

**HOLIDAY ASSIGNMENT**  
**CLASS-XII-B**  
**SUBJECT-ECONOMICS (OPT)**

1. Calculate GNP<sub>mp</sub> & NNP<sub>fc</sub> from the following data-

NFIA	-5
Net exports	-7
NIT	47
Net change in stocks	13
Pvt final consumption Exp	263
Govt. final consumption exp	50
Depreciation	45
Gross domestic capital formation	100

2. How is NDP<sub>mp</sub> calculated?
3. If we deduct NDP<sub>fc</sub> from NDP<sub>mp</sub>, what do we get?
4. Are the following included in the estimation of NI of a country?
  - a. Govt. expenditure on street lighting.
  - b. Interest received by a household from a commercial bank.
  - c. Death duty
  - d. Purchase of new good.
  - e. Purchase of vegetables by a restaurant.
  - f. Old age pensions.
  - g. Subsidized lunch served to workers in a factory
  - h. Profit earned by Indian companies from their branches abroad.
5. Why is PPC called opportunity cost curve?
6. State the relation between TU & MU.
7. What will happen to budget line when
  - a. Price of good X falls (gd X is shown on X axis)
  - b. Money income falls.
8. Price elasticity of demand is (-)2. 40 units of this good are bought at a price of Rs. 10 per unit. How many units will be bought at a price of Rs. 11 per unit?
9. When the price falls from Rs. 20 per unit to Rs. 16 per unit, its quantity demanded rises from 1000 units to 1160 units. Calculate ed & find out the elasticity.
10. Price of a good rises from Rs. 10 per unit to Rs. 11 per unit. As a result quantity demanded of that good falls by 10%. Calculate its price elasticity of demand.
11. How does the availability of close substitutes of a good affect the price elasticity of that good? Explain.
12. Distinguish between GDP<sub>mp</sub> & GNP<sub>mp</sub>.
13. How will you derive GNDI from NI?
14. What is the difference between GDP<sub>fc</sub> & NDP<sub>fc</sub>?

**HOLIDAY ASSIGNMENT**  
**Class-XII-D**  
**Subject-Geography**

**CH-HUMAN GEOGRAPHY**

1. Differentiate between environmental determinism & possibilism.
2. Explain the nature & scope of Human Geography.

**CH- PRIMARY ACTIVITY**

3. State the important features of Modern gathering.
4. What is Transhumance?
5. What are the factors that affect mining?
6. How is market gardening different from truck farming?

**CH-SECONDARY ACTIVITY**

7. What are foot-loose industries?
8. Explain the industries based on ownership.
9. Why are hi-tech industries being attracted to the peripheral areas of metropolitan cities?

**CH-TERTIARY ACTIVITIES**

10. Explain the different trading centres of rural & urban marketing.
11. What are the factors that affect the transport services?
12. Define informal sector?
13. Who are empowered workers?
14. What is digital divide?

**CH-LAND RESOURCES & AGRICULTURE**

15. Why the share of area under forest & non-agricultural uses has shown an increase?
16. Differentiate between productive & protective irrigation.
17. What are the important strategies for agricultural development followed in the post-independence period?

**CH-WATER RESOURCES**

18. State the measures to prevent water pollution.
19. Why is the share of agricultural sector in total water used in the country expected to decline?

**CH-MINERAL RESOURCES**

20. Name any 2 agencies that are involved in exploration of minerals.
21. Name the stones that provide raw material for cement industry.
22. Write a short note on Nuclear energy resource.
23. Give an account of distribution of coal in India.

**CH-MANUFACTURING INDUSTRIES**

24. Name two rivers that provide water to TISCO.
25. Where was the first iron & steel factory set up in India?
26. State the locational features of sugar industry.
27. Mention the measures initiated under LPG policy.
28. Explain globalization in the Indian context.
29. State the important features of Mumbai-Pune industrial region.

HOLIDAY HOMEWORK  
CLASS – XII (BIOLOGY)

Chp. Reproduction in organisms

- 1.How is Bryophyllum multiplied?(1)
- 2.What are monocarpic plants?(1)
- 3.Define oestrus cycle.(1)
- 4.What is homothallic condition?(1)
- 5.Write a note on gemmule.(2)
- 6.What are the disadvantages of asexual reproduction?(2)
- 7.Differentiate between zoospore and zygote.(2)
- 8.Describe gootae.(2)

Chp. Sexual reproduction in Angiosperms

- 1.What is ornithophily?(1)
- 2.Name the processes involved in double fertilization.(1)
- 3.What is polyembryony?(1)
- 4.How endosperm becomes triploid?(1)
- 5.Mention the application of pollen bank.(1)
- 6.Write a note on incompatibility.(2)
- 7.Differentiate between pericarp and perisperm.(2)
- 8.How mega SMS develop in ovule?(2)
- 9.Why cross pollination is better than self pollination?(3)
- 10.Draw a well labeled diagram of mature embryosac.(3)
- 11.Explain apomixes and give its types.(3)
- 12.Give the function of coleorhiza,coleoptile,teptum,sporopolanin and nucellus.(3)

Chp. Reproduction in human beings

- 1.What is polocyte?(1)
- 2.Name the extra embryonic membranes.(1)
- 3.What do you mean by morphogenetic movement?(1)
- 4.Name the process similar to ovulation in males.(1)
- 5.Define spermeiogenesis.(1)
- 6.What is pregnancy hormone?Name two sources of it in human female.(2)
- 7.Describe the formation and function of corpus luteum.(2)
- 8.What is the main content of acrosome?Give its function.(2)
- 9.How placenta is formed in human female?Mention its function.(2)
- 10.Describe the structure of graffian follicle.(2)
- 11.By a flow chart only show the process of oogenesis showing various phases.(3)
- 12.Describe parturition.(3)
- 13.Describe the events of fertilization in human female.(3)
- 14.Draw a flow chart of human male and female reproductive system.Highlight the positive and negative feedback mechanism in it.Also show the inhibitory and stimylatory directions.(5)
- 15.What is menstruation?Mention the action of estrogen,progesterone,FSH and LH in it.(5)

SUMMER FIELDS SCHOOL  
HOLIDAY ASSIGNMENTS, 2009  
CLASS-XII, SUBJECT-BIOTECHNOLOGY

1. Define the following.
  - a. cloning vectors
  - b. restriction enzymes
  - c. plasmid
  - d. bacteriophages
  - f. electrophoresis
2. Give one word answer for the following.
  - a. Name the bacterium from which Eco RI is isolated.
  - b. Which type of Library will be prepared for the cloning of a gene of rat.
  - c. Give an example of blunt end cutter.
  - d. what is the foreign insert capacity of cosmid.
  - e. which enzyme is responsible for Mad cow disease.
  - f. Name the strongest and weakest covalent bond.
  - g. Which protein has maximum biological value and protein efficiency ratio.
  - h. What is GRAS.
3. Answer the following in 30-40 words.
  - a. What is palindromic sequence? why they are important in rdt.
  - b. What is the use of selectable markers in a vector?
  - c. Why an athlete should take the diet rich in whey proteins?
  - d. What are nutraceuticals protein? Why are they produced in industry.
  - e. Why sickle cell anaemia is known as molecular disease?
  - f. Why proteins in the body are synthesized in inactive form?
  - g. Which method is used for improving the laundry detergent functional activity and why?
4. Answer the following in 60-80 words.
  - a. If you are provided with a bacterial sample then how will you purify the antibiotic from the sample. enlist the steps involved in the method used.
  - b. Which type of organism can produce molecular scissors and why the genome of those organisms are not affected by them?
  - c. Why E.coli is not used for the production of human proteins?
  - d. What is relay race technique. Describe it in brief?
  - e. Why acidic serine is required in relay race method?
  - f. What is molecular pharming? Write its uses in industry?
  - g. Name and describe the technique used for detecting sickle cell anaemia?
5. Answer the following in 80-100 words.
  - a. Explain two methods used for the gene amplification.
  - b. What are molecular markers? describe their use in biotechnology with the help of a suitable example.
  - c. What are DNA probes? How are they used in southern hybridization. explain.
  - d. What do you mean by proteomics? which type of proteomics is used for the detection of sickle cell anaemia .explain.
  - e. Make a flow chart showing the purification of extracellular and intracellular protein from bacterial cell. in a fermenter.
  - f. Write a note on the analytical application of proteins and enzymes.
  - g. Explain the two methods used for the characterization of protein in vapour state.
  - h. What is ddNTP. Why it is used in DNA sequencing?

**SUMMER FIELDS SCHOOL**  
**Holidays Home Work Session 2009-10**  
Class XII COMPUTER –SCIENCE -083

Do all these questions on a separate notebook

**Overloaded Functions**

1. Write difference between procedural programming and object oriented programming?
2. What are advantages and disadvantages of Object based Programming?
3. Explain with an example how we can avoid ambiguity while calling overloaded functions?
4. How the concept of polymorphism can be implemented through C++?
5. What are overloaded functions? What is the need for function overloading?
6. How the compiler will interpret the second (subsequent) declaration of overloaded function?
7. What are the restrictions are involved on overloaded functions and also write the steps involved in finding the best match?

**Class and Objects**

- Q.1 What is a data hiding? How it is implemented in C++?
- Q.2 What is the difference between class and structure?
- Q.3 What do you understand by data hiding and data abstraction?
- Q.4 What is an encapsulation? How it is implemented in C++?
- Q.5 Differentiate between private and public visibility mode in context of Object Oriented programming?
- Q.6 What is the purpose of scope resolution operator?
- Q.7 What is an inline function? What is the advantage of it?
- Q.8 In which situations Inline function will not work?
- Q.9 What are the of static data members of a class?
- Q.10 How a static data member is different from the normal data member of a class?
- Q.11 How static member functions are different from the normal member functions? Ans.
- Q.12 What is data hiding? How it is implemented in C++?
- Q.13 Encapsulation is one of the major properties of OOP. How is it implemented in C++?
- Q.14 What do you understand by the term Polymorphism? How is it implemented in C++?
- Q.15 Define a class named Book in C++ with following description?

**Private members:**

bookno	integer
title	20 characters string
price	float
TotalCost( )	A function which calculates total cost for N number of copies where N is passed to function as argument.

**Public members:**

- A constructor which initialized initialize bookno , price with 0 and title with "Not Allotted"
- Function Input() to read the bookno, title and price.
- Function Purchase() to ask user to input the number of copies to be purchased. It invokes TotalCost() function to be paid by the user.

Q.16 Define a class named Tour in C++ with following description?

**Private members:**

tcode	integer (Ranges 6 - 10)
adults, children, distance	integer
totalfare	float
AssignFare( )	A function which calculates and assign the value to data member totalfare as follows:- - For adults Fare                      Distance Rs. 500                    >=1500 And fare get reduced by 25% if distance is < 1500. - For Children For every child a fixed Rs. 50 is charged as fare.

**Public members:**

- A constructor which initialized initialize all data members with 0

- Function EnterTour() to input the values of the data members tcode, adults, children and call to AssignFare function.
- Function ShowTour() to print all the details of object of Travel type.

Q.17 Define a class named Admission in C++ with following description?

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.

## CONSTRUCTOR AND DESTRUCTOR

Q.1 What is a constructor? What is its purpose?

Q.2 What is a destructor? What is its purpose?

Q.3 What is a copy constructor?

Q.4 Answers the questions (i) to (ii) based on following code?

2

```
class student
{ int rno;
  char name[20];
  float per;
  student()           // Function 1
  {rno=1;
   strcpy(name,"Raman");
   per=85.5;
   cout<<"Student is initialized "<<endl
  }
public:
  void showdata()     // Function 2
  { cout<<name<<" scored "<<per<<"% marks"<<endl;
  ~student ()        // Function 3
  { cout<<"object is destroyed "<<endl;  }
};
main()
{ student S; //Statement-1
  S.showdata(); //Statement-2
}
```

(i) Will Statement -1 initialize all the data members for object S with the values given in the Function 1 ? (Yes or No). Justify your answer suggesting the correction(s) to be made in the above code.

(ii) What shall be the possible output after the execution of program? (Assuming , if required the suggested correction(s) are made in the program )

Q.5 Answers the questions (i) to (ii) based on following code?

2

```
class interview
{ int month;
public:
  interview(int m)     // Function 1
  { month=m;}
  interview(interview & T); // Function 2
  ~interview()        // Function 3
  { }
};
```

(i) Write complete definition of function 2?

(ii) Why function 3 is required in the Class? When will be function 3 gets executed?

Q.6 Answers the questions (i) to (ii) based on following code?

class exam

```
{ int marks;
  char subject[20];
  public:
  exam()                // Function 1
  { marks=0;
    strcpy(subject,"Computer Science");
  }
  exam(char s[])        // Function 2
  { marks=0;
    strcpy(subject, s);
  }
  exam (int m, char s[])// Function 3
  { marks=m;
    strcpy(subject, s);
  }
  exam (exam & E)       // Function 4
  { marks=E.marks;
    strcpy(subject, E.subject);
  }
};
```

(i) Which statements in C++ will execute Function 3 and Function 4 of class exam?

(ii) Which feature of Object Oriented Programming demonstrated using Function 1, Function 2, Function3 and Function 4 in the above class exam?

Q.7 Consider the following coding and answer the question given below:-

Class testmeout

```
{ int rollno;
  public :
  ~testmeout() //Function 1
  {cout<<rollno<<" is Leaving examination hall"<<endl;}
  testmeout() //Function 2
  { rollno=1;
  cout<<rollno<<" is appearing for examination "<<endl;}
  testmeout(int n, char name[]) //Function 3
  {rollno=n;
  cout<<name<<" is in examination hall"<<endl;}
  testmeout(testmeout & t);//function 4
  void mywork() //Function 5
  {cout<<rollno<<" is attempting questions "<<endl;}
};
```

a. In object oriented programming, what is Function 1 referred as and when does it get invoked?

b. In object oriented programming, what is Function 2 referred as and when does it get invoked?

c. In object oriented programming, what is Function 3 referred as and when does it get invoked?

d. Write a statement so that function 3 gets executed?

e. Complete the definition of function 4

f. What will be the output of the above code if its main function definition is as given below (assumed the definition of Function 4 is completed) :

```
main()
{testmeout ob1;
  ob1.mywork();
}
```

g. Which feature of object oriented programming is demonstrated using Function 2, Function 3 and Function 4 in the above class testmeout?

h. What is the scope of data member (rollno) of class testmeout?What does the scope of data members depend upon?

Ans:-

Q.8 What will be the output of the following ?

```
#include<iostream.h>
class student
{ public:
  student()
  {cout<<"Student object created "<<endl;}
  ~student()
  {cout<<"Student object destroyed"<<endl;}
};
class teacher
{ student s1;
  public:
  teacher()
  {cout<<"teacher object created "<<endl;}
  ~teacher()
  {cout<<"teacher object destroyed"<<endl;}
};
main()
{
  teacher ob1;
}
```