Subject: English

- 1. Prepare a leaflet of a temple which is situated nearby your house.
- 2. You are now on long leave due to climate change. write analytically on its background, causes and its negative impacts in our environment. (Approx 500 words).

Subject: Science(Project Work)

- 1. Take two equal sized tin cans.one of them filled with sand and next kept empty.

 Hang both of them at a certain height with equal sized thread. Now lift both of them up and release them from the same height.
 - a. Which one comes to rest fast and why? Explain scientific logic.

Subject: सामाजिक

 १) पानी बचाउ, जीवन बचाउ भन्ने नारा सँग सम्बन्धित चित्र कोरी तपाईको समुदायमा भएको खानेपानीका समस्यालाई समाधान गर्न तपाईको स्थानीय तहले के गर्नुपर्ला ? चार सुझाव दिनुहोस् ।

Subject: Math Question 1

Conduct a survey among your at least 20 friends whether they like to play volleyball or basketball or both.

Represent the set of students who like to play volleyball by V and the set of students who like to play basketball by B.

Draw a venn-diagram and show each of the following set operations by shading.

- a) Set of students who like to play volleyball or basketball or both, $V \cup B$.
- b) Set of students who like to play volleyball as well as basketball, $V \cap B$
- c) Set of students who like to play volleyball but not basketball, V-B.
- d) Set of students who like to play basketball but not volleyball, B-V.
- e) Set of students who like to play none of these games, $\overline{V \cup B}$
- f) Set of students who like to play only one of these games, $V\Delta B$.

Question 2

Suppose, A and B are overlapping sets and the subsets a universal set U.

$$U = \{a,b,c,d,e,f,g,h,i,j\}, B = \{e,f,g,h,i\}, A = \{a,b,c,d\}$$

Draw a separate venn-diagrams in the chart paper and shade to verify the following operations

i)
$$(A-B) \cup (B-A) = (A \cup B) - (A \cap B)$$

ii)
$$\overline{A \cup B} = \overline{A} \cap \overline{B}$$

iii)
$$\overline{A-B} = \overline{A \cup B} \cup B$$

Question 3

Conduct a survey in your society and collect the data about how many of your friends like football, cricket and both games. Then, tabulate the data and find the following numbers by using cardinality relation of two sets:

- a) Number of friends who like football and cricket.
- b) Number of friends who do not like any of these two games.
- c) Number of friends who like only (i) football (ii) cricket
- d) Show your data in a venn-diagram