

## **HOLIDAYS HOMEWORK(2015)**

### **CLASS –XII ENGLISH**

Read newspaper daily and practice minimum five note making of any relevant topic after pasting the text on the register.

Collect five classified ads each of the following type and paste them in a register

Property/To Let/ for Sale  
Situation Vacant/Wanted  
Vehicles : for Sale  
Hobby Classes  
Matrimonials

Collect any 10 posters giving a social message or information about an event.

Paste an invitation card of a wedding and a formal function.

Read the novel ' The Invisible Man' and watch the same on You tube.

### **CLASS XII SUB: PHYSICS**

One investigatory project is to be performed from the following list of suggested projects

or from any topic related to senior school physics.

1. To study the quality of detergents by capillary rise method.
2. To study the effect of temperature on surface tension of liquids.
3. To study the factors affecting the rate of loss of heat of a liquid.
4. To study the breaking stress of different materials of varying diameter.
5. To study the Inter conversion of potential and kinetic energy.
6. To determine the specific heat capacity of liquids.
7. To study the factors affecting the range and height of a projectile.
8. To study the factors affecting the coefficient of friction between 2 surfaces.
9. To study the factors affecting the time period of a simple pendulum.
10. To determine Faraday's constant.
11. To determine electrochemical equivalent of a material.
12. To study the validity of ohm's law for different types of material.
13. To study various factors on which the internal resistance /emf of a cell depends.
14. To study variations, in current flowing in a circuit containing a LDR , because of



variation.

a. In the power of the incandescent lamp used to 'illuminate' the LDR.  
(keeping all the lamps at a fixed distance)

b. In the distance of an incandescent lamp, (of fixed power), used to  
'illuminate' the LDR.

15. To find the refractive indices of (a) water (b) oil (transparent) using a plane mirror, an equiconvex lens, (made from a glass of known refractive index) and an adjustable object needle.

16. To design an appropriate logic gate combination for a given truth table.

17. To investigate the relation between the ratio of

a. Output and input voltage.

b. Number of turns in the secondary coil of a self designed transformer.

18. To investigate the dependence, of the angle of deviation, the angle of incidence,

using a hollow prism filled, one by one, with different transparent fluids.

19. To estimate the charge induced on each one of the 2 identical styro foam (or pith)

balls suspended in a vertical plane by making use of columb's law.

20. To set up a common base transistor circuit and to study its input and output characteristics and to calculate its current gain.

21. To study the factor, on which the self inductance of a coil depends, by observing

the effect of this coil, when put in series with a resistor/ (bulb) in a circuit fed up by an a.c. source of adjustable frequency.

22. To construct a switch using a transistor and to draw the graph b/w the input and

output voltage and mark the cut off, saturation and active regions.

23. To study the earth's magnetic field using a tangent galvanometer.

## INFORMATICS PRACTICES

### Class XII

#### Q.1 Design GUI desktop applications for following:-

Q Mr. Krishnav is working with railways and he has to design an application which can calculate the total fare. The following is the Fare Calculator along with details: (Use only defaults name for the controls i.e. Swing Components)



- a. Write the code for exit button so that when a user clicks on exit button Application will be closed. Also display a message “Thank you for your nice visit” before exiting the application.

- b. Write a code to calculate the total fare according to the given conditions:

- i) The type of coach is selected by the user from the JList1 and the charges are for 1 tier coach Rs. 2000 per person , 2 tier coach Rs 1500 per person and for 3 tier coach 1000 per person.
- ii) If the person is travelling in AC coach then increase the fare by 20%.
- iii) If the person is senior citizen the fare will be 50%.
- iv) The total fare will be number of passenger travelling multiply by fare calculated per seat.

- c Write the property which is prerequisite for radio button.

Q Blue Valley Public School has computerised its registration for class XI students.

Given below is the data entry form for same.



i) On clicking the initial button the jTextField1 and jTextField2 editable property should be set to false.

ii) On clicking the Calculate button the jTextField1 and jTextField2 editable property should be set to true. The Total Fee is calculated on the basis of the following criteria:

Stream	Fee(Rs.)
Commerce	3500
Arts	3000
Medical	3900
Non Medical	3800

The Fee should be displayed in jTextField3

iii) If the student has opted for Computers Rs. 500 will be added to the Total Fee. The Total Fee should be displayed in jTextField3.

iv) On Clicking the End button the application will be closed.

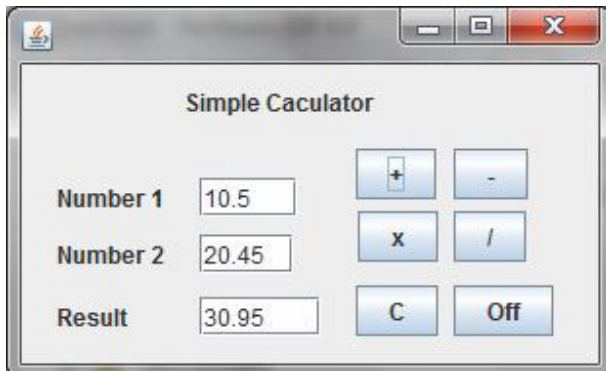
a) Develop a Billing application for Happy Shopping- A retail chain involved in sales of Readymade garments. The happy Shopping offers discount to its members holding Platinum, Gold and Silver card. The 10% discount is given to Platinum card, 8% to Gold Card and 5% to Silver Card holders on sales amount.

The screenshot shows a Java Swing window titled "Happy Shopping". It contains several text input fields and a group box for membership cards. The fields are: "Item Name:" with "Shirt" entered, "Rate (per unit)" with "550", "Quantity:" with "5", "Total Amount:" with "2750.0", "Discount:" with "275.0", and "Net Amount:" with "2475.0". The "Membership Card" group box has three radio buttons: "Platinum" (selected), "Gold", and "Silver". There are two buttons at the bottom right: "Calculate" and "Close".

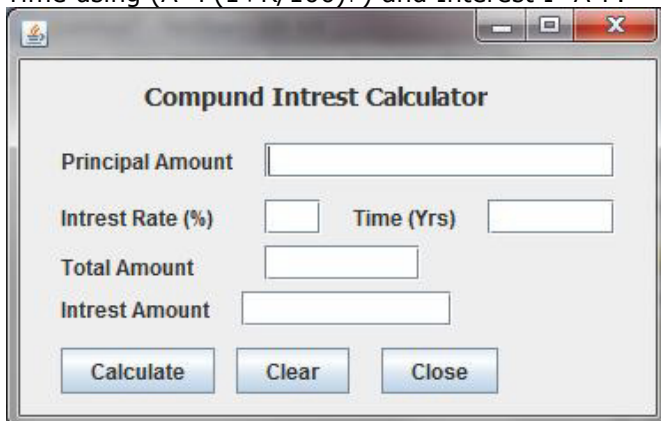
b) Develop a simple Calculator application as per given screen snapshot, to implement +, -, x and / operations. The text boxes get cleared when 'C' button



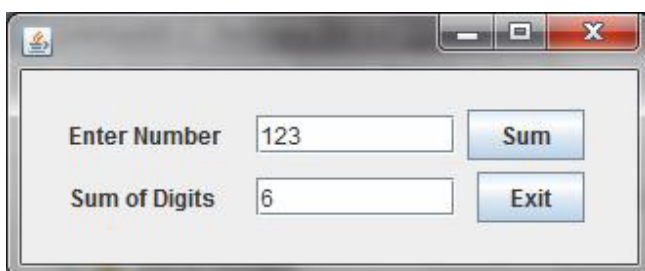
is clicked.



c) Develop a Compound Interest Calculator application as per given screen snapshot, to calculate total amount for given Amount, Rate of Interest and Time using  $A = P(1 + R/100)^T$  and Interest  $I = A - P$ .

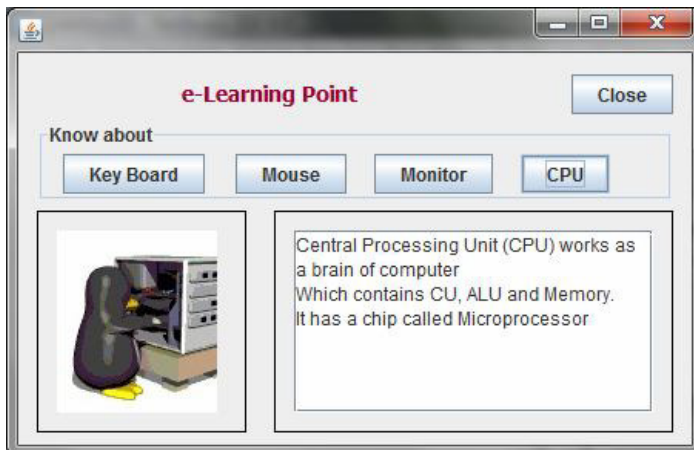


d) Develop an application to compute the sum of digits for given number



e) Develop an e-Learning application with images and text information as per given screen shot.





f) A Quick Fox Transport Co. wants to develop an application for calculating amount based on distance and weight of goods.

The charges (Amount) to be calculated as per rates given below.

Distance	Weight	Charges per Km.
$\geq 500$ Km	$\geq 100$ kg.	Rs. 7/-
	$< 100$ kg.	Rs. 6/-

$< 500$ Km	$\geq 100$ Kg.	Rs.8/-
	$< 100$ Kg.	Rs.5/-

## Q2 Read CH-8 MYSQL Revision Tour.

- A) Solve the crossword puzzle on pg.263
- B) Do the lab exercise and write the command neatly in your practical register (pg.266 to 269).

## Q3 Read chapter-7 Web Applications

- A) Write HTML code for web pages given on pg.238.
- B) Give the output of HTML code given in Q3 pg.240.



**Q 4** Develop a project using Programming and Database skills learnt during the course. The project should be an application in any one of the following domains, - e-Governance, e-Business and e-Learning with GUI front-end corresponding database at the back-end.

**Project Work**

**Sample Project :** Student Information System, Shopping Mall, Banking, Payroll, Digital Contact Diary, Hotel Reservation System, Airways Booking System, Railways System, etc...

**Data Collection and analysis:**

- Choose any system as your project for XII (a batch of two maximum)
- Collect data about the project(bills, reports, admission forms, etc.)
- Analyze the design screen and validations of forms (to clear, disable the components, check for negative values, check for blanks, etc.)

**System Development (Coding)**

- Design the First Screen – with related picture, title with an impressive font and an Enter button.
- Second Screen – as a Login Screen.
- Other Screens related to your project including ADD, DELETE, MODIFY and SEARCH.

**Note :** Submit the project in a CD .

**Your Project should cover the following specifications:**

- Project Title(name of the project, roll no, class)
- Acknowledgement
- Certificate
- Introduction to project
- Software and hardware required ( including Operating system )
- Bibliography

**Q5** Revise the syllabus covered for test.

(\*NOTE:The soft copy as well as the hard copy of the work done is to be submitted)

**BIOLOGY**

- 1.** Read & learn all the chapters covered in class .



2. Complete the record file .
3. Read the investigatory project & prepare for viva voce .
4. Write down the answers to HOTS questions provided to you .

## Subject: Political Science

Answer the following questions:-

### Ch-1 Cold War

1. What is meant by Cuban missile crisis?
2. Why did smaller nations support super powers?
3. Why were most of the non-aligned countries categorized as L.D.C's?
4. How did the New International Economic Order came into being? What reforms were proposed by UNCTAD in its report in 1972?

### Ch-2 Disintegration of Soviet Union

1. Define shock therapy. Discuss its consequences on the post-communist regimes?
2. Describe any 4 drawbacks of the soviet system?
3. Write the causes and consequences of disintegration of Soviet Union?
4. What was Gorbachev's reform policy?

### Ch-3 U.S hegemony in world politics

1. Write a note on beginning of the new world order?  
(Hint -> Write all the four operations)
2. Write beginning of U.S as hard power, soft power and structural power?
3. What are the constraints on American hegemony?
4. Analyze different ways in which American hegemony can be overcome?
5. Describe India's relations with U.S.A?



## Computer Science

Q.1 (a) Name the header files that shall be needed for the following code:-

```
void main( )
{
char string[20];
gets(string);
strcat(string,"CBSE");
puts(string);
}
```

(b) Name the header file to which the following function belong:

strcpy( ),toupper( ),random( ),isalnum( ),abs( ), isupper( ), strcmp( ), fabs()  
puts( ),clrscr(),getchar(),exp()

Q.2 Rewrite the following program after removing all the syntax error(s),if any.

Underline each correction.

(a) #include<iostream.h>

```
void main( )
{
First=10,second=20;
Jumppto(first;second)
Jumppto(second);
}
```

Void jumpto(int N1,int N2=20)

```
{
N1=N1+N2;
Cout<<N1>>N2;
}
```

(b) #include [iostream.h]

```
class MEMBER
{
int Mno;float Fees;
PUBLIC:
void Register(){ cin>>Mno>>Fees;}
void Display{ cout<<Mno<<" : "<<Fees<<endl;}
};
```

void main()

```
{
MEMBER M;
Register();
M.Display();
}
```

**Q.3 In the following program, if the value of n entered by the user is 5, what maximum and minimum values the program could possibly display?**

```
#include <iostream.h>
```

```
#include <stdlib.h>
```

```
void main()
```

```
{
```



```

int a[ ]={ 10,20,30,40,50},n,b,c;
randomize();
cin>>n;
c=random(n);
b=a[c]+c;
cout<<b<<endl;
}

```

Q.4 Find the output of the following program:

```

#include <iostream.h>
void Secret(char Str[ ])
{
for (int L=0;Str[L]!='\0';L++);
for (int C=0;C<L/2;C++)
if (Str[C]=='A' || Str[C]=='E')
Str[C]='#';
else
{
char Temp=Str[C];
Str[C]=Str[L-C-1];
Str[L-C-1]=Temp;
}
}
void main()
{
char Message[ ]="ArabSagar";
Secret(Message);
cout<<Message<<endl;
}

```

Q.5 Define a class in C++ with following description:

#### Private Members

- A data member Flight number of type integer
- A data member Destination of type string
- A data member Distance of type float
- A data member Fuel of type float
- A member function CALFUEL() to calculate the value of Fuel as per the following criteria:

Distance	Fuel
<=1000	500
more than 1000 and <=2000	1100
more than 2000	2200

#### Public Members

- " A function FEEDINFO() to allow user to enter values for Flight Number, Destination, Distance & call function CALFUEL() to calculate the quantity of Fuel
- " A function SHOWINFO() to allow user to view the content of all the data members

(b) Define a class garments with the following description:

private members:



gcode	string
gtype	string
gsize	integer
gfebric	string
gprice	float

a function assign( ) which calculates and assigns the value of gprice as follows:  
for the value of gfebric "cotton"

<u>gtype</u>	<u>gprice</u>
trouser	1300
shirt	1100

for gfebric other than "cotton" the above mentioned gprice gets reduced by 10%  
public members:

\*A function input( ) to input the values of the data members gcode, gtype, gsize and gfebric and invoke the assign( ) function.

\*A function display( ) which display the contents of all the data members for a garment.

(c) Define a class Tour with the following description:

private members:

tcode	string
NoofAdults	integer
Noofkids	integer
kilometer	integer
totalfare	float

public members:

\*A function Assignfare( ) which calculates and assigns the values of the data member totalfare as follows:

**for each adult**

<b>fare</b>	<b>for KM</b>
500	>=1000
300	<1000 & >=500
200	<500

**for each kid** the above fare will be 50% of the fare mentioned in the above table.

for eg.

if KM is 850, No. of adults=2 and No. of kids=3

then total fare should be calculated as

no. of adults\*300+no. of kids\*150

i.e 1500

\* A function entertour( ) to input the values of the data members tcode, NoofAdults, Noofkids, kilometer and invoke the assignfare( ) function.

\* A function showtour( ) which display the contents of all data members.

**Q.6 In the following program, if the value of n entered by the user is 5, what maximum and minimum values the program could possibly display?**

```
#include <iostream.h>
```

```
#include <stdlib.h>
```

```
void main()
```

```
{
```



```

int a[]={ 10,20,30,40,50},n,b,c;
randomize();
cin>>n;
c=random(n);
b=a[c]+c;
cout<<b<<endl;
}

```

7(a)What do you understand by Data Encapsulatiopn and Data Hiding ?Also, give an example in C++ to illustrate both.

(b) Answer the questions (i) and (ii) after going through the following class:

```

class WORK
{
int workid;
char worktype;
public:
~WORK()                //function 1
{cout<<"unallocated"<<endl;}
void status( )          //function 2
{cout<<workid<<":"<<worktype<<endl;}
WORK( )                //function 3
{workid=10;worktype='T';}
WORK(WORK &w)          //function 4
{
workid=w.workid+12;
worktype=w.worktype+1
}
};

```

which member function out of function 1, function2, function 3 and function 4 shown in the above definition of class WORK is called automatically, when the scope of an object gets over? Is it known as constructor or destructor or overloaded function or copy constructor?

(ii) WORK W;

WORK(W);

Which member function out of function 1, function2, function 3 and function4 shown in the above definition of class WORK will be called on execution of statement written as statement 2? What is this function specially known as out of destructor or copy constructor or default constructor?

Note:-Revise all the chapters covered so far.



**CLASS XII**  
**BUSINESS STUDIES**  
**PART A**

Q1. Mr. David, working as Sales executive in Mahalaxmi Ltd. possesses good marketing techniques. His techniques involve oral presentation of message in the form of conversation with prospective customers for the purpose of making sales. Name the promotional tool used by Mr. David. Identify the values which can be inculcated by using the technique in the above case.

Q2. It is one of the elements of market mix which contains one of the most important decisions that a marketer has to take to promote sales. This decision was taken by Mr. Mukund, Marketing manager of Intel Ltd. which facilitated the customers in product identification and hence ensured quality. It also built up their confidence and help in increasing their level of satisfaction. Apart from this, they provide educational scholarships for poor children in the society. Identify the element of marketing mix. Name any two values being emphasised by ensuring quality products for customers and by running an orphanage home.

Q3. ABC Ltd. manufactures computer appliances. They massively advertise about their products with incomplete & wrong information. More or less their products are not of superior quality. They charge higher prices for their products. State the objections to above advertising. (i) Name the values which are not followed by ABC Ltd.

Q4. Prakash purchased an ISI Mark electric induction stove from 'Rama electricals. While using he found that it was not working properly. He approached the seller and complained for the same. The seller satisfies Prakash by saying that he will ask the manufacturer to replace this induction stove. Name the consumer right Prakash exercised in the above situation. Name the value which is followed in the above case.

Q5. A consumer has the freedom to choose from a variety of products at competitive prices. The marketers should offer a wide variety of products in terms of quality, brand, price, size etc. Ramya (a class X student) was in need of a geometry box. She went to the nearest shop and the shopkeeper showed her a variety of geometry boxes at different prices. She selected a box and paid Rs.300, the maximum retail price of the box, and took the cash memo for the same. Name the consumer right exercised by Ramya. Name the values which are emphasized in the above case.

Q6. Harsha purchased some grocery items from a general store. After reaching home she found a talcum powder in her bag which was not billed for. She checked the date of expiry and other details and after satisfying herself she started using it. Immediately she developed some skin problems. (i) What are the values to be conveyed to the society from the above and how?



Q7. The owner of a restaurant is charging Rs.40 for a bottle of juice from a customer whereas the maximum retail price of the bottle of juice is Rs.17. One of the consumers (a member of NGO) has objected to this but the owner continues to do this malpractice.(i) Identify any two social values that the traders must follow?

Q8. Under the Consumer Protection Act, every consumer has a right to be protected against goods and services which are hazardous to life and health. Alpha Ltd. manufactures and sells substandard refrigerators. As these appliances did not conform to the safety norms and a mark assuring quality specification was missing. Cases were noticed where these substandard refrigerators had caused serious injury to many consumers.

Suggest any two precautions to be taken by the consumer while purchasing therefrigerator.Which values do you find disturbing in the above paragraph?

Q9. What are the values behind promoting Consumer Protection?

Q10. A packet of biscuit does not bear a green or red dot indicative of vegetarian or non vegetarian food item. What values are ignored?

### **Extra questions**

1. State whether following are treated consumer under consumer protection act

- (a) Nikita purchased washing machine for her house
- (b) Rakesh purchased DVD Player for resale
- (c) Utkarsh uses new mobile phone connection

2. Government is actively advertising for “ Jago Grahak Jago”.Which consumer right is highlighted in the above statement

3. Identify the relevant rights of a consumer being violated in the following instances.

- (a)A bottle of acid sold but the cap was not properly sealed.
- (b)Medicine sold without date of manufacturing and date of expiring printed on its packaging.
- (c) Madan bought a cooler with 2 years warranty.The cooler started giving problem within 6 months. Madan approached the seller.The seller did not listen to his grievances.
- (d)The seller compels the consumer to purchase the available product.
- (e)The common consumers are not aware of their rights, right path and procedure for filing the complaints

5. Write Yes or No in the following cases.

- a.Indian Airlines delayed the flight to Guwahati from New Delhi by 8 hrs. Can the passenger file a case in the consumer court?\_\_\_\_\_
- b.A lawyer accepted the fee but did not appear in the court for the client. Can the client approach the consumer court for remedy?\_\_\_\_\_



- c. In the nearby area a milkman adulterates the milk with water and sells in the locality. Can all the consumers from a group and file a case. \_\_\_\_\_
- d. Mohan bought a product without a cash memo. Can he file a case in consumer court, if exploited?

6. The earlier approach of CAVEAT EMPTOR, which means “Let the buyer beware”, has now been changed to CAVEAT VENDITOR (“Let the seller beware”). Why such a radical change has taken place?

7. Consumer Protection has a wide agenda. How ?

### ***BUSINESS STUDIES (PART B)***

Attempt the following questions in a separate file

- Design a suitable label for any one dietary food product of your choice.
- Prepare a write up on any one consumer protection case and the ruling given therein from the newspaper or internet.
- Write about any one company that has mobilized capital through issue of shares in the year 2015 so far by giving details about the issue.
- Paste ten advertisements appearing in newspapers, magazines etc about recent sales promotional schemes for various products /services.
- Prepare a report on “Constitution and Role of SEBI in regulating the Indian Stock Market” .
- Prepare a report on the distribution channels adopted by a company of your choice for its various consumer goods.
- Paste any one article, displaying the reports of the lab tests of any one food product undertaken to check whether it conforms to the quality and nutrient standards of AGMARK or not, from any consumer magazine.
- Paste atleast five standardized marks to be checked before making a purchase of any consumer good.
- Paste any two advertisements issued by various institutions to spread public awareness (issued with the heading ‘**Jago Grahak Jago**’ ) from any daily newspaper.



- Visit any two of the following outlets and find out how the goods reach them, starting from their dispatch from the producers. Prepare a chart showing the channel of distribution being followed for each case.

(i) A grocery shop

(iii) A readymade garment shop

(ii) A home appliances shop

(iv) A franchise shop in any chain