

APEEJAY SCHOOL, SAKET
HOLIDAY HOMEWORK
2019-20
CLASS –XIA1 & A2

ENGLISH

This summer break is important to improve and hone your writing skills. Write out the following writing tasks neatly in your literature notebook.

I. Writing Tasks

1) As the vice – principal draft a notice in 50 words informing the prefects , monitors and other discipline in – charges of the Prefectorial Board about a Leadership Training Camp being organized by the school.

2) Design a poster to be issued by the Ministry of Health in public interest warning people against the dangers of high sugar and salt intake.

OR

2.) Prepare a poster on behalf of the municipal authority of your city advising citizens on ways to save water.

3.) Write an article about the impact of revolution brought by 'Information Technology' in India to be published in your school magazine in about 150-200 words.

4) Children usually come to school without taking breakfast in the morning and eat junk food from the school canteen. This habit affects adversely the performance of students in academic and sports. Write an Article in about 150-200 words on the topic “ Importance of a Healthy Lifestyle ”.

5.) As a social worker you had the chance to visit some slum areas of your city. You were deeply pained to see the unhygienic living conditions , lack of drinking water and sanitation facilities prevailing in the area. Write a letter to the Editor , The Times of India, pointing out the lack of concern on the part of the government as well as non – government organizations.

6.) As the Head Boy of your school, write a letter to the principal requesting him/her to arrange a workshop for career counseling for the students of classes XI and XII. Request him/her to invite experts from several professions to speak to the students to give insight and information about the current prospects in the professions offered under Science Stream.

II. Select any two articles from the Sunday Magazine section of a newspaper, make relevant notes on them and write a summary of the passage in 80 words. Also attach the selected passage / article in the notebook

III. Editing and Omission

Practice Editing and Omission exercises given in the following worksheets.

Click on the link provided below, download the exercises and note them down your notebook.

<http://www.studiestoday.com/worksheet-english-cbse-class-11-english-worksheet-error-omission-224482.html>

PHYSICS

Do the following question in your notebook.

Q1. (a) State one law that holds good in all natural processes.

(b) Name the forces having the longest and shortest range of operation.

(c) Can there be a physical quantity that has no unit and no dimensions?

(d) If g is the acceleration due to gravity and λ is wavelength, then which physical quantity is represented by $\sqrt{g\lambda}$?

Q2. Deduce the dimensional formulae for the following physical quantities.

a) Gravitational constant.

b) Power

c) coefficient of viscosity

d) Surface tension.

Q3. Name the four basic forces in nature. Arrange them in the order of their increasing strengths.

Q4. If E, M, J and G respectively denote energy, mass, angular momentum and gravitational constant, Calculate the dimensions of EJ^2 / M^5G^2

Q5. The frequency n of vibration of stretched string depends on its length L its mass per unit length m and the tension T in the string, obtain dimensionally an expression for frequency n ?

Q6. A physical quantity X is given by $X = A^2B^3/C^4D$, If the percentage errors of measurement in A, B, C and D are 4%, 2%, 3% and 1% respectively, then calculate the % error in X ?

Q7. If two resistors of resistance $R_1 = (4 \pm 0.5)\Omega$ and $R_2 = (16 \pm 0.5)\Omega$ are connected (1) In series and (2) Parallel. Find the equivalent resistance in each case with limits of % error?

Q8. The length of a rod measured in an experiment was found to be 2.48m, 2.46, 2.50m and 2.48m and 2.49m, Find the average length , the absolute error in each observation and % error.

Q9. In an experiment, on the measurement of g using a simple pendulum the time period was measured with an accuracy of 0.2 % while the length was measured with accuracy of 0.5%. Calculate the percentage error in the value of g .

Q10. In an experiment, on the measurement of g using a simple pendulum the time period was measured with an accuracy of 0.2 % while the length was measured with accuracy of 0.5%. Calculate the percentage error in the value of g .

Q11. In an experiment the value of refractive index of a glass was found to be 1.54, 1.53, 1.44, 1.55, 1.56 and 1.45 in successive measurements. Calculate (i) value of refractive index of glass (ii) absolute error in each measurement. (iii) mean absolute error (iv) relative error. Also express the result in terms of absolute error and percentage error.

Q12. (a) In Van der Waals' equation $(P + a/V^2)(V - b) = RT$, Determine the dimensions of a and b .

(b) If $X = a + bt^2$, where X is in meter and t is in second . find the unit of a and b ?

(c) Check whether the equation $h\lambda = mv$ is dimensionally correct (λ - wavelength, h - Planck's constant, m - mass, v - velocity).

Q13. State the number of significant figures from the following list.

(i) 600900 (ii) 5212.0 (iii) 6.320 (iv) 0.0631 (v) 2.64×10^24

Q14. Obtain by dimensional analysis an expression for the surface tension of a liquid rising in a capillary tube. Assume that the surface tension T depends on mass m of the liquid, pressure P of the liquid and radius r of the capillary tube.

(Take the constant $k = 1/2$).

Q15 (i) _____ have the same dimensional formula (a) Force and momentum (b) Stress and strain (c) Density and linear density (d) Work and potential energy.

(ii) A speck of dust weighs 1.6×10^{-10} kg. How many such particles would weigh 1.6 kg? (a) 10^{-10} (b) 1010 (c) 10 (d) 10^{-1}

(iii) The force acting on a particle is found to be proportional to velocity. The constant of proportionality is measured in terms of (a) kg s^{-1} (b) kg s (c) kg m s^{-1}

(d) kg m s^{-2}

(iv) The number of significant digits in 0.0006032 is (a) 8 (b) 7 (c) 4 (d) 2

BIOLOGY

- I. Prepare the practical file as per directions given in the class.
- II. Complete the assignments given below in your assignment notebook.

Topic:

1. Cell structure and function

2. Biomolecules

1. What is cell theory? Who modified the hypothesis of Schleiden & Schwann?
2. How does cytokinesis in plant cell differ from that in animal cell?
3. Distinguish between-
 - (i) plastid and plasmid
 - (ii) chromatin material and sister chromatid
 - (iii) cristae and cisternae
4. In a typical prokaryotic cell, explain the structure and function of each of the following:
 - (i) plasma membrane (ii) capsule (iii) mesosomes (iv) flagellum
 - (v) pili and fimbriae (vi) plasmid
5. "Fluid-mosaic model of cell membrane" was given by Singer-Nicolson. Explain the structure with help of labelled diagram.
6. Why does golgi apparatus remain in close association with E.R.?
7. With the help of a diagram, explain the structure of mitochondria.
8. Classify the types of plastids found in plant cell. Name the pigments present in each and also list the function performed .
9. What is the function of pores in the nuclear envelope?
10. Identify various types of chromosomes based on the position of centromere.
11. Illustrate a glycosidic, peptide, and a phosphodiester bond.
12. Reaction given below is catalysed by oxidoreductase between two substrates A and A' .Complete the reaction.
A reduced + A' oxidised -----
13. How are prosthetic groups different from co-factors?

14. What are different classes of enzymes? Explain any two with the types of reaction they catalyse.

15. Describe all different stages of structure of protein.

16. Select an appropriate chemical bond among ester bond, glycosidic bond, peptide bond and hydrogen bond and write against each of the following.

- a) Polysaccharides
- b) Protein
- c) Fat
- d) Water

17. Enzymes are biocatalyst. they catalyse biochemical reactions. In general they reduce activation energy of reaction. Many physicochemical processes are enzyme mediated. Some examples of enzymes mediated reactions are given below.

- a) Dissolving CO₂ in water
- b) Unwinding the two strands of DNA
- c) Hydrolysis of sucrose
- d) Formation of peptide bond

18. The number of ' ends ' in a glycogen molecule would be

- a) Equal to the number of branches plus one
- b) Equal to the number of branch points
- c) One
- d) Two, one on the left side and another on the right side.

19. Glycogen is a homopolymer made of

- a) Glucose units
- b) Galactose units
- c) Ribose units
- d) Amino acids

20. Proteins are made of

- a) 20 types of monomers
- b) 40 types of monomers
- c) Nucleic acids
- d) Glucose molecule

21. Write one example each

- a) Sugar
- b) Nucleotide
- c) Fatty acid
- d) Amino acid

CHEMISTRY

I. Complete the practical file as per directions given in class.

II. Make a project on “Environmental Chemistry”.

The project should be handwritten. Photographs and pictures, statistics to be included. It should have a minimum of 2000 words.

The project file should have Title page; Content page (Index); Introduction (Importance/Significance); Content matter and Bibliography.

The Content Matter should include the topics listed below:

1 Environmental Pollution

2 Tropospheric Pollution

- a) Gaseous Pollutants
- b) Global Warming and Greenhouse Effect –causes, effects, control measures
- c) Acid- Rain –causes, effects and control measures
- d) Particulates
- e) Smog – Its causes, effects and control measures

3 Stratospheric Pollution

- a) Ozone layer depletion – causes, effects and control measures.

4 Water Pollution

- a) Causes
- b) International Standards for Drinking Water
- c) Importance of Dissolved Oxygen in water
- d) Biochemical Oxygen Demand and Chemical Oxygen Demand

5 Land Pollution

- a) Insecticides and Pesticides
- b) Herbicides
- c) Fungicides

6 Pollution – Control

- a) Waste management
- b) Green Chemistry

Rubrics to assess Project (10 marks)

- Introduction-2 marks
- Content-3 marks
- Presentation-2 marks
- Creativity-2 marks
- On time submission-1 mark

III. Complete the assignments given below in your assignment notebook.

1. Carbon and hydrogen combine to form three compounds A, B and C. The percentage of hydrogen in these compounds are : 25, 14.3 and 7.7 respectively. Show that the data illustrates the law of multiple proportion.
2. Commercially available H₂SO₄ contains 98% acid by mass. Find the molarity if density of the sample is 1.84g/cc. What volume of this acid is required to make 2 L of 0.1 M solution?
3. The average atomic mass of copper is 63.5. It exists as two isotopes which are ${}_{29}\text{Cu}^{63}$ and ${}_{29}\text{Cu}^{65}$. Calculate the percentage of each isotope present in it.
4. Calculate the total number of electrons present in 1.6g of methane.
5. What is the number of molecules of CO₂ which contain 8g of O₂?
6. The density of water at room temperature is 1g/ml. How many molecules are there in a drop of water if its volume is 0.05 ml?
7. Calculate the number of carbon and oxygen atoms present in 11.2 L of CO₂ at NTP.
8. Calculate the number of moles in each of the following:
 - i) 392 g of Sulphuric acid
 - ii) 44.8 L of SO₂ at N.T.P.
 - iii) 6.022×10^{22} molecules of oxygen
9. How much of copper is obtained from 100 g of copper Sulphate?
10. An organic compound on analysis gave the following percentage composition: C=57.8%, H=3.6% and the rest is oxygen. The vapour density of the compound was found to be 83. Find the molecular formula of the compound.
11. What mass of copper oxide will be obtained by heating 12.35g of copper carbonate?
12. 1.84 g of a mixture of CaCO₃ and MgCO₃ is strongly heated till no further loss in mass take place. The residue is found to weigh 0.96g. Calculate the percentage of each component in the mixture.
13. KClO₃ on heating decomposes to give KCl and O₂. What is the volume of O₂ at NTP liberated by 0.1 mole of KClO₃?
14. 3 g of H₂ reacts with 29 g of O₂ to yield H₂O.
 - i) What is the limiting reactant?
 - ii) Calculate the maximum amount of water that can be formed.
 - iii) Calculate the amount of one of the reactants which remains unreacted.
15. Calculate the masses of cane sugar and water required to prepare 250g of 25% solution of cane sugar.
16. One Litre of sea water weighs 1050 grams and contains 6×10^{-3} g of dissolved oxygen gas. Calculate the concentration of the dissolved oxygen in ppm.
17. Calculate the percentage composition in terms of mass of a solution obtained by mixing 300g of a 25% and 400 g of a 40% solution by mass.
18. What is molarity of the resultant solution obtained by mixing 2.5L of 0.5 M urea solution and 500 ml of 2M urea solution?
19. What is the volume of ethanol (density 1.15g/cm³) that has to be added to prepare 100 cm³ of 0.5 Methanol solution in water.
20. What is the molality of a solution which contains 36 g of glucose C₆H₁₂O₆ in

250 g of water?

21. The density of 2 molal aqueous solution of NaOH is 1.1g/L. Calculate the molarity of the solution.
22. Calculate the molality and molarity of 93% H₂SO₄(weight/volume). The density of the solution is 1.84g/ml.
23. Calculate the normality of a solution containing 3.15 g of hydrated oxalic acid C₂H₂O₄. 2H₂O dissolved in 250 ml of the solution.
24. The mole fraction of CH₃OH in an aqueous solution is 0.02 and density is 94g/cm³. Determine the molality of the solution.
25. A welding fuel gas contains carbon and hydrogen only. Burning a small sample of it in oxygen gives 3.38 g carbon dioxide , 0.690 g of water and no other products. A volume of 10.0 L (measured at STP) of this welding gas is found to weigh 11.6 g. Calculate (i)empirical formula, (ii) molar mass of the gas, and (iii) molecular formula.
26. A 100 watt bulb emits monochromatic light of wavelength 400 nm. Calculate the number of photons emitted per second by the bulb.
27. When a certain metal was irradiated with light of frequency 1.6×10^{16} Hz, the photoelectrons emitted had twice the kinetic energy as photoelectrons emitted when the same metal was irradiated with light of frequency 1.0×10^6 Hz. Calculate the threshold frequency ν_0 for the metal.
28. When electromagnetic radiation of wavelength 300 nm falls on the surface of sodium, electrons are emitted with kinetic energy of 1.68×10^5 J/mol. What is the minimum energy needed to remove an electron from sodium? What is the maximum wavelength that will cause a photoelectron to be emitted?
29. Calculate the frequency, wavenumber and energy associated with photon of radiations having wavelength 6000 Å°.
30. A photon of wavelength 4×10^{-7} m strikes on metal surface, the work function of the metal being 2.13 eV. Calculate (i) the energy of the photon (eV), (ii) the kinetic energy of the emission, and (iii) the velocity of the photoelectron (1 eV= 1.6020×10^{-19} J).

MATHEMATICS

Dear students

Summer vacation is here and all of you need to use this time to hone your mathematical skills along with playing.

Solve the following exercises from NCERT Exemplar text book in your practice register.

1.Sets

Exercise 2.1,2.2,2.3,2.4

HOME SCIENCE

1. Prepare a Chart/Poster on any topic of your choice from the syllabus. For this read that chapter (for which you want to prepare a chart /poster) with understanding.
2. Write any 20 recipes from the list already shared with you in the class. These need to be submitted after school reopens in July
3. Revise for the Unit Test 1-Chapter 5,7,8

NOTE: Use A4 size papers and make a file.

Do the work as shown to you/Use your own creativity.

COMPUTER SCIENCE

- I. Select the most appropriate option from the following:
 1. Is Python case sensitive when dealing with identifiers?
a) yes b) no c) machine dependent d) none of the mentioned
 2. What is the maximum possible length of an identifier?
a) 31 characters b) 63 characters c) 79 characters d) none of the mentioned
 3. Which of the following is invalid?
a) `_a = 1` b) `__a = 1` c) `__str__ = 1` d) none of the mentioned
 4. Which of the following is an invalid variable?
a) `my_string_1` b) `1st_string` c) `foo` d) `_`
 5. Why are local variable names beginning with an underscore discouraged?
a) they are used to indicate a private variables of a class
b) they confuse the interpreter
c) they are used to indicate global variables
d) they slow down execution
 6. Which of the following is not a keyword?
a) `eval` b) `assert` c) `nonlocal` d) `pass`

7. All keywords in Python are in

a) lower case b) UPPER CASE c) Capitalized d) None of the mentioned

8. Which of the following is true for variable names in Python?

a) unlimited length

b) all private members must have leading and trailing underscores

c) underscore and ampersand are the only two special characters allowed

d) none of the mentioned

9. Which of the following is an invalid statement?

a) `abc = 1,000,000`

b) `a b c = 1000 2000 3000`

c) `a,b,c = 1000, 2000, 3000`

d) `a_b_c = 1,000,000`

10. Which of the following cannot be a variable?

a) `__init__`

b) `in`

c) `it`

d) `on`

II. Classify each of the following as either a legal or illegal Python identifier / keyword / constant:

1. `fred`

2. `#if`

3. `#2x`

4. `-4`

5. `sum_total`

6. `sumTotal`

7. `sum-total`

8. `#sum total`

9. Sumtotal
10. While
11. x2
12. Private
13. public
14. # \$16
15. xTwo
16. _static
17. #wilma's
18. ____
19. #10%
20. a27834

III. If $x = 2$ Indicate what each of the following Python statements would print.

1. `print("x")`
2. `print('x')`
3. `print(x)`
4. `print("x + 1")`
5. `print('x' + 1)`
6. `print(x + 1)`

IV. Find Output: if $i1 = 2, i2 = 5, i3 = -3, d1 = 2.0, d2 = 5.0, d3 = -0.5;$

1. `print(i1 + i2)`
2. `print(i1 / i2)`
3. `print(i1 // i2)`
4. `print(i2 / i1)`
5. `print(i2 // i1)`
6. `print(i1 * i3)`

7. `print(d1 + d2)`
8. `print(d1 / d2)`
9. `print(d2 / d1)`
10. `print(d3 * d1)`
11. `print(d1 + i2)`
12. `print(i1 / d2)`
13. `print(d2 / i1)`
14. `print(i2 / d1)`
15. `print(i1/i2*d1)`
16. `print(d1*i1/i2)`
17. `print(d1/d2*i1)`
18. `print(i1*d1/d2)`
19. `print(i2/i1*d1)`
20. `print(d1*i2/i1)`

V. Find Output: if $i2 = 5, i3 = -3, 1 = 2.0, d2 = 5.0, d3 = -0.5$

1. `print(i1 + (i2 * i3))`
2. `print(i1 * (i2 + i3))`
3. `print(i1 / (i2 + i3))`
4. `print(i1 // (i2 + i3))`
5. `print(i1 / i2 + i3)`
6. `print(i1 // i2 + i3)`
7. `print(3 + 4 + 5 / 3)`
8. `print(3 + 4 + 5 // 3)`
9. `print((3 + 4 + 5) / 3)`
10. `print((3 + 4 + 5) // 3)`
11. `print(d1 + (d2 * d3))`

12. `print(d1 + d2 * d3)`
13. `print(d1 / d2 - d3)`
14. `print(d1 / (d2 - d3))`
15. `print(d1 + d2 + d3 / 3)`
16. `print((d1 + d2 + d3) / 3)`
17. `print(d1 + d2 + (d3 / 3))`
18. `print(3 * (d1 + d2) * (d1 - d3))`

VI. Write the shortest way to express each of the following statements.

1. `x = x + 1`
2. `x = x / 2`
3. `x = x - 1`
4. `x = x + y`
5. `x = x - (y + 7)`
6. `x = 2*x`

VII. Write the output of the given program:

```
pi = 3.14159;
print("Pi =", pi)
print("or", 3.14, "for short")
avogadros_number = 6.022e23
c = 2.998e8
print("Avogadro's number =", avogadros_number)
print("Speed of light =", c)
print('A\nB\nC')
print('D\tE\tF')
print('WX\bYZ')
```

```
print('1\a2\a3\a4\a5\a6')
print("Did you know that 'word' is a word?")
print("Did you know that \"word\" is a word?")
print('Did you know that \'word\' is a word?')
print("Did you know that \"word\" is a word?")
filename = 'C:\\Users\\rick'
print(filename)
print('Please enter some text:')
x = input()
print('Text entered:', x)
print('Type:', type(x))
print('Please enter an integer value:')
x = input()
print('Please enter another integer value:')
y = input()
num1 = int(x)
num2 = int(y)
print(num1, '+', num2, '=', num1 + num2)
x = input('Please enter an integer value: ')
y = input('Please enter another integer value: ')
num1 = int(x)
num2 = int(y)
print(num1, '+', num2, '=', num1 + num2)
num1 = int(input('Please enter an integer value: '))
num2 = int(input('Please enter another integer value: '))
print(num1, '+', num2, '=', num1 + num2)
x1 = eval(input('Entry x1? '))
```

```
print('x1 =', x1, ' type:', type(x1))
x2 = eval(input('Entry x2? '))
print('x2 =', x2, ' type:', type(x2))
x3 = eval(input('Entry x3? '))
print('x3 =', x3, ' type:', type(x3))
x4 = eval(input('Entry x4? '))
print('x4 =', x4, ' type:', type(x4))
x5 = eval(input('Entry x5? '))
print('x5 =', x5, ' type:', type(x5))
num1, num2 = eval(input('Please enter number 1, number 2: '))
print(num1, '+', num2, '=', num1 + num2)
print(eval(input()))
print('A', end="")
print('B', end="")
print('C', end="")
print()
print('X')
print('Y')
print('Z')
w, x, y, z = 10, 15, 20, 25
print(w, x, y, z)
print(w, x, y, z, sep=',')
print(w, x, y, z, sep="")
print(w, x, y, z, sep=':')
print(w, x, y, z, sep='-----')
x = 6
print(6)
```

```
print("6")
x = 7
print(x)
print("x")
value1 = eval(input('Please enter a number: '))
value2 = eval(input('Please enter another number: '))
sum = value1 + value2
print(value1, '+', value2, '=', sum)
x, y, z = 3, -4, 0
x = -x
y = -y
z = -z
print(x, y, z)
print(-(4 - 5))
print(10/3, 3/10, 10//3, 3//10)
print(10%3, 3%10)
print(10.0/3.0, 3.0/10.0, 10.0//3.0, 3//10.0)
one = 1.0
one_third = 1.0/3.0
zero = one - one_third - one_third - one_third
print('one =', one, ' one_third =', one_third, ' zero =', zero)
one = 1.0
one_tenth = 1.0/10.0
print('one =', one, ' one_tenth =', one_tenth, ' zero =', zero)
print(-3 + 2)
print(-(3 + 2))
dividend, divisor = eval(input('Please enter two numbers to divide: '))
```

```

print(dividend, '/', divisor, "=", dividend/divisor)

value = eval(input('Please enter a number to cut in half: '))

print(value/2)

degrees F = eval(input('Enter the temperature in degrees F: '))

degrees C = 5/9*(degrees F - 32);

print(degrees F, "degrees F =", degreesC, 'degrees C')

seconds = eval(input("Please enter the number of seconds:"))

hours = seconds // 3600 # 3600 seconds = 1 hours

seconds = seconds % 3600

minutes = seconds // 60 # 60 seconds = 1 minute

seconds = seconds % 60

print(hours, "hr,", minutes, "min,", seconds, "sec")

seconds = eval(input("Please enter the number of seconds:"))

hours = seconds // 3600 # 3600 seconds = 1 hours

seconds = seconds % 3600

minutes = seconds // 60 # 60 seconds = 1 minute

seconds = seconds % 60

print(hours, ":", sep="", end="")

tens = minutes // 10

ones = minutes % 10

print(tens, ones, ":", sep="", end="")

tens = seconds // 10

ones = seconds % 10

print(tens, ones, sep = "")

degrees F, degrees C = 0, 0

degrees C = 5/9*(degrees F - 32)

degrees F = eval(input('Enter the temperature in degrees F: '))

```

```
print(degrees F, "degrees F =", degreesC, 'degrees C')
```

```
x1 = 2
```

```
x2 = 2
```

```
x1 += 1
```

```
x2 -= 1
```

```
print(x1)
```

```
print(x2)
```

VIII. Given the following definitions: b1, b2, b3, b4 = true, false, x == 3, y < 3 evaluate the following Boolean expressions:

1. B3
2. b4
3. not b1
4. not b2
5. not b3
6. not b4
7. b1 and b2
8. b1 or b2
9. b1 and b3
10. b1 or b3
11. b1 and b4
12. b1 or b4
13. b2 and b3
14. b2 or b3
15. b1 and b2 or b3
16. b1 or b2 and b3
17. b1 and b2 and b3
18. b1 or b2 or b3
19. not b1 and b2 and b3

20. not b1 or b2 or b3
21. not (b1 and b2 and b3)
22. not (b1 or b2 or b3)
23. not b1 and not b2 and not b3
24. not b1 or not b2 or not b3
25. not (not b1 and not b2 and not b3)
26. not (not b1 or not b2 or not b3)

IX. Given the following definitions: $x, y, z = 3, 5, 7$ evaluate the following Boolean expressions:

1. $x == 3$
2. $x < y$
3. $x >= y$
4. $x <= y$
5. $x != y - 2$
6. $x < 10$
7. $x >= 0$ and $x < 10$
8. $x < 0$ and $x < 10$
9. $x >= 0$ and $x < 2$
10. $x < 0$ or $x < 10$
11. $x > 0$ or $x < 10$
12. $x < 0$ or $x > 10$

X. Write a code to input the length and breadth of a rectangle and display the area.

XI. Write the code input a number and display the square of the number.

ECONOMICS

Option 1

(i) Prepare a project on consumer awareness among households through collection of primary data by designing a questionnaire.

The following is A SAMPLE QUESTIONNAIRE:

A questionnaire on Consumer Awareness

Questions

1 Name

2. Address

3. Occupation

4. Are you aware that the product you buy should be a certified product like ISI,AGMARK,ISO-922? Yes/No

5. Do you check MRP, Manufacturing date and expiry date while buying a product? Yes/No

6. Do you confirm the availability of the product at Fair Price Shops? Yes/No

7. Are you aware of consumer courts to protect your rights? Yes/No

8. Do you insist on Cash Memo at the time of purchase to ensure genuine purchase and tax revenue to the government? Yes/No

9. Are you updating your awareness through electronic media or print media? Yes/No

(ii) Frame a sample size of your study, preferably 50 households, 25 high income families and 25 low income families.

(iii) Collect data through direct personal investigation. You will collect 50 response sheets when you complete your investigation.

(iv) Classify the data.

(v) Present the data in a tabular form.

(vi) Prepare a project report in the form of a project file.

(vii) Present the data with the help of pie charts.

OPTION 2

Project Report on Consumer's Preference of Newspaper

Objective of the Project

- (i) To determine number of newspapers purchased by each consumer daily
- (ii) To determine the best selling Hindi and English Newspaper
- (iii) To determine the kind of news, which attracts the consumers most.
- (iv) To study the time spent by consumers on reading the newspaper
- (v) To determine the average monthly expenditure of consumers on newspapers

Sample Questionnaire

Consumer's preference of Newspaper(English and Hindi)

Note: Please put a tick mark in the relevant box of each question.

Section A - Profile of Respondent

1. Name.....
2. Address.....
3. Age.....
4. Sex Male/Female.
5. Phone: Landline_____ Mobile _____
6. Educational Qualification: Undergraduate/Graduate/Postgraduate/Professional Degree
7. Number of Members in the family: 1-3/ 4-6/ More than six
8. Occupation: Service/Manufacturing/Trade/ Other
9. Monthly: Less than 20,000/ 20,000 - 40,000 / 40,000- 60,000/ More than 60,000

Section-B Consumer preference of Newspaper

10. Which language Newspaper do you buy: English/ Hindi
11. How many newspapers do you purchase daily: English 1/2/3/4/5 ; Hindi: 1/2/3/4/5
12. Which newspaper do you purchase? English : The Times of India / The Hindustan Times / The Indian Express / Others_____
13. How do you get your Newspaper? Vendor/On your Own

14. How much time do you generally spend on reading the Newspaper? 10 min / 20 min / 30 min / 40 min / 50 min / 60 min

15. On which kind of news do you spend your maximum time : Political News/ Business News/ Sports News/ Entertainment News/ Others_____

16. What is your monthly budget on newspaper : Less Than Rs. 100 / Rs. 100-200 / Rs.200- Rs.300 / More than Rs. 300.

(ii) Frame a sample size of your study, preferably 50 households, 25 high income families and 25 low income families.

(iii) Collect data through direct personal investigation. You will collect 50 response sheets when you complete your investigation.

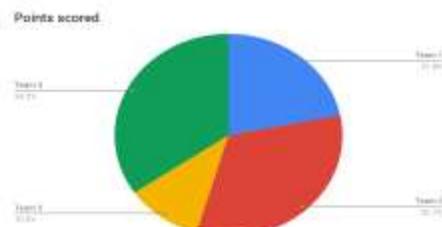
(iv) Classify the data.

(v) Present the data in a tabular form.

(vi) Prepare a project report in the form of a project file.

(vii) Present the data with the help of pie charts.

Note: You may modify / increase/ reduce the number of questions according to your purpose of investigation or conduct an enquiry different from the above options if you wish to do so.



(Example of a pie chart)

GENERAL STUDIES

As you are aware, General Studies is a mandatory grading subject.

Please prepare a 15-20 page project in General studies on one of the following topics of your choice.

- Unit I Science and Technology
- Unit II Understanding Social Structure
- Unit III Protection of Environment
- Unit IV National Unity
- Unit V International Understanding

The project should include

- a) An impressive cover page
- b) Acknowledgement page

c) Introduction to the topic

d) Main content with statistical data, illustrations and relevant pictures.

e) Conclusion

f) Bibliography

Check the cbse link given below for details about each topic.

http://cbseacademic.nic.in/web_material/CurriculumMain20/SrSecondary/General_Studies.pdf

***** HAPPY HOLIDAYS *****