PBRP ACADEMY

Summer Vacation Homework

FOR CLASS -10

1. Write a letter in 150 – 200 words to the Editor of 'The Times of India' highlighting the importance of 'Solidarity in times of Crisis.'

2. Write an article in about 200 words on the impact of Covid-19 on India Economy and psyche of people.

3. Prepare a list of adjectives that can be used to describe positive / negative traits of a person with their antonyms. (i.e. adaptable – inflexible, decisive – unyielding).

4. Make a list of 30 words along with their synonyms (i.e. Baffle – Confuse, Together – Simultaneously).

HINDI HOMEWORK

दिये गए विषयों पर एक – एक अनुच्छेद 150 - 200 शब्दों में लिखें।

(क) स्वस्थ जीवन शैली और हम।

(ख) ऐसे बिताया मैनें अपना LOCKDOWN PERIOD.

1. Attempt all exercise questions alongwith examples of Ch-2 'Polynomials' from NCERT.
2. Make an assignment of Ch- Probability on the basis of concept done in previous class.
3. Learn and write formulas of Ch-13 (Surface Area and Volume).
4. Attempt atleast 05 extra sums from Ch-2 (Polynomials):

   i) If α and β are the zeroes if the quadratic polynomial $f(x) = ax^2 + bx + c$, then evaluate:

       a) $\alpha^2 + \beta^2$ b) $\dfrac{\alpha}{\beta} + \dfrac{\beta}{\alpha}$ c) $\alpha^3 + \beta^3$ d) $\dfrac{1}{\alpha^3} + \dfrac{1}{\beta^3}$ e) $\dfrac{\alpha^2}{\beta} + \dfrac{\beta^2}{\alpha}$

   ii) If sum of squares of zeroes of the quadratic polynomial $f(x) = x^2 - 8x + K$ is 40, find value of K.

   iii) If one zeroes of the quadratic polynomial $f(x) = 4x^2 - 8kx - 9$ is negative of the other. Find the value of k.

   iv) Find a quadratic polynomial whose zeroes are reciprocal of the zeroes of the polynomial $f(x) = ax^2 + bx + c, \ a \neq 0, \ c \neq 0$.

   v) If the polynomial $6x^4 + 8x^3 + 17x^2 + 21x + 7$ is divided by another polynomial $3x^2 + 4x + 1$, the remainder comes out to be $ax + b$, find a and b.

   vi) What must be added to the polynomial $f(x) = x^4 + 2x^3 - 2x^2 + x - 1$ so that resulting polynomial is exactly divisible by $x^2 + 2x - 3$?

   vii) What must be subtracted from the polynomial $f(x) = x^4 + 2x^3 - 13x^2 - 12x + 21$ so that the resulting polynomial is exactly divisible by $x^2 - 4x + 3$?

5. Attempt atleast 05 sums related to Ch-2 polynomials from any other book of G-10.

SCIENCE HOMEWORK

1. Name any three pandemic and epidemic - prone diseases. What are their causes, how we can prevent these diseases. What are their effects on the human body and psychology?

2. What do you understand by the term Covid-19? Draw it's structure and explain it's mechanism. How much contagious is the Corona virus. Explain by taking into account:
   a) Signs of infection
   b) Transmission
   c) Incubation period
   d) Source or vector
   e) How does sanitizer and soaps kills the virus

3. Draw and label the following:
   a) Human alimentary canal
   b) Sectional view of human heart
   c) Human brain
   d) Excretory system in human beings
   e) Human eye

4. Define the following useful basic terms:
   a) Cations
   b) Anions
   c) Dilute
   d) Valency
   e) Nutrition
   f) Photosynthesis
   g) Pollination
   h) Reproduction
   I) Fertilisation
   j) Fossils
   k) Reflection
   l) Tyndall effect
   m) Renewable sources.
   n) Hetero Trophic Nutrition

SOCIAL SCIENCE HOMEWORK

Syllabus : Every student has to compulsorily undertake any one project on the following topics:

Consumer Awareness.

Or

Social Issues.

Or

Sustainable Development.

General Instructions:

1. Project work carry 5 marks.
2. The project report should be handwritten by the students themselves.
3. Students are expected to apply the social science concepts that they have learnt over the years in order to prepare the project report.
4. Only blue and black pen should be used. No other colour pens should be used.
5. Use A4 assignment sheets - one side lined and one side plain.
6. Mention index and bibliography.
7. Project should be of minimum 10 sheets and maximum 14 sheets.
8. Related pictures should be pasted / drawn on plain side of the sheet.
9. Mention the following details outside:
   SUBJECT, TOPIC, SESSION, NAME, CLASS AND ROLL NUMBER.

STOP CORONAVIRUS SPREAD

PREVENTION FROM COVID-19

WEAR MASK

WASH HANDS

USE HAND SANITIZER

MAINTAIN SOCIAL DISTANCE