests with Radhika as the final authority. In the earlier days of starting of the business, five of her employees were asked to put in extra hours of work. In return she had promised to give them a special incentive within a year. Therefore, after six months when the business was doing well, she awarded a cash bonus to each of these employees to honour her commitment. However, when it comes to settling the conflicts among her employees, she tends to be more biased towards her female employees. In context of the above case:</p> <p>A) Identify and explain the various principles of management that are being applied by B) Radhika by quoting lines from the paragraph.</p>	
<b>CHAPTER 03: BUSINESS ENVIRONMENT</b>		
1	Which environment prohibits the advertisement of alcoholic beverages?	
2	Banking sector reforms have led to easier credit terms and better services. This is an example of a key component of the —Business Environment" name this component?	
3	Demand for reservation in jobs for minorities refers to an example of key component of general environment of business. Name this component.	
4	<p>On 8th November, 2016 the Government of India announced the demonetisation making all Rs.500 and Rs. 1,000 banknotes of the Mahatma Gandhi Series invalid past midnight. The government claimed that the action would curtail the use of illicit and counterfeit cash to fund illegal activity and terrorism. The BSE SENSEX and NIFTY 50 stock indices fell over 6% on the day after the announcement. The decision was heavily criticised by members of the opposition parties, leading to debates in both houses of parliament and triggering organised protests against the government in several places across India. People seeking to exchange their bank notes had to stand in lengthy queues, and several deaths were linked to the inconveniences caused due to the rush to exchange cash. After demonetisation the demand for point of sales (POS) or card swipemachines has increased. E-payment options like Paytm has also seen a rise. In context of the above case:</p> <p>Identify &amp; explain the various dimensions of business environment which relate to the above mentioned case.</p>	
5	<p>Identify the various dimensions of business environment:</p> <ol style="list-style-type: none"> <li>1. With the election of a new government the sensex drops by 748 points.</li> <li>2. A particular channel refrains from showing the advertisement of a particular product as it is banned by the government.</li> <li>3. A software is in high demand among the industrial buyers as it can connect all the branches of a company as a single integrated unit.</li> <li>4. At the time of holi a large number of manufacturing firms get involved in making colours which are used in the celebration of this colourful festival.</li> <li>5. It is not advisable to open a luxury car showroom in the middle of an economy where per capita income is very low.</li> </ol>	
<b>CHAPTER 4 : PLANNING</b>		
1	<p>Super Fine Rice Ltd. has the largest share of 55% in the market. The company's policy is to sell only for cash. In 2015, for the first time company's number one position in the industry has been threatened because other companies started selling rice on credit* also. But the managers of Super Fine Rice Ltd. continued to rely on its previously tried and tested successful plans which didn't work because the environment is not static. This led to decline in sales of Super Fine Rice Ltd. The above situation is indicating two limitations of planning which led to decline in its sales. Identify these limitations.</p>	
2	<p>Two years ago, Madhu completed her degree in food technology. She worked for sometime in a company that manufactured chutneys, pickles and murabbas. She was not happy in the company and decided to have her own organic food processing unit for the same. She set the objectives and</p>	



1	<p>Mr. Fernandes is the owner of Unibie Enterprises, carrying on the business of manufacturing electrical appliances. There is a lot of discontentment in the organization and targets are not being met. He asked his son, Michel, who has recently completed his MBA, to find out the reason. Michel found that all decision making of the enterprise were in the hands of his father. Moreover, his father did not have confidence in the competency of the employees. Thus the employees were not happy.</p> <p>(a) Identify any two communication barriers because of which 'Unibie Enterprise' was not able to achieve its target.</p> <p>(b) State one more barrier each of the types identified in part (a) above</p>	
2	<p>A.S. Environs Ltd.' is dealing in Environment- Consultancy. To get the business, the team leader and his team used to travel to different states to give presentation to their clients. As per the policy of the company, the team leader used to travel by air whereas his team travelled by road/train. It was not only time consuming but also at times forced the female team members to travel alone. As a result, the subordinates were not acting in a desired manner to achieve organizational goals. The CEO of the company came to know about it. He called the team leader, discussed the matter with him and decided to change the travel policy of the company. It was decided that in future all the members including the leader would travel together and usefully utilize the travelling time in discussion about the presentation to be given to the clients. This made a positive impact and every member of the team started acting in a manner as desired by the team leader.</p> <p>State the features of the element of the function of management used by the CEO</p>	
3	<p>Prateek is working in a multi national company in Noida. He was running temperature for the last many days. When his blood was tested, he was found positive for malaria. He was admitted in the hospital and a blood transfusion was advised by the doctors as his condition was very serious. One of his colleagues sent a text message to his superior 'Mr. B. Chatterjee'. Mr. B. Chatterjee immediately sent a text message to the employees of the organization requesting them to donate blood for Prateek. When the General Manager came to know about it he ordered for fumigation in the company premises and for cleaning the surroundings.</p> <p>(a) From the above para quote lines that indicate formal and informal communication</p> <p>(b) State any two features of informal communication</p>	
4	<p>Pramod was a supervisor at 'Annapurna Ata' factory. The factory was producing 200 quintals of aata every day. His job was to make sure that the work goes on smoothly and there was no interruption in production. He was a good leader who would give orders only after consulting his subordinates and work out the policies with the acceptance of the group. Identify and describe the leadership style being adopted by Pramod.</p>	
5	<p>Anjali had been working with 'Tata Enterprises' for the last ten years. She was famous for her dedication towards the work. When the Manager senior to her retired, all her colleagues thought that now Anjali would be promoted. But to everyone's surprise the vacant post was filled by an outsider 'Miss Monika'. Anjali felt demoralised and her performance started declining. She would absent herself often and could not meet her targets. Miss Monika was a good leader who would not only instruct her subordinates, but also guide and inspire them. She noticed Anjali's behaviour and felt that her performance could be improved. She started involving Anjali in decision-making issues related to the organisation and made her a part of a high-level joint management committee. Anjali was now punctual to office and her performance started improving.</p> <p>(a) Identify the function of management being performed by Monika</p> <p>(b) Name the element of the above function of management which helped Monika to improve Anjali's behaviour.</p> <p>(c) State any three features of the element identified in (b) above</p>	
<b>CH-8 CONTROLLING</b>		
1	<p><b>Explain — Critical point control with respect to Analyzing deviations, a step in the process of controlling. Give a suitable example.</b></p>	
2	<p><b>Explain — Management by exception with respect to Analyzing deviations, a step in the process of controlling. Give a suitable example</b></p>	
3	<p><b>A.S. Ltd.' is a large company engaged in assembly of air-conditioners. Recently the company had conducted the 'Time' and 'Motion' study and concluded that on an average a worker</b></p>	



	<p>can assemble ten air-conditioners in a day. The target volume of the company in a day is assembling of 1,000 units of air-conditioners. The company is providing attractive allowances to reduce labour turnover and absenteeism. All the workers are happy. Even then the assembly of air-conditioners per day is 800 units only. The reason the company compared actual performance of each worker and observed through C.C.T.V. that some of the workers were busy in gossiping. (a) Identify the function of management discussed above. (b) State those steps in the process of the function identified which are discussed in the above paragraph</p>	
	<b>CHAPTER 09: FINANCIAL MANAGEMENT</b>	
1	<p>Financial leverage is called favourable if :</p> <p>(a) Return on investment (ROI) is lower than the cost of debt</p> <p>(b) ROI is higher than the cost of debt</p> <p>(c) Debt is easily available</p> <p>(d) If the degree of existing financial leverage is low</p>	
2	<p>Financial planning arrives at :</p> <p>(a) Minimising the external borrowing by resorting to equity issues</p> <p>(b) Entering that the firm always have significantly more fund than required so that there is no paucity of funds</p> <p>(c) Ensuring that the firm faces neither a shortage nor a glut of unusable funds.</p> <p>(d) Doing only what is possible with the funds that the firms has at its disposal</p>	
3	<p>In the paint industry, various raw materials are mixed in different proportions with petroleum for manufacturing different kinds of paints. One specific raw material is not readily and regular available to the paint manufacturing companies. Bonler Paints Company is also facing this problem and because of this there is a time lag between placing the order and the actual receipt of the material. But, once it receives the raw materials, it takes less time in converting it into finished goods. Identify the factor affecting the working capital requirements of this industry</p>	
4	<p>Aarohan Ltd. An automobile manufacturer was diversifying into manufacturing two-wheelers. They knew that India is on a growth path and a new breed of consumer is eager for a first vehicle. The market responded very well to the new product. The company did not have to allow credit, as it had advance orders from four to six months with deposits paid. Also, due to efficiency in managing their operations as soon as a vehicle was off the assembly line, it was out to the dealers. Give any one reason discussed above which helped the firm in managing its working capital efficiently.</p>	
5	<p>Yogesh, a businessman is engaged in purchasing and selling of Ice-creams. Identify the working capital requirement of Manish giving reasons in support of your answer. Explain any two factors that will affect his fixed capital requirements.</p>	
6	<p>Well being Ltd. is a company engaged in production of organic foods. Presently, it sells its products through indirect channels of distribution. But, considering the sudden surge in the demand for organic products, the company is now inclined to start its online portal for direct marketing. The financial managers of the company are planning to use debt in order to take advantage of trading on equity. In order to finance its expansion plans, it is planning to raise a debt capital of Rs.40 lakhs through a loan @ 19% from an industrial bank. The present capital base of the company comprises of Rs.9 lakh equity shares of Rs.10 each. The rate of tax is 30%. In context of the above case:</p> <p>(a) What are the two conditions necessary for taking advantage of trading on equity?</p> <p>(b) Assuming the expected rate of return on investment to be same as it was for the current year i.e. 15%, do you think the financial managers will be able to meet their goal. Show your workings clearly.</p>	
7	<p>'Sarah Ltd' is a company manufacturing cotton yarn. It has been consistently earning good profits for many years. This year too it has been able to generate enough profit. There is availability of enough cash in the company and good prospect for growth in future. It is a well managed organisation believes in quality, equal employment opportunities and good remuneration practices. It has many shareholders who prefer to receive a regular income from</p>	

	<p>their investments. It has taken a loan of Rs 40 lakh from IDBI and is bound by certain restrictions on the payment of dividend as per terms of loan agreement.</p> <p>The above discussion about the company leads to various factors which decide how much of the profit should be retained and how much about to be distributed by the company.</p> <p>Quoting the lines from the above discussion Identify and explain any four such factors.</p>
	<p><b>Project Work</b></p> <p><b>Decide and Choose any one topic for your project out of four topics prescribed by CBSE.</b></p> <p>Project One: Elements of Business Environment</p> <p>II. Project Two: Principles of Management</p> <p>III. Project Three: Stock Exchange</p> <p>IV. Project Four: Marketing</p>

### Maths

1. Do any one of the **projects** given below
  - A. Mathematics and I.T. :writing of mathematical programmes, algorithms, circuit diagrams.
  - B. Applications of conic section, 3d Geometry and vectors in Physics.
  - C. Form a differential equation of growth of bacteria in different environments.
2. Do any of the following **activities**

### Hindi

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केंद्रीय विद्यालय सेक्टर 5 ,द्वारका  
कक्षा -12 , A,B,D

- 1- छायावाद युग के किन्हीं चार कवियों का सामान्य परिचय देते हुए उनकी प्रमुख कृतियों एवं उपलब्धियों का भी वर्णन करें ।
- 2- पत्रकारिता के क्षेत्र में दिए जाने वाले सभी पुरस्कारों के विषय में विस्तृत जानकारी दीजिए ।
- 3-सड़क दुर्घटनाग्रस्त किसी व्यक्ति के प्रति पुलिस के असहयोगपूर्ण व्यवहार का वर्णन करते हुए पुलिस आयुक्त दिल्ली को एक पत्र लिखिए और उपयुक्त कदम उठाने का आग्रह कीजिए।
- 4- बैंक ऑफ इंडिया में कार्यालय सहायक के रिक्त पद के लिए महाप्रबंधक को स्ववृत्त सहित आवेदन पत्र लिखिए ।
- 5- दिए गए विषयों पर लगभग 150 शब्दों में लेखन करिए ।  
परीक्षा के दिन  
मेरे शहर का मेला
- 6- किसी पत्र- पत्रिका से शिक्षा संबंधी कोई 4 विज्ञापन काटकर चिपकाएं।

### Political Science

Solve the half yearly question paper SET 1 and SET 2 in your political science fair notebook.

🏠 Complete your notebook work till chapter: challenge and restoration of the Congress system

📁 Complete your CBSE project file according to the topic allotted to you.

📁 Special Points

The project work should be of 20 to 22 pages.

Index and acknowledgment letter should be attached to the project work.

Pictures, maps and figures should be used to make the project work attractive.

All the students will make their own separate projects.

## Biology

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KV SEC 5 DWARKA -II  
BIOLOGY

Class 12 autumn holiday hw

1. Complete investigatory project and submit on the day of reopening.

2. solve half yearly paper of shift 1 and 2

3. Make model for science exhibition on the given topics.

4. Solve following CCT questions in your copy

[https://drive.google.com/file/d/1m5\\_9B5PvjituYQF94IjTMHzxHQy\\_beYO/view?usp=drivesd](https://drive.google.com/file/d/1m5_9B5PvjituYQF94IjTMHzxHQy_beYO/view?usp=drivesd)

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## Information Practices

Q1. Prepare Project File for the AISSCE Practical Exam 2023-2024 on the following topics

- 1. LIBRARY MANAGEMENT SYSTEM**
- 2. SCHOOL MANAGEMENT SYSTEM**
- 3. HOSPITAL MANAGEMENT SYSTEM**
- 4. EMPLOYEE MANAGEMENT SYSTEM**
- 5. AIR LINE RESERVATION SYSTEM**
- 6. RAILWAY RESERVATION SYSTEM**
- 7. CULTURAL ACTIVITY BASED INFORMATIVE SYSTEM**
- 8. EMPLOYEMENT SYSTEM**
- 9. PAYROLL SYSTEM**
- 10. ANY OTHER TOPICS**

Project covered and based on all python syntax and command of your CBSE prescribed syllabus book and other references like Internet You can visit the website Python4Cs, Know python Bytes websites for reference only.

NOTE: Its compulsory to all submit your project and practical file for correction after AUTUMN Break.

## Computer science

Q1. Prepare Project File for the AISSCE Practical Exam 2023-2024 on the following topics

1. LIBRARY MANAGEMENT SYSTEM
2. SCHOOL MANAGEMENT SYSTEM
3. HOSPITAL MANAGEMENT SYSTEM
4. EMPLOYEE MANAGEMENT SYSTEM
5. AIR LINE RESERVATION SYSTEM
6. RAILWAY RESERVATION SYSTEM
7. CULTURAL ACTIVITY BASED INFORMATIVE SYSTEM
8. EMPLOYEMENT SYSTEM
9. PAYROLL SYSTEM
10. ANY OTHER TOPICS

Project covered and based on all python syntax and command of your CBSE prescribed syllabus book and other references like Internet You can visit the website Python4Cs, Know python Bytes websites for reference only.

NOTE: Its compulsory to all submit your project and practical file for correction after AUTUMN Break.

## Accountancy

1. Solve the half yearly question paper Again.
2. Solve all the monthly test paper

## Chemistry

- Solve all the question paper of half yearly
- Practice all the name reactions.

## Economics

- Q1.Explain determination of equilibrium level of income output and employment by AD AS approach? S-I approach also?
- Q2 Explain objective of Government Budget ?
- Q3.Explain function of central bank?
- Q4.Explain goals of five year plan?
- Q5,Explain function of investment multiplier?
- Q5.write formula of MPC,MPS,APC,APS , Investment multiplier, consumption function, saving function?
- Q6 Make diagram of AD,AS,consumption functions. Saving functions?
- Q7.Explain sustainable development and its Importance?
- Q8.Compare groth path of India, China and Pakistan?
- Q9. Explain Excess Demand and Deficient Demand with the help of diagram?
- Q10.Explain method of correction of excess Demand and Deficient Demand?

## **History**

- **Solve all half yearly question paper**
- **Prepare a project file for CBSE exam as per topic given in the class**
- **Prepare 10 question from each taught lesson with their answer**
- **Revise and learn all taught lessons.**