

## **HOLIDAY HOMEWORK**

### **CLASS: XI SESSION: - 2024-25**

#### **SUBJECT: Accountancy**

1. Revise Ch.: 1, 2,4,5,6
  2. Do the following question in Homework Notebook
    - Ch.2 Page2.23 Case Study Based Question, Page 2.24 – Question 1
    - Ch.4 Page 4.6 Question 1 to 10
    - Ch.4 Page 4.6 Question 1 to 10
    - Ch.5 Accounting Equation Question – 5,6,7,8,10,11,12,14,15,16,17to 26.
    - Ch.6 Accounting Procedures  
Make a Chart or PPT  
**Topic:** a) Types of Accounts and Rules of Debit & Credit  
b)Carrier Option in Commerce Stream
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#### **SUBJECT: Geography**

1. Prepare a Project on the following Climatic Regions of the world:-
    - Sub-Tropical Desert
    - Tundra
  2. Points to be covered:  
Location, Climate, Vegetation, Wildlife, People and their culture, Economic activities (Specific physical feature found there.)  
Paste colourful pictures.
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#### **SUBJECT: Biology**

1. Practice the questions given in the assignment.
2. Complete the following experiments in the practical file. Get the details of the file from your subject teacher

#### **Experiments to be completed in the experiment notebook**

1. Study of the parts of a compound microscope.
2. Study of mitosis in onion root tip cellsfrom permanent slides.
3. Preparation and study of T.S. of dicot and monocot roots and stems (primary).
4. Study of osmosis by potato osmometer.
5. Study of plasmolysis in epidermal peels (e.g. Rhoeo/lily leaves or flashy scale leaves of onion bulb).
6. Study of distribution of stomata on the upper and lower surfaces of leaves.

7. Test for the presence of sugar, starch, proteins and fats in suitable plant and animal materials.
8. Separation of plant pigments through paper chromatography

NOTE: Things to take care while preparing the file

- Write Aim, Principle, Requirements, Procedure, Result and Precautions on Right Hand Page (Ruled Page) of your file.
- Observation Table, Diagrams, Graph, should be on the Left-Hand Page (Blank Sheet)
- Each and every diagram should be well labelled and drawn with pencil only.

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**SUBJECT: English**

1. Look at the famous painting 'Daya of Glory' by Satish Gujral and answer the questions that follow based on your interpretation of .



- a) Suggest an alternative title for this painting.
  - b) Narrate a story based on your interpretation of the painting.
  - c) What inspired the painter to draw this particular painting? Write a few words about the painter and his style of painting in not less than 120-150 words.
2. Click this link: <https://youtu.be/zQfdtCmGbx0>. Based on your observations answer the following questions.
- a) Indian advertisements make no sense. Justify your stand with valid reasons.
  - b) Do you think Indian ads promote stereotypes? Substantiate your answers by quoting a few examples.
3. Make any one A-3 size poster of any good quotation, phrases, proverbs, Great Poets, Dramatists, Novelist, story writers in a neat and creative manner.
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## SUBJECT: Economics

### **1. \*\*Project Topic Research: \*\***

- Choose your topic from the given list.
- Gather detailed information about the topic.
- Organize your findings neatly on A4-sized sheets and compile them into a file.

### **2. \*\*Sustainable Development Research: \*\***

- Research sustainable development and its implications on economic policies.
- Summarize your findings in a PowerPoint presentation or create a documentary.
- Highlight key points, examples, and potential challenges.

### **3. \*\*Case Study on Current Economic Issues: \*\***

- Select a current economic issue to study.
- Conduct thorough research on the issue, gathering data and analyzing its impact.
- Prepare a speech outlining your analysis, findings, and possible solutions or recommendations.

### **4. \*\*Volunteering at an NGO: \*\***

- Find an NGO where you can volunteer for a total of 7 hours.
- Document your experiences daily, noting what you did, whom you helped, and any insights gained.
- Obtain an appreciation certificate from the NGO for your contribution.

**Remember to manage your time effectively and prioritize each task based on its deadline and complexity. Good luck with your holiday homework!**

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## SUBJECT: Pol.Science

1. Watch 10 episodes of the TV series "SAMVIDHAAN- The Making of the Constitution of India" directed by Shyam Benegal .

- Enlist any 5 less known facts about the Indian Constitution in your fair note book.
- PROJECT WORK:- Prepare a PPT and a Project File on the topic- ' LOK SABHA ELECTION 2024' covering the following points:
  - \* Meaning of the term 'Election'.
  - \* Types of Elections.
  - \* Total Phases and Key Dates of Lok Sabha Election 2024
  - \* Total number of Political Parties in India. Name and symbols of the National Political Parties of India.
  - \* Member Parties of National Democratic Alliance (NDA) and United Progressive Alliance (UPA) in 2024 and now (Names only)
  - \* Seat-sharing arrangement of the BJP led- National Democratic Alliance (NDA) and Congress led- United Progressive Alliance (UPA) for 2024 Lok Sabha Election.

\* Compare the election Manifestos of Bharatiya Janata Party (BJP) and the Indian National Congress (INC) .

\* New measures that Election Commission introduced for free and fair polls in 2024.

\* On a political map of India write number of Lok Sabha seats state wise. GENERAL INSTRUCTIONS FOR THE PROJECT WORK:

• Project must be of at least 12-15 pages. It should be hand written.

A Cover/Front page having the School Logo, School name, Session, Student's Name (Submitted By), Class and Section, and Name of the Subject teacher (Submitted To)

\* Title Page with name of the Topic

\* Acknowledgement

\* Index

\* Preface/ Introduction

\* Content (The above mentioned points must be explained.) the Project must be supported with newspapers or magazine cuttings, pictures from internet, comparative graphs, map etc.)

\* Conclusion

Do the given assignments of Ch.: 3 Right in Indian Constitution.

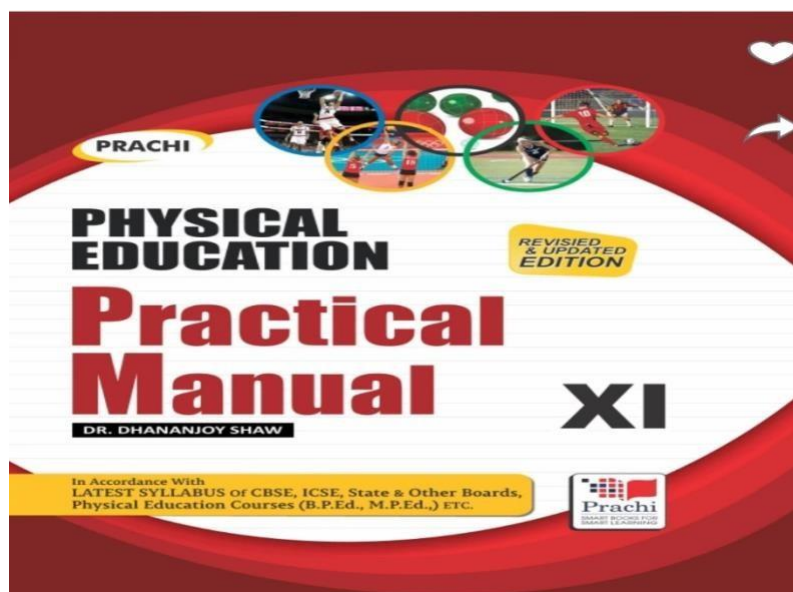
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### **SUBJECT: Business Studies**

1. Read the section of 'THE ECONOMIC NEWS' in newspaper and figure out 10 news clippings/headings for 15 days. Paste them in a scrap book. Find words related to commerce and trade from the same and write their meaning.
2. Make a PPT on Economic and Non-Economic activities
3. Revise Ch.1 and 2 for Unit Test.

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### **SUBJECT: Physical Education**



Prepare a Record file (Practical file) which includes:-

- **Practical-1:** Fitness tests administration. (SAI Khelo India Test) Age group 5- 8 years /class 1-3:- BMI, Flamingo Balance Test, Plate Tapping Test. Age group 9-18/ Class 4-12:- BMI, 50M Speed test, 600M Run/ Walk, Sit C Reach, Flexibility Test, Strength Test (Partial Abdominal Curl Up, Push-Ups for boys, Modified Push-Ups for girls). Brockport Physical Fitness Test (BPFT). Test for CWSN (any 4 items out of 27 items. One item from each component: Aerobic Function, Body Composition, Muscular strength C Endurance, Range of Motion or Flexibility)

According to unit 6. Test Measurement and Evaluation

Paste or draw relative pictures.

- **Practical-2:** Procedure for Asanas, Benefits & Contraindications for any 2 Asanas for each lifestyle disease (Obesity, Asthma, Hypertension, Diabetes and Back Pain) Total 10 Asanas.

Paste or draw relative pictures.

- **Practical - 3 :** Any one IOA recognised Sports /Game of choice. Labelled diagram of Field C Equipment, Also mention its Rules, Terminologies and Skills.

**Note:-** If you are willing, You can have assistance from Google app.

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### **SUBJECT: Computer Science**

Prepare Presentation on the following topics (**Refer Book Chapter-1, 10 & 11**)

S.NO	TOPIC	ROLL.NO
1	Basic component of computer system	1-10
2	Software and Types of Software	11-20
3	Society, Law and Ethics	21-30
4	Cyber Safety	31 Onwards

#### **General Instructions:**

1. Make 10-12 slides on each topic.
2. Bring the printouts in proper file cover.

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### **SUBJECT: Chemistry**

1. Make an investigatory project on one of the following topics:
  - Sterilization of water using bleaching powder.
  - Analysis of fertilizers.
  - Study of presence of oxalates in guava fruit in different stages of Ripening.
  - Effect of Potassium bisulphate as food preservative.
  - Quantity of presence of casein in different sample of milk.

- Study of common food adulterants in food stuff.
  - Extraction of various essential oils present in Ajwain, Sauf, Ellaichi.  
You can select any other topic also elated to your syllabus  
Topic has to be practical based & must need investigation.  
Minimum 15 Pages is needed as file work.  
No 8 Roll no's in sequence can select the same topic.
2. Revise Ch.1, 2 for class test.
  3. Redo all exercise questions of Ch.1 in your C.W Copy.
  4. Draw Periodic Table on a big chart paper and make it informative as far as possible.
  5. Learn atonic no upto 30(H to Zn)
  6. Revise and learn chapters
    - Metal & Non Metal
    - Carbon & its compounds from 'X' Book.
  7. Complete practice file work upto 10 practicals which shall be sent to you in your class group.
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**SUBJECT: History**

**Make a Project On:**

1. Ancient History in depth -Mesopotamia

OR

Contribution of Roman Empire

**Note:**

- Make use of colourful pictures
  - Make a colourful cover page
  - 15-20 Pages
2. Art and Architecture during Renaissance period. Present with the help of Portrait, painting or craft work
  3. Go through the taught chapters thoroughly.
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**SUBJECT: Physics**

- I. Write the following experiments in practical file (Follow the instructions given by Subject teacher while writing the experiments)

**Section A**

- A. To measure diameter of a small spherical/cylindrical body and to measure internal diameter and depth of a given beaker/calorimeter using Vernier Callipers and hence find its volume.

- B. To measure diameter of a given wire and thickness of a given sheet using screw gauge.
- C. To determine volume of an irregular lamina using screw gauge.
- D. To determine radius of curvature of a given spherical surface by a spherometer.
- E. To find the weight of a given body using parallelogram law of vectors.

**Section B**

- A. Using a simple pendulum, plot its  $L-T^2$  graph and use it to find the effective length of second's pendulum.
  - B. To study variation of time period of a simple pendulum of a given length by taking bobs of same size but different masses and interpret the result.
  - C. To study the relationship between force of limiting friction and normal reaction and to find the co-efficient of friction between a block and a horizontal surface.
  - D. To find the downward force, along an inclined plane, acting on a roller due to gravitational pull of the earth and study its relationship with the angle of inclination  $\theta$  by plotting graph between force and  $\sin \theta$ .
  - E. To find the force constant of a helical spring by plotting a graph between load and extension.
- II. Make a project file on the following topic according to your roll number.
- A. Roll No 1 to 7 : Physics in Stethoscope
  - B. Roll No. 8 to 14: Physics in football
  - C. Roll No. 15 to 21 : Physics in Robotics
  - D. Roll No. 22 to 28 : Crazy facts about black holes
  - E. Roll No. 29 to 35 : Nanotechnology a branch of science
  - F. Roll No. 36 to 42 : Role of Maths in Physics
  - G. Roll No. 43 to 49 : Physics in Biology
- III. Make a chart on any Physics Topic from syllabus of class 11<sup>th</sup> or 12<sup>th</sup>.
- IV. Solve the following assignment in Fair notebook
1. Name the physical quantities whose dimensional formulae are as follows:  
(i)  $ML^2T^{-2}$  (ii)  $MT^{-2}$  (iii)  $ML^{-1}T^{-2}$  (iv)  $ML^2T^{-3}$
  2. Define dimensional formulae of the following: (i) Power (ii) Gravitational constant (iii) Planck's Constant (iv) Coefficient of viscosity (v) Surface Tension
  3. Find the value of 120 J/min on a system that has 100 g, 100 cm and 1 min as the base unit.
  4. Convert one dyne into Newton.
  5. If the units of force, energy and velocity are 20 N, 200 J and 5 m/s, find the units of length, mass and time.
  6. Test the dimensional consistency of the following equations: (i)  $v = u + at + 0.5at^2$  (ii)  $s = ut + 0.5at^2$   
(iii)  $0.5mv^2 = mgh$
  7. Find the dimensions of  $a \cdot b$  in the relation:  $F = a\sqrt{x} + bt^2$ , where F is force, x is distance and t is time.

8. Find the dimension of a, b, c and d if the distance covered by a particle in time t is given by  $x = a+bt+ct^2+dt^3$ .
9. A planet moves around the sun in nearly circular orbit. Its period of revolution 'T' depends upon: (i) radius 'r' of the orbit (ii) mass 'M' of the sun and (iii) the gravitational constant 'G'. Show dimensionally that  $T^2 \propto r^3$ . Taking the proportionality constant as  $2\pi$ , write the expression for T.
10. The frequency 'f' of stretched string depends upon: (i) its length l, (ii) its mass per unit length 'm' and (iii) the tension 'T' in the string. Obtain dimensionally an expression for frequency 'f'.
11. The escape velocity v of a body depends upon (i) the acceleration due to gravity of the planet and (ii) the radius of the planet R. Establish dimensionally the relationship between v, g and R.
12. State the number of significant figures in the following measurements: (i) 0.009m<sup>2</sup> (ii) 5.049 (iii) 0.02800 m (iv)  $1.27 \times 10^{27}$  kg (v) 0.05090 cm
13. Define (i) error (ii) accuracy (iii) precision (iv) significant figures.
14. 5.74 g of a substance occupies 1.2 cm<sup>3</sup>. Express its density keeping significant figures in view.
15. Solve the following and express the result to an appropriate number of significant figures (i) Add 7.1 cm, 5.66cm and 14.89 cm (ii)  $80.5 \times 132.5 \times 0.10$  m<sup>3</sup>.
16. The number of particles given by  $n = -D (n_2 - n_1) / (x_2 - x_1)$ ; are crossing a unit area perpendicular to x- axis in unit time, n<sub>1</sub> and n<sub>2</sub> are the number of particles per unit volume for the values of x meant to be x<sub>1</sub> and x<sub>2</sub>. What is dimensional formula of diffusion constant D?
17. Derive the following relationships using dimensions: (a) The velocity 'v' of a wave along a plucked string depends on the tension 'T' in the string, its length 'l' and the mass 'm' of the string. (b) The terminal velocity 'v' of a steel sphere moving under gravity through a viscous liquid depends on the weight of the sphere 'mg', the coefficient of viscosity 'η' and the radius of the sphere 'r'.

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**SUBJECT: Psychology**

### 1. CASE STUDY

Socialization is a process by which individuals acquire knowledge, skills and dispositions which enable them to participate as effective members of group and society. It is a process that continues over the entire life span and through which one learns develops ways of effective functioning at any stage of development. It forms the basis of social and cultural transmission from one generation to the next. Its failure in any society may endanger the very existence of that society.

Answer the following questions.

1. Why socialization is necessary in daily life
2. What is the age criterion of socialization?
3. What is the basis of socialization?

### 2. Project work

What is stress? Why is it important to manage stress? Explore the natural ways to manage stress.



**SUBJECT: Maths**

**Mathematics Holiday Homework CLASS - XI**

**Topic - Trigonometry or Circular function**

1. Find the values of the following trigonometric ratio:

- |                                      |  |   |                          |
|--------------------------------------|--|---|--------------------------|
| (i) $\sin 315^\circ$                 | (ii) $\cos 210^\circ$                      | (iii) $\cos(-480^\circ)$                    | (iv) $\sin(-1125^\circ)$ |
| (v) $\operatorname{cosec} 390^\circ$ | (vi) $\cot 570^\circ$                      | (vii) $\tan 480^\circ$                      | (viii) $\cos 270^\circ$  |
| (ix) $\tan \frac{19\pi}{3}$          | (x) $\sin \left[ \frac{-19\pi}{3} \right]$ | (xi) $\cot \left[ \frac{-19\pi}{4} \right]$ | (xii) $\sec 6\pi$        |

2. Find the values of following trigonometric ratios:

- |                           |                        |  |                           |
|---------------------------|------------------------|--|---------------------------|
| (i) $\sin \frac{5\pi}{3}$ | (ii) $\sin 3060^\circ$ | (iii) $\tan \frac{11\pi}{6}$             | (iv) $\cos(-1125^\circ)$  |
| (v) $\tan 315^\circ$      | (vi) $\sin 510^\circ$  | (vii) $\cos 510^\circ$                   | (viii) $\sin(-330^\circ)$ |
| (ix) $\cos 855^\circ$     | (x) $\tan(-585^\circ)$ | (xi) $\operatorname{cosec}(-1200^\circ)$ |                           |

3. Find the values of the following trigonometric ratio:

- |  |   |  |  |
|--|---|--|--|
| (i) $\sin \left( \frac{25\pi}{3} \right)$  | (ii) $\cos \left( \frac{41\pi}{4} \right)$  | (iii) $\tan \left( \frac{-16\pi}{2} \right)$ | (iv) $\cot \left( \frac{29\pi}{4} \right)$ |
| (v) $\sin \left( -\frac{19\pi}{3} \right)$ | (vi) $\tan \left( -\frac{31\pi}{4} \right)$ | (vii) $\operatorname{cosec}(-1110^\circ)$    | (viii) $\sin(765^\circ)$                   |
| (ix) $\cot(-600^\circ)$                    | (x) $\sin 1140^\circ$                       | (xi) $\sin 5\pi$                             | (xii) $\tan \left( \frac{5\pi}{4} \right)$ |

4. Find the values of the other five trigonometric functions in each of the following:

- |  |   |
|--|---|
| (i) $\cot \theta = \frac{12}{5}$ , $\theta$ in quadrant III        | (ii) $\cos \theta = \frac{-1}{2}$ , $\theta$ in quadrant II |
| (iii) $\tan \theta = \frac{3}{4}$ , $\theta$ in quadrant III       | (iv) $\sin \theta = \frac{3}{5}$ , $\theta$ in quadrant I   |
| (v) $\cos \theta = \frac{-\sqrt{2}}{2}$ , $\theta$ in quadrant III | (vi) $\sin \theta = \frac{-1}{2}$ , $\theta$ in quadrant IV |

5. If  $\sin \theta = \frac{12}{13}$  and  $\theta$  lies in the second quadrant, find the value of  $\sec \theta + \tan \theta$ .

6. If  $\sin \theta = \frac{3}{5}$ ,  $\tan \phi = \frac{1}{2}$  and  $\pi/2 < \theta < \pi < \phi < (3\pi)/2$  find the value of  $\theta \tan \theta - \sqrt{5} \sec \phi$ .

7. Calculate the value of:

- |                     |                      |                        |                         |
|---------------------|----------------------|------------------------|-------------------------|
| (i) $\sin 15^\circ$ | (ii) $\cos 15^\circ$ | (iii) $\tan 15^\circ$  | (iv) $\sin 75^\circ$    |
| (v) $\cos 75^\circ$ | (vi) $\tan 75^\circ$ | (vii) $\sin 105^\circ$ | (viii) $\cos 105^\circ$ |

8. prove that

- |  |  |
|--|--|
| (i) $\sin 70^\circ \cos 10^\circ - \cos 70^\circ \sin 10^\circ = \frac{\sqrt{3}}{2}$   | (ii) $\cos 50^\circ \cos 10^\circ - \sin 50^\circ \sin 10^\circ = \frac{1}{2}$   |
| (iii) $\cos 80^\circ \cos 20^\circ + \sin 80^\circ \sin 20^\circ = \frac{1}{2}$  | (iv) $\sin 36^\circ \cos 9^\circ + \cos 36^\circ \sin 9^\circ = \frac{1}{\sqrt{2}}$  |
| (v) $\sin \frac{7\pi}{12} \cos \frac{\pi}{4} - \cos \frac{7\pi}{12} \sin \frac{\pi}{4} = \frac{\sqrt{2}}{2}$   | (vii) $\sin \frac{\pi}{8} \cos \frac{\pi}{12} + \cos \frac{\pi}{4} \sin \frac{\pi}{12} = \frac{\sqrt{3}}{2}$                       |
| (viii) $\frac{\cos(90^\circ+\theta) \operatorname{cosec}(270^\circ+\theta) \sin(180^\circ+\theta)}{\operatorname{cosec}(-\theta) \cos(270^\circ-\theta) \tan(180^\circ+\theta)} = \cos \theta$ | (viii) $\cos \frac{2\pi}{3} \cos \frac{\pi}{4} - \sin \frac{2\pi}{3} \sin \frac{\pi}{4} = \frac{-(\sqrt{3}+1)}{2\sqrt{2}}$         |
| (ix) $\tan^2 \frac{\pi}{3} + 2\cos^2 \frac{\pi}{4} + 3\sec^2 \frac{\pi}{6} + 4\cos^2 \frac{\pi}{2} = 8$  | (x) $4\sin \frac{\pi}{6} \sin^2 \frac{\pi}{3} + 3\cos \frac{\pi}{3} \tan \frac{\pi}{4} + \operatorname{cosec}^2 \frac{\pi}{2} = 4$ |

9. Evaluate the following:-

(i)  $\sin 78^\circ \cos 18^\circ - \cos 78^\circ \sin 18^\circ$

(ii)  $\cos 47^\circ \cos 13^\circ - \sin 47^\circ \sin 13^\circ$

(iii)  $\sin 36^\circ \cos 9^\circ + \cos 36^\circ \sin 9^\circ$

(iv)  $\cos 80^\circ \cos 20^\circ + \sin 80^\circ \sin 20^\circ$

10. Prove that:-

(i)  $\frac{\cos 11^\circ + \sin 11^\circ}{\cos 11^\circ - \sin 11^\circ} = \tan 56^\circ$

(ii)  $\frac{\tan 69^\circ + \tan 66^\circ}{1 - \tan 69^\circ \tan 66^\circ} = -1$

(iii)  $\frac{\cos 9^\circ + \sin 9^\circ}{\cos 9^\circ - \sin 9^\circ} = \tan 54^\circ$

(iv)  $\frac{\cos 8^\circ - \sin 8^\circ}{\cos 8^\circ + \sin 8^\circ} = \tan 37^\circ$

11. Prove that:

(i)  $\sin \frac{2\pi}{4} + \cos \frac{2\pi}{4} - \tan \frac{2\pi}{4} = \frac{-1}{2}$

(ii)  $2\sin \frac{2\pi}{6} + \operatorname{cosec}^2 \frac{7\pi}{6} \cos^2 \frac{2\pi}{3} = \frac{3}{2}$

(iii)  $\cot^2 \frac{\pi}{4} + \operatorname{cosec} \frac{5\pi}{6} + 3\tan^2 \frac{\pi}{6} = 6$

(iv)  $2\sin^2 \frac{3\pi}{4} + 2\cos^2 \frac{\pi}{4} + 2\sec^2 \frac{\pi}{3} = 10$

(v)  $\cos 510^\circ \cos 330^\circ + \sin 390^\circ \cos 120^\circ = -1$

(vi)  $\sin(-420^\circ) (\cos 390^\circ) + \cos(-660^\circ) (\sin 330^\circ) = -1$

(vii)  $\frac{\cos(90^\circ+0) \sec(-0) \tan(180^\circ-0)}{\sec(160^\circ-0) \sin(180^\circ+0) \cot(90^\circ-0)} = -1$

12. Prove that:

(i)  $\tan 225^\circ \cot 405^\circ + \tan 765^\circ \cot 675^\circ = 0$

(ii)  $\sin \frac{8\pi}{3} \cos \frac{23\pi}{6} + \cos \frac{31\pi}{3} \sin \frac{35\pi}{6} = \frac{1}{2}$

(iii)  $\cos 24^\circ + \cos 55^\circ + \cos 125^\circ + \cos 204^\circ + \cos 300^\circ = \frac{1}{2}$

(iv)  $\tan(-225^\circ) \cot(-405^\circ) - \tan(-765^\circ) \cot(675^\circ) = 0$

(v)  $\cos 510^\circ \sin 510^\circ + \sin(-330^\circ) \cos(-390^\circ) = 0$

(vi)  $\tan \frac{11\pi}{3} - 2\sin \frac{8\pi}{6} - \frac{3}{4} \operatorname{cosec}^2 \frac{\pi}{4} + 4\cos^2 \frac{17\pi}{6} = \frac{1-4\sqrt{3}}{2}$

(vii)  $3\sin \frac{\pi}{6} \sec \frac{\pi}{3} - 4 \sin \frac{5\pi}{6} \cot \frac{\pi}{4} = 1$

13. Prove that:

(i)  $\frac{\cos(3\pi+0) \operatorname{cosec}(2\pi+0) \tan(\pi/2+0)}{\sec(\pi/2+0) \cot 0 \cot(\pi+0)} = 1$

(ii)  $\frac{\operatorname{cosec}(90^\circ+0) + \cot(450^\circ+0)}{\operatorname{cosec}(90^\circ-0) + \tan(180^\circ-0)} + \frac{\tan(180^\circ+0) + \sec(180^\circ-0)}{\tan(160^\circ+0) - \sec(-0)} = 2$

(iii)  $\frac{\sin(180^\circ+0) \cos(90^\circ+0) \tan(270^\circ-0) \cot(360^\circ-0)}{\sin(360^\circ-0) \cos(160^\circ+0) \operatorname{cosec}(-0) \sin(270^\circ+0)} = 1$

(iv)  $\frac{\tan(90^\circ-0) \sec(180^\circ-0) \sin(-0)}{\sin(180^\circ-0) \cot(160^\circ-0) \operatorname{cosec}(90^\circ-0)} = 1$

14. Prove that:

(i)  $\tan 720^\circ - \cos 270^\circ - \sin 150^\circ \cos 120^\circ = \frac{1}{4}$

(ii)  $\sin 780^\circ \sin 480^\circ + \cos 120^\circ \sin 150^\circ = \frac{1}{2}$

(iii)  $\sin 780^\circ \sin 120^\circ + \cos 240^\circ \sin 390^\circ = \frac{1}{2}$

(iv)  $\sin 600^\circ \cos 390^\circ + \cos 480^\circ \sin 150^\circ = -1$

SUBJECT: Hindi

- कक्षा - ग्यारहवीं विषय - हिन्दी
1. निम्न विषयों पर 100 शब्दों में अनुच्छेद लिखिए।  
क) कश्मीर समस्या का समाधान  
ख) रिश्वत का रोग  
ग) वरिष्ठ नागरिकों की समस्याएँ
2. जनसंचार के विभिन्न माध्यमों पर परिमोजना बनाए।
3. आज की तनावपूर्ण जीवन-शैली पर एक फीचर लिखिए।
4. डाक-सेवाओं के प्रति संतोष व्यक्त करते हुए दिल्ली के मुख्य डाकपाल को पत्र लिखिए।
5. क्लर्क के रिक्त स्थान की पूर्ति के लिए किसी कंपनी के मैनेजर को एक आवेदन पत्र लिखिए।
- करवाए गए काम की पुनरावृत्ति करें।