ATREYEE DAV PUBLIC SCHOOL

MONGALPUR, BALURGHAT, W. B.

Summer assignments (2019 – 2020)

CLASS – XII (Sc., Arts & Com.)	SUBJECT - ENGLISH

A. Flamingo – The last lesson. Prepare a PPT on Alphouse Daudet
   1) Coloured picture of Alphouse Daudet.
   2) Source of the last lesson (necessary pictures & facts)
   3) The Doudet family with Alphouse Daudet present. Mark where is Alphouse present.
   4) Important phrases of the lesson and their contractual reference.

B. A lecture or speech that being delivered about the importance remaining in bond with one's mother tongue as a tool to make a nation free from the bondage under another. (an Indian leader / western leader delivering the speech, picture and also the speech). Bring the speech in print also. Also the speech in paragraph form.

C. Book page 11 writing
   1) My estimate about the lesson – The last lesson – a critical estimate. Write a paragraph highlighting about 7 to 8 points.
   2) What would have happened if China ever overtakes India? (Write about 7 to 8 points highlighting the linguistic domination and trauma that we should suffer from). One printed file.

D.
   1) Lost spring – a ppt on Lost Spring's Bangle makes of Firozabad, their hutments, their working atmosphere.
   2) Firozabad famous for its bangles – short article minted form.
   3) Page 20, 21 literary devices solution 1, 2, 3, 4, 5, 6 in homework copybook.
   4) Page 21 Things to do – The beauty of the glass bangles of Firozabad contrast with the misery of people who produce them.

CLASS – XII (Sc., Arts & Com.)	SUBJECT - BENGALI

1. "ওটা পাশবিক স্বার্থপরতা"—কে, কাকে বলেছে? তাৎপর্য বিশ্লেষণ কর।

2. ব্যাখ্যা কর – "শহরের অসুখ হাঁ করে কেবল সবুজ খায়"

3. 4 টি উদাহরণসহ স্বরভক্তির সংজ্ঞা লেখ।

4. গ্রীষ্মের ছুটিতে তুমি কাশ্মীর বেড়াতে গিয়েছিলে, তার বিবরণ দিয়ে বন্ধুকে একটি পত্র লেখ।

5. "হাতিবেগর কী? তা বন্ধহোল কেনো?

CLASS – XII (Sc., Arts & Com.)   SUBJECT - HINDI

प्रश्न 1 रस किसे कहते हैं? आठ रसों की उदाहरण सहित परिभाषा लिखिए।

प्रश्न 2 'आत्मपरिचय' कविता को याद करके लिखिए।

प्रश्न 3 'पतंग' कविता का सारांश लिखिए।

प्रश्न 4 भक्तिन की चारित्रिक विशेषताएँ लिखिए।

प्रश्न 5 लेखिका स्वयं को देहातिन समझने लगती है, कैसे? उदाहरण सहित स्पष्ट कीजिए।

प्रश्न 6 आप लोग बोर्ड परीक्षा की तैयारी कैसे कर रहे हैं,और यदि आप कहीं घूमने गए हैं, तो आपको कैसा लगा ।इसका वर्णन कीजिए।

CLASS – XII (Sc., Arts & Com.)   SUBJECT - MATHEMATICS

1. Let, A = $\{x \in R: -1 \leq x \leq 1\}$ = B. Show that $: A \rightarrow B$, given by $f(x) = x \mid x \mid$ is a bijection.

2. If $f(x) = \sqrt{x}$; $(x \geq 0)$ and $g(x) = x^2 - 1$ are two real functions, then find fog and gof and check whether $fog = gof$.

3. Let, $g(x) = 1 + x - [x]$ and $f(x) = \begin{cases} -1, & x < 0 \\ 0, & x = 0 \\ 1, & x > 0 \end{cases}$.

   Then for all x find $fog(x)$.

4. Consider $f: R^+ \rightarrow [4, \infty)$ given by $(x) = x^2 + 4$. Show that f is invertible with the inverse (f^{-1}) of f given by $f^{-1}(y) = \sqrt{y - 4}$, where R^+ is the set of all non-negative real numbers.

5. Show that the function $f: R \rightarrow R$ given by $f(x) = x^3 + x$ is a bijection.

6. If $\tan^{-1} a + \tan^{-1} b + \tan^{-1} c = \pi$, then prove that $a + b + c = abc$.

7. Prove that :- $\cos[\tan^{-1}\{\sin(\cot^{-1} x)\}] = \sqrt{\frac{1+x^2}{2+x^2}}$

8. Solve the following for x:- $\cos^{-1}(\frac{x^2-1}{x^2+1}) + \tan^{-1}(\frac{2x}{x^2-1}) = \frac{2\pi}{3}$.

9. Solve the following for x:- $2\tan^{-1}(\cos x) = \tan^{-1}(2 \operatorname{cosec} x)$.

10. Solve :- $\cos(\tan^{-1} x) = \sin\left(\cot^{-1} \frac{3}{4}\right)$

CLASS – XII (Sc., Arts & Com.)   SUBJECT - PHYSICS

Q1. Develop a concept map of electric field and electric potential.

Q2. With example justify KCL and KVL.

CLASS – XII (Sc., Arts & Com.)   SUBJECT - CHEMISTRY

1. Define binary solution with example.

2. Mention different types of solution by giving suitable examples.

3. Differentiate between molarity and molality.

4. Draw the labeled diagram of conductivity cell.

5. Differentiate between ideal solution and non ideal solution. Explain with suitable example and draw their diagram.

6. Investigatory Projects on:

a) Determination of pH of different types of antacids.

b) Metal coupling.

CLASS – XII (Sc., Arts & Com.)	SUBJECT - BIOLOGY

Explain Mendel's laws of heredity with the help of suitable examples.

CLASS – XII (Sc., Arts & Com.)	SUBJECT – COMPUTER SCIENCE

(1) **Which C++ header file(s) will be essentially required to be included to run /execute the following C++ code:**

```
void main()
{
        char Msg[ ]="Sunset Gardens";
        for (int I=5;I<strlen(Msg);I++) //String.h
        puts(Msg);                      // stdio.h
}
```

(2) **Name the header files that shall be need for the following code:**

```
void main()
{
        char text[] ="Something"
        cout<<"Remaining SMS chars: "<<160-strlen(text)<<endl;    //string.h
}
```

3) **Rewrite the following program after removing the syntactical error(s) if any.Underline each correction**.

```
#include<iostream.h>
Class Item
{
    long IId, Qty;
public:
    void Purchase { cin>>IId>>Qty;}
    void Sale()
    {
        cout<<setw(5)<<IId<<"Old:"<< Qty<<endl;
        cout<< "New :"<<Qty<<endl;
    }  };
```

```
void main()
{
    Item I;
    Purchase();
    I.Sale()
}
```

4) Find the output of the following program:

```
#include<iostream.h>
#include<ctype.h>
typedef char Str80[80];
void main()
{
    char *Notes;
    Str80 str= " vR2GooD";
    int L=6;
    Notes =Str;
    while(L>=3)
    {
        Str[L]=(isupper(Str[L])? tolower(Str[L]) : toupper(Str[L]));
        cout<<Notes<<endl;
        L--;
        Notes++;
    }
}
```

* consider all required header file are include

Note (index)	L	str	Output
		vR2GooD	
0	6	vR2Goo**d**	vR2Goo**d**
1	5	vR2Go**O**d	R2Go**O**d
2	4	vR2G**OO**d	2G**O**Od
3	3	vR2**g**OOd	**g**OOd

5) Observe the following program and find out, which output(s) out id (i) to (iv) will not be expected from
program? What will be the minimum and maximum value assigned to the variables Chance?
    #include<iostream.h> CBSE 2012

```
#include<stdlib.h>
void main()
{
    randomize();
    int Arr[] = {9,6};, N;
    int Chance = random(2)+10;
    for(int c=0;c<2;c++)
    {
            N= random(2);
            cout<<Arr[N];
    }
}
```

i) 9#6#
ii) 19#17#
iii) 19#16#
iv) 20#16#

. Define a class named Admission in C++ with following description?   4

Private members:

admno   integer (Ranges 10-1500)

name   string of 20 characters

cls   integer

fees   float

Public members:

A constructor which initialized admno with 10, name with "NULL", cls with 0 & fees with 0

Function getdata() to read the object of Admission type.

Function putdata() to print the details of object of admission type.

Function draw_nos() to generate the admission no. randomly to match with admno and display the detail of object.

CLASS – XII (Sc., Arts & Com.)	SUBJECT - GEOGRAPHY

Draw a dot map on distribution on density of population in India. (Draw in a chart paper….census (2011)

CLASS – XII (Sc., Arts & Com.)	SUBJECT - HISTORY

Project work- Al-Biruni

CLASS – XII (Sc., Arts & Com.)	SUBJECT - ECONOMICS

1. Define money?
2. Explain difficulty in storing wealth problem faced in barter system of exchange.
3. Explain, how do open market operations by the central bank affect money creation by commercial bank.
4. How does central bank control credit creation in the economy through bank rate? Explain.
5. How does repo rate can helpful in controlling money creation of commercial bank?
6. Distinguish between
   a. goods and intermediate goods
   b. Consumer goods and Capital goods
   c. income and Transfer income
   d. Stocks and Flows
   e. Real GDP and Nominal GDP
7. If a real GDP is RS 400 and Nominal GDP is 450, Calculate the price index (base year100)
8. Distinguish between domestic product and national product. When can domestic product be more than national product?
9. How commercial bank can create credit? Explain the process of money multiplier?
10. What is Gross domestic product?

CLASS – XII (Sc., Arts & Com.)	SUBJECT – POLITICAL SCIENCE

A) World politics: Solve exercise questions of chapter 3 and write answers in homework copy.
B) Indian politics: Solve exercise questions of chapter 2 and write answers in homework copy.