

- 6- If the zeros of polynomial  $x^3 - ax^2 + bx - c$  are in AP then show that  $2a^3 - 9ab + 27c = 0$ .
- 7- If 1 and -1 are zeros of polynomial  $Lx^4 + Mx^3 + Nx^2 + Rx + P$ , show that  $L + N + P = M + R = 0$ .
- 8- Prove that:  $\sqrt{14}$  is an irrational number.
- 9- Floor of a room is to be fitted with square marble tiles of the largest possible size. The size of the room is 10 m  $\times$  7 m. What should be the size of tiles required that has to be cut and how many such tiles are required?
- 10- Two zeros of cubic polynomial  $ax^3 + 3x^2 - bx - 6$  are -1 and -2. Find the third zero and value of a and b.
- 11- If -4 is a root of the quadratic equation  $x^2 + px - 4 = 0$  and  $x^2 + px + k = 0$  has equal roots, find the value of k.
- 12- For what value of k, does the equation  $(k + 1)x^2 - 2(k - 1)x + 1 = 0$  has real and equal roots?
- 13- For what value of k, the roots of the quadratic equation  $3x^2 + 2kx + 27 = 0$  are real?
- 14- A motor boat whose speed is 18 km/h in still water, takes 1 hour more to go 24 km upstream than to return downstream to the same spot. Find the speed of the stream.
- 15- At 't' minutes past 2pm, the time needed by the minute hand of a clock to show 3 pm was found to be 3 minutes less than  $\frac{t}{4}$  minutes. Find 't'?

**Note:** Revise all taught syllabus and do above given questions in fair notebook.

#### **COMPUTER (CBSE)**

- 1- What are the advantages of the ability to Work Independently?
- 2- Name the Stress causal agents.
- 3- State any two purposes of using Templates in a word document.
- 4- In which situations Online shopping could be useful? Write any two popular E-commerce websites.
- 5- What is the difference between styles and templates?

#### **COMPUTER (UP BOARD)**

- 1- Write a program to Factorial of N number in 'c' and also draw the flow chart.
- 2- Briefly explain the difference the medium used in data communication.
- 3- What is the basic communication model? Draw the block diagram also.
- 4- Explain the following-
  - (a) Analog Communication System
  - (b) Digital Communication System

#### **PHYSICAL EDUCATION (Physical Activity Trainer)**

- 1- Prepare a chart on difference between assessment and evaluation.
- 2- Write a paragraph on importance of free play students life.
- 3- Write an essay on uses of computer in daily life.
- 4- Draw a flow chart file and folder.

*Illuminating Global Education Through Indian Values*

**NEW STANDARD GROUP OF INSTITUTES**



**HOME ASSIGNMENT 2023**



Name.....

Class. 10 (UP & CBSE) Sec. ....

Branch.....

**Note:1-All the written work is to be done in the fair note book.**

**2- Prepare taught topics in all subject for test just on reopening of the school.**

हिन्दी- (CBSE)

1. बस कर्मचारी के अशिष्ट व्यवहार की शिकायत करते हुए परिवहन विभाग के क्षेत्रीय अधिकारी को ई-मेल लिखिए।
2. 'गीता गारमेट प्राइवेट लिमिटेड' कम्पनी को सहायक प्रबंधक की आवश्यकता हैं उक्त पद हेतु आवेदन पत्र प्रेषित करते हुए स्व-वृत्त लेखन कीजिए।

हिन्दी- (UP Board)

1. गद्य एवं पद्य साहित्य का इतिहास कंठस्थ कीजिए।
2. 'बरोजगारी- एक वैश्विक समस्या' विषय पर निबंध लिखिए।

**ENGLISH-**

- 1- You recently visited a cricket stadium to watch your favourite team play. Write a descriptive paragraph : adding the following points- Name, location aspects, atmosphere: sights, sounds, purpose and importance.
- 2- Write a former letter, you are Samarth / Sonal Mishra, a resident of C-123, Janakpuri, New Delhi. You are a regular runner and when you go for your practice runs early in the morning, you have to face the menace of street dogs. Write a letter to the editor of a local news paper, on this issue.
- 3- **Exercises on Determiners-**  
Pg. 266 & 267 Ex. 10 & 11 (CBSE Board)  
Pg. No. - 309 & 310 Ex. - 6 to 10 (UP Board).
- 4- **Modals-**  
Exercises 7 & 8 from Pg No. -159 onwards (CBSE Board)
- 5- **Translation-**  
Exercise No. - 20-25 Pg No. - 20-25 (UP Board)

**PHYSICS-**

- 1- An object 1 m tall is placed on the principle axis of a convex lens and its 40 cm tall image is formed on the screen placed at the distance of 70 cm from the object calculate the focal length of the lens.
- 2- An object 2 cm high is placed at the distance of 64 cm from a white screen on placing a convex lens at the distance of 32 cm from the object it is found at a distinct image of the object is formed on screen calculate the focal length of the lens and size of the image formed on screen.
- 3- Water has reflective index 1.33 and alcohol has reflective index 1.36 which of the two media is optically denser give reason for your answer. Draw a diagram to show the path of ray of light passing obliquely from the water to alcohol.
- 4- For the same angle of incidence the angle of reflection in three different media PQ and R are  $45^\circ$  degree  $35^\circ$  and  $15^\circ$  respectively in which medium will the speed of light be minimum give reason for your answer.
- 5- The power of lens used by a is  $-2.5$  D what is the focal length and nature of the lens.

**CHEMISTRY-**

- 1- Aluminium is a reactive metal but is still used for packing food articles. Why?
- 2- Why is combustion reaction an oxidation reaction?
- 3- How will you test whether the gas evolved in a reaction is hydrogen?
- 4- Why does not silver evolve hydrogen on reacting with dilute sulphuric acid?
- 5- What is observed when a solution of potassium iodide is added to a solution of lead nitrate?
- 6- Write two observations when lead nitrate is heated in a test tube.

**BIOLOGY-**

- 1- Make a Mind Map Of Animal Hormones and Plant Hormones with their Functions on Chart Paper.
- 2- Prepare a puzzle games on the following topics:  
(a) Transportation (b) Excretion
- 3- Assume that you are a veterinary surgeon and you had removed a good length of the small intestine of a bear that was suffering from an intestinal tumor. Now, would you suggest a plant based or a meat based diet for the bear after its recovery? Give reason for your answer.
- 4- Solve 10 Assertion Reason based questions on given topic Photosynthesis, Stomata, Human digestive system , human circulatory system, Nephron.
- 5- Why is it necessary to separate oxygenated and deoxygenated blood in mammals and birds?

**SOCIAL SCIENCE -**

- 1- Solve very short type questions of Chapter-1 (Development) and Chapter-2 (Sectors of the Indian Economy) of Economics in notebook.
- 2- Practice map work of chapter 1 and 3 of Geography.(Map related questions already given in book)

**MATHS-**

- 1- If one zero of the polynomial  $5z^2 + 13z - p$  is reciprocal of the other , then find p.
- 2- If the product of two zeros of polynomial  $2x^3 + 3x^2 - 5x - 6$  is 3 , then find its third zero.
- 3- Find the polynomial of least degree which should be subtracted from the polynomial  $x^4 + 2x^3 - 4x^2 + 6x - 3$ . So that it is exactly divisible by  $(x^2 - x + 1)$ .
- 4- Write a quadratic polynomial, sum of whose zeros is  $2\sqrt{3}$  and product is 5.
- 5- A polynomial  $g(x)$  of degree zero is added to the polynomial  $2x^3 + 5x^2 - 14x + 10$  so that it becomes exactly divisible by  $(2x - 3)$ . Find the  $g(x)$ .