

**APEEJAY SCHOOL SAKET
HOLIDAY HOMEWORK
2019-20
CLASS XII –A**

ENGLISH

This summer break is the only time when you can brush up and hone your reading and writing skills in English. Be organised , study strategically and most importantly work on paper presentation. Please take out time to complete the following assignments in the English note book.

1. Please attempt two complete sample papers . Attach the papers with your solution. The link for the question papers are given below.:

https://drive.google.com/file/d/1iapqr7vO0r8wtShZzCScYhVupw6klmrv/viewhttps://drive.google.com/file/d/0Bw_tfaJ0AfMuS3JuSElwNHk2c0k/view

2. Notemaking should be practised regularly. Select two articles or comprehension passages from a newspaper/magazine and make notes and summary on the same. Please attach the selected passage.

3. Attempt Worksheet 1 and 2 from the link provided below.

<http://www.studiestoday.com/worksheet-english-cbse-class-12-english-worksheet-writing-skills-220217.html>

PHYSICS

I INVESTIGATORY PROJECT BASED ON ANY TOPIC OF PHYSICS

The project must have some practical work which you will perform in the school laboratory. The project carries 4 marks in board practical exam.

Instructions:

1. The work has to be done on A4 size interleaf sheets.
2. It should be written in neat handwriting.
3. The file should be spiral binded.
4. The project should be hand written and no print-outs to be used.

You can search for the topics of Investigatory projects from the CBSE website.

II. Solve in-text and back exercise question of NCERT and at least 10 previous years question related to the topic covered in your notebook.

BIOLOGY

I INVESTIGATORY PROJECT BASED ON ANY TOPIC OF BIOLOGY

- Select and get the topic of the project approved before making the project.
- Make the project on the approved topic.
- It should be written in neat handwriting.

- The project should be hand written and no print-outs to be used.

II Complete the practical file as per directions given in class

ASSIGNMENT:-

TOPIC 1 : MOLECULAR BASIS OF INHERITANCE

TOPIC 2 : Evolution

A copy of the assignment should also be pasted.

1. If adenine constitutes 30% of an isolated DNA fragment, then what is the expected % of the base cytosine in it?
2. How does the flow of genetic information in HIV deviate from the central dogma proposed by Francis Crick?
3. How does HIV differ from a bacteriophage?
4. What is a nucleoid?
5. Name two amino acids that provide +ve charge to histone proteins.
6. Why do RNA viruses undergo mutation and evolution faster than most of the other viruses?
7. Name the enzyme involved in the continuous replication of DNA strand. Mention the polarity of the template strand.
8. What is a cistron?
9. Which one out of Rho factor and sigma factor, acts as initiation factor during transcription in prokaryote?
10. Write the function of RNA polymerase II.
11. What is meant by hnRNA?
12. (a) Differentiate between euchromatin and heterochromatin.
(b) What is the function of non-histone chromosomal proteins?

13. Why is DNA a better genetic material when compared to RNA?
14. Answer the following questions based on Meselson and Stahl's experiment:
 - a) Write the name of the chemical substance used as a source of nitrogen in the experiment by them.
 - b) Why did the scientists synthesize the light and the heavy DNA molecules in the organism in the experiment?
 - c) How did the scientists synthesize make it possible to distinguish the heavy DNA molecule from the light DNA molecule? Explain.
 - d) Write the conclusion the scientists arrived at, after completing the experiment.
15. Monocistronic structural genes in eukaryotes have interrupted coding sequences, Explain. How are they different in prokaryotes?
16. Describe the initiation process of transcription in bacteria?
17. Explain the elongation process of transcription in bacteria?
18. Describe the termination process of transcription in bacterium?
19. Explain the role of ^{35}S and ^{32}P in the experiments conducted by Hershey and chase?
20. It is established that RNA is the first genetic material. Explain giving three reasons?
- 21 (a) What are the transcriptional products of RNA polymerase III?
 - (b) Differentiate between 'capping' and 'tailing'? Expand hnRNA.
22. DNA is the genetic material in most of the organisms, while RNA is the genetic material in a few viruses/ What are the four general/common functions performed by RNA in other organisms?
23. Write short notes on RNA polymerases of eukaryotic cells?
24. How do histones acquire positive charge?
25. Explain the role of RNA polymerase in transcription in bacteria.
26. Identify giving reasons, the salient features of genetic code by studying the following nucleotide sequences of mRNA strand and the polypeptide translated from it?
27. What is the basis of DNA fingerprinting? Explain the steps in DNA fingerprinting.
28. Draw a double stranded polynucleotide chain.
29. What are the characteristics of a molecule that can act as genetic material?

30. Explain DNA replication.
31. How is gene expression controlled? Explain with an example.
32. Identify the examples of convergent evolution from the following: (a) Flippers of penguins and dolphins. (b) Eyes of octopus and mammals © Vertebrate brains
33. What did Louis Pasteur's experiments on 'killed yeast' demonstrate? Name the theory that got disproved on the basis of his experiment.
34. Coelacanth was caught in 1938 in South Africa. Why is it very significant in the evolutionary history of vertebrates?
35. List the two characteristics of mutation that help in explaining evolution according to De Vries.
36. Why are lichens regarded as pollution indicators?
37. Pick out the ancestral line of Angiosperms from the list given below:
Conifers, Seed ferns, Cycads, Ferns.
38. Mention the type of evolution that has brought the similarity as seen in potato tuber and sweet potato.
39. List the two main propositions of Oparin and Haldane.
40. How does paleontological evidence support evolution of organisms on Earth?
41. What does the comparison between the eyes of Octopus and those of mammals say about their ancestry and evolution?
42. Categorise the following pairs of examples as convergent or divergent evolutions: (a) Eyes of octopus and mammals. (b) Wings of butterfly and birds. (c) Tuber of sweet potatoes and potato. (d) Thorns in bougainvillea and tendrils in cucurbits.
43. How do Darwin's finches illustrate adaptive radiation?
44. How does fitness of a population help in evolution?
45. How is genetic-drift different from gene migration? Explain.
46. State the theory of abiogenesis. How does miller's experiment support this theory?
47. Evolution is the change of gene frequencies in a population in response to changes in environment in the time scale of years and not centuries. Justify the statement with reference to DDT. How does the theory of Hugo de Vries support this?

48. How did Darwin theory of natural selection explain the appearance of new forms on the earth?

49. a) How does Hardy Weinberg equation explain the genetic equilibrium?

b) Describe how this equilibrium gets disturbed which may lead to founder effect.

50. Briefly mention the contributions of T.H.Morgan in genetics

CHEMISTRY

I. Make investigatory project on a topic related to the syllabus.

The project must have some practical work which you will perform in the school laboratory. The project carries 4 marks in board practical exam.

Instructions:

1. The work has to be done on A4 size interleaf sheets.
2. It should be written in neat handwriting.
3. The file should not be spiral binded.
4. The project should be hand written and no print-outs to be used.

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

III. Solve in text and back exercise question of NCERT and at least twenty previous years question related to the topic covered in class.

IV. Learn and write all the name reactions, mechanism of reactions and distinguishing tests of organic chemistry in your register.

V. Do the following questions in your notebook:

- 1) Illustrate the following reactions giving suitable chemical equation for each:
 - a) Cannizzaro reaction
 - b) Kolbe's reaction
 - c) Reimer-Tiemann reaction
 - d) Clemmensen reduction
 - e) Gatterman reaction
 - f) Aldol condensation

2) An unknown aldehyde A on reacting with alkali gives a β -hydroxy aldehyde (Aldol) which loses water to form an unsaturated aldehyde 2-Butenal. Another aldehyde B undergoes disproportionation reaction in the presence of conc. alkali to form products C and D. C is an aryl alcohol with the formula C_7H_8O .

i) Identify A and B.

ii) Write the sequence of reactions involved.

iii) Name the product when B reacts with zinc -amalgam and hydrochloric acid.

3) A compound X (C_2H_4O) on oxidation gives Y ($C_2H_4O_2$). X undergoes haloform reaction. On

treatment with HCN, X forms a product Z which on hydrolysis gives 2-hydroxypropanoic acid.

i) Write down structures of X and Y.

ii) Name the product when X reacts with dilute NaOH

4) Give reasons for each of the following:

(i) Cyclohexanone forms cyanohydrin in good yield but 2, 2, 6 trimethylcyclohexanone does not.

(ii) There are two $-NH_2$ groups in semicarbazide. However, only one is involved in the formation of semicarbazones.

(iii) During the preparation of esters from a carboxylic acid and an alcohol in the presence of an acid catalyst, the water or the ester should be removed as soon as it is formed.

(iv) Aldehydes more reactive than ketones.

(v) Sodium bisulphate is used for the purification of aldehydes and Ketones.

5) Give reasons why?

a) While separating a mixture of ortho and para nitrophenols by steam distillations ortho isomer is more steam volatile

b) Alcohol group attached to benzene ring activates it towards electrophilic substitution

c) Unlike phenols, alcohols are easily protonated.

6) How will you chemically distinguish b/w the following pairs of compounds?

- a) Methanol & Ethanol.
- b) Phenol & ethanol.
- c) Propan-1-ol and Propan-2-ol.

7) How will you bring about the following conversions?

- a. Propene to 1-nitropropane
- b. Toluene to Benzyl alcohol
- c. But-1-ene to But-2-ene
- d. Aniline to chlorobenzene
- e. Methyl bromide to propanone
- f. Benzyl alcohol to phenylethanoic acid
- g. Aniline to Phenyl Isocyanide

8) A compound (A) with molecular formula $C_5H_8O_2$ is reduced to n-pentane on treatment with Zn-Hg/HCl. (A) forms a dioxime with hydroxylamine and gives a positive iodoform test and Tollen's test. Identify the compound (A) and deduce its structure.

9) Write the reactions involved in the following reactions:

- i) Etard reaction
- ii) Hell-Volhard Zelinsky reaction
- iii) Cannizzaro reaction
- iv) Wolff-Kishner reduction
- v) Haloform test
- vi) Decarboxylation

10) Give reasons:

- i) C-Cl bond length in chlorobenzene is shorter than C-Cl bond length in haloalkanes.
- ii) The dipole moment of chlorobenzene is lower than that of cyclohexyl chloride.
- iii) SN_1 reactions are accompanied by racemisation in optically active alkyl halides whereas SN_2 reactions proceed by inversion.

- iv) The treatment of alkyl chlorides with aqueous KOH leads to the formation of alcohol but in the presence of alcoholic KOH, alkene is the major product.
- v) Aldehydes are more reactive than ketones towards nucleophilic addition reactions.
- vi) Carboxylic acid does not give reactions of carbonyl group.
- vii) Presence of EWG increases the acidity of phenol whereas EDG decreases it.
- viii) pK_a of $F-CH_2COOH$ is lower than that of CH_3COOH ?

11) Distinguish between:

- i) Ethanal and Benzaldehyde
- ii) Phenol and Benzoic acid
- iii) Benzylamine and Aniline

12) How will you bring about the following conversions?

- i) Benzoic acid to Benzaldehyde
- ii) Benzene to m-Nitroacetophenone
- iii) Ethanol to 3-Hydroxybutanal
- iv) Aniline to p-Bromoaniline
- v) Aniline to 4-Aminobenzene sulphonic acid

13) A solution of sucrose (molar mass=342 u) is prepared by dissolving 68.4g in 1000g of water.

Calculate

- a. The vapour pressure of solution at 293 K
- b. The boiling point of solution
- c. The freezing point of solution
- d. The osmotic pressure at 293 K

Given that vapour pressure of water at 293 K is 0.023atm. K_f for water=1.86 K kg mol⁻¹ and K_b for water =0.52 K Kg mol⁻¹

14) A decimolar solution (0.1M) of potassium ferrocyanide is 50% dissociated at 300K.

Calculate the osmotic pressure of the solution.

15) Calculate the boiling point of a solution containing 0.61g of benzoic acid in 50g of CS_2 assuming 84% dimerisation of the acid. The boiling point and K_b of CS_2 are 46.2°C and $2.3 \text{ K Kg mol}^{-1}$ respectively.

16) The degree of dissociation of $\text{Ca}(\text{NO}_3)_2$ in dilute aqueous solution containing 7 g of the salt per 100 g of water at 100°C is 70%. If the vapour pressure of water at 100°C is 760 mmHg, calculate the vapour pressure of the solution.

17) Two elements A and B form compounds having molecular formula AB_2 and AB_4 . When dissolved in 20g of benzene, 1g of AB_2 lowers the freezing point by 2.3°C whereas 1g of AB_4 lowers the freezing point by 1.3°C . Calculate the atomic masses of A and B (K_b for benzene = $5.1 \text{ K Kg mol}^{-1}$)

18) What is Van't Hoff factor? What possible values can it have if the solute molecules undergo i) association ii) dissociation in solution. Prove that osmotic pressure is a colligative property.

19) State Henry's law correlating the pressure of a gas and its solubility in a solvent and mention two applications of the law.

20) Derive the relationship between relative lowering in vapour pressure and mole fraction of the volatile liquid.

21) How does a non-ideal solution differ from an ideal solution?

22) Mixing acetone and chloroform occurs with reduction in volume and is an endothermic process. What type of deviation from Raoult's law is shown in this case and why?

23) State Raoult's law of solution containing non-volatile solutes in volatile solvents. Derive an expression for the lowering of vapour pressure when a non-volatile solute is dissolved.

24) What is osmotic pressure? Explain how the molecular mass of a non-volatile solute can be determined from it.

25) At 298K, the vapour pressure of pure benzene is 0.256 bar and the vapour pressure of pure toluene is 0.0925 bar. If the mole fraction of benzene in solution is 0.40. (i) What is the total vapour pressure of the solution (ii) Calculate the composition of the vapour in terms of mole fraction.

26) 2g of benzoic acid (C_6H_5COOH) dissolved in 25g of benzene shows a depression in freezing point equal to 1.62 K. Molal depression constant for benzene is $4.9 \text{ K kg/mol}^{-1}$. What is the percentage association of acid if it forms dimer in the solution? Molar mass of benzoic acid = 122 g/mol.

27) An organic compound (A) $C_5H_{10}O$ gives positive 2, 4-DNP Test. It does not reduce Tollens' reagent but forms an addition compound with sodium hydrogen sulphite. On reaction with iodine in presence of sodium hydroxide, yellow precipitate B and another compound C is formed. On oxidation with $KMnO_4$ it forms two acids D and E. Identify A, B, C, D and E and write all the reactions involved.

28) An organic compound (A) has characteristic odour and on treatment with $NaOH$ it forms two compounds (B) and (C). Compound (B) has molecular formula C_7H_8O which on oxidation gives back (A). The compound (C) is a sodium salt of an acid. When (C) is treated with soda lime it yields an aromatic hydrocarbon (D). Deduce the structures of (A), (B), (C) and (D). Write the sequence of reactions involved.

29) Illustrate the following with an example

- i) Carbylamine reaction
- ii) Coupling reaction
- iii) Hoffmann's bromamide reaction
- iv) Gabriel phthalimide synthesis
- v) Diazotization reaction
- vi) Gatterman reaction

30) Accomplish the following conversions:

- (i) Nitromethane into dimethylamine
- (ii) Benzene to *m*-bromophenol
- (iii) Benzoic acid to aniline
- (iv) Aniline to 2,4,6-tri bromofluorobenzene
- (v) Benzyl chloride to 2-phenylethanamine
- (vi) Chlorobenzene to *p*-chloroaniline
- (vii) Aniline to *p*-nitroaniline
- (viii) Aniline to benzyl alcohol.

COMPUTER SCIENCE

(Data File Handling)

1. Why do we need a data file?
2. What is a binary file ? What is the basic difference between a binary and a text file.
3. Name two member functions belonging to fstream class.
4. What is a file mode? Explain the various file modes in C++ with reference to a text file .
5. Differentiate between the following
 - a. ifstream class and ofstream class.
 - b. Read() and write() functions.
6. Write main() function, which asks the user for information about the object of class Person, and writes this object to the disk file PERSON.DAT . You have to include all the required header file. You may choose any structure / class for Person of your choice.
7. Write a program in C++ to read an existing text file and display words of this file on the screen (one word per line) in the order they appear in the file. Assume that one or more whitespace characters separate successive words.
8. Assuming a class FLOPPY BOX

```
class FLOPPY BOX
{
int size;
char name[10];
public:
void getdata(){ cin>>quantity;gets(name);}
void showdata(){cout<<size<<" "<<name<<endl;}
};
```

Write functions to do the following operations

- i. Write the objects of FLOPPY BOX to binary file.
 - ii. Reads the objects of FLOPPY BOX from binary file and display them on screen.
9. Name two functions common to the class ifstream and ofstream.
10. Write a user defined function in C++ to read the content from a text file NOTES.TXT , count and display the number of blank spaces present in it.

Based on the concept of abstraction, encapsulation and data file handling, create an application in C++ on the topic chosen by you in class, and bring the same in form of a .cpp file. It must create data files. (The project is required to be developed in groups of 1-2 students)

ECONOMICS

As you are aware a project has to be prepared as per the CBSE requirements. It carries 20 valuable marks. Given below are the guidelines for the project. As discussed prepare your project on the pre decided topic.

Guidelines for Project Work in Economics (Class XII)

The **objectives** of the project work are to enable learners to:

- probe deeper into theoretical concepts learnt in classes XI and XII
- analyse and evaluate real world economic scenarios using theoretical constructs and arguments
- demonstrate the learning of economic theory
- follow up aspects of economics in which learners have interest
- develop the communication skills to argue logically

The **expectations** of the project work are that:

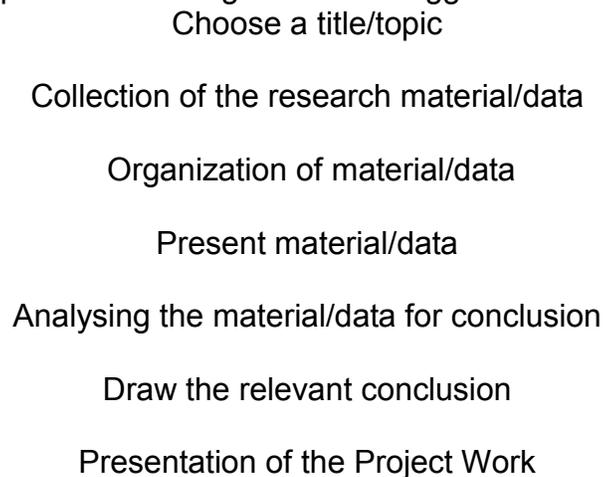
- learners will complete only **ONE** project in each academic session
- project should be of 3,500-4,000 words (excluding diagrams & graphs), preferably hand-written
- it will be an independent, self-directed piece of study

Role of the teacher:

The teacher plays a critical role in developing thinking skills of the learners. A teacher should: help each learner select the topic based on recently published extracts from the news media, government policies, RBI bulletin, NITI Aayog reports, IMF/World Bank reports etc., after detailed discussions and deliberations of the topic play the role of a facilitator and supervisor to monitor the project work of the learner through periodic discussions guide the research work in terms of sources for the relevant data · educate learner about plagiarism and the importance of quoting the source of the information to ensure authenticity of research work prepare the learner for the presentation of the project work arrange a presentation of the project file

Scope of the project:

Learners may work upon the following lines as a suggested flow chart:



Expected Checklist:

- Introduction of topic/title
-
- Identifying the causes, consequences and/or remedies
-
- Various stakeholders and effect on each of them
-
- Advantages and disadvantages of situations or issues identified
-
- Short-term and long-term implications of economic strategies suggested in the course of research
-
- Validity, reliability, appropriateness and relevance of data used for research work and for presentation in the project file

- Presentation and writing that is succinct and coherent in project file
-
- Citation of the materials referred to, in the file in footnotes, resources section, bibliography etc.

Mode of presentation/submission of the Project:

At the end of the stipulated term, each learner will present the research work in the Project File to the External and Internal examiner. **The questions should be asked from the Research**

Work/ Project File of the learner. The Internal Examiner should ensure that the study submitted by the learner is his/her own original work. In case of any doubt, authenticity should be checked and verified.

Marking Scheme :

Marks are suggested to be given as –

Heading	Marks Allotted
Relevance of the topic	3
Knowledge Content/Research Work	6
Presentation Technique	3
Viva-voce	8
Total	20 Marks

Suggestive List of Projects:

Class XII

· Micro and Small Scale Industries	· Food Supply Channel in India
· Contemporary Employment situation in India	· Disinvestment policy of the government

· Goods and Services Tax Act and its Impact	· Health Expenditure (of any state)
on GDP	
· Human Development Index	· Inclusive Growth Strategy
· Self-help group	· Trends in Credit availability in India
Monetary policy committee and its functions	Role of RBI in Control of Credit
Government Budget & its Components	· Trends in budgetary condition of India
Exchange Rate determination – Methods and	Currency War – reasons and repercussions
Techniques	
· Livestock – Backbone of Rural India	Alternate fuel – types and importance
· Sarwa Siksha Abhiyan – Cost Ratio Benefits	· Golden Quadrilateral- Cost ratio benefit
· Minimum Support Prices	Relation between Stock Price Index and
	Economic Health of Nation
Waste Management in India – Need of the	· Minimum Wage Rate – approach and
hour	Application
· Digital India- Step towards the future	· Rain Water Harvesting – a solution to water
	crises

· Vertical Farming – an alternate way	· Silk Route- Revival of the past
· Make in India – The way ahead	· Bumper Production- Boon or Bane for the farmer
· Rise of Concrete Jungle- Trend Analysis	· Organic Farming – Back to the Nature
· Any other newspaper article and its evaluation on basis of economic principles	· Any other topic

Answer the following questions in your notebook:

Q1. Distinguish between final goods and intermediate goods. Give one example of each.

Q2. Explain with the help of an example the basis of classifying goods into final goods and intermediate goods

Q3. Explain the circular flow of income.

Q4. What are capital goods? How are they different from consumption goods ?

Q5. Define externalities. give an example of negative/positive externality what is its impact on welfare ?

Q6. What are non monetary exchanges? Give an example. Explain their impact on use of gross domestic product as an index of welfare of the people.

Q7. If real GDP is Rs. 200 and price index (with base = 100) is 110, calculate nominal GDP.

Q8. If the nominal GDP is Rs. 1200 and price index (with base = 100) is 120 calculate real GDP.

Q9. If the real GDP is Rs. 400 and nominal GDP is Rs. 450 , calculate the price index (base=100)

Q10. If the real GDP is Rs. 500 and price index (base=100) is 125 calculate the nominal GDP.

Q11. If nominal Gross Domestic Product = Rs. 4,400 and the price index is equal to 110 (base=100), calculate the real Gross Domestic Product.

Q12. Government includes expenditure to popularize yoga among the masses analyse its impact on Gross Domestic Product and welfare of the people.

Q13. National income is the sum of factor incomes accruing to: (choose the correct alternative) (a) nationals (b) economic territory (c) residents (d) both residents and non residents

Q14. Sale of petrol and diesel cars is rising particularly in big cities. Analyse its impact on Gross Domestic Product and welfare.

Q15. Government spends on child immunization programme. Analyse its impact on Gross Domestic Product and welfare of the people

Q16. Distinguish between domestic product and national product.

Q17. Giving reason, explain how should the following be treated in estimating Gross Domestic Product at market price?

- (i) fees to mechanic paid by a firm
- (ii) interest paid by individual on a car loan taken from a bank
- (iii) expenditure on purchasing a car for use by a Firm

Q18. How should the following be treated in estimating national income of a country? You must give reason for your answer.

- (i) Taking care of aged parents
- (ii) Payment of Corporate tax
- (iii) expenditure on providing police services by the government

Q19. How should the following be treated While estimating National income? You must give reason to support your answer.

- (i) Bonus paid to employees
- (ii) Addition to stocks during a year
- (iii) Purchase of taxi by a taxi driver

Q20. Giving reasons, explain how the following be treated in estimation of national income:

- (i) Expenditure by a firm on payment of fees to a chartered accountant.
- (ii) Payment of corporate tax by a firm
- (iii) Purchase of refrigerator by a firm for own use

Q21. Giving reasons, explain how the following be treated in estimation of national income:

- (i) Payment of interest by a firm to a bank
- (ii) Payment of interest by a bank to an individual
- (iii) Payment of interest by an individual to a bank

Q22.a) How will you treat the following be while estimating the domestic product of a country? Give reasons for your answer :

- (i) Profits earned by branches of a country's bank in other countries
- (ii) Gifts given by an employer to his employees on independence day.
- (iii) Purchase of goods by foreign countries.

b) Given the following data find the missing values of "Gross Domestic Capital Formation and wages and salaries" :

S.No.	Particulars	Amount (in Cr. Rs.)
(i)	Mixed Income of Self Employed	3,500
(ii)	Net Indirect Taxes	300
(iii)	Wages and salaries	?
(iv)	Government Final Consumption Expenditure	14,000
(v)	Net Exports	3,000

(vi)	Consumption of fixed Capital	300
(vii)	Net Factor Income From Abroad	700
(viii)	Operating Surplus	12,000
(ix)	National Income	30,000
(x)	Profits	500
(xi)	Gross Domestic Capital Formation	?
(xii)	Private Final Consumption Expenditure	11,000

Q23. Explain the precautions that should be taken while estimating national income by expenditure method.

or

What precautions should be taken while estimating national income by expenditure method.

Q24. Explain the precautions that are taken while estimating national income by value added method.

Or

What precautions should be taken while estimating national income by value added method.

Q25. Will the following be added in the domestic product of India? Give reasons for your answer

- (a) Profits earned by foreign companies in India.
- (b) Salaries of Indians working in the Russian Embassy in India.
- (c) Profits earned by a branch of State Bank of India in Japan.

Q26. Will the following be included in the national Income of India? Give reasons for your answer.

- (a) Financial assistance to flood victims.
- (b) Profits earned by the branches of a foreign bank in India.
- (c) Salaries of Indians working in the American embassy in India.

Q27. Explain 'mixed income of self-employed' and give an example.

Q28. Find gross value added at market price:

(i) Depreciation	20
(ii) Domestic Sales	200
(iii) Net change in stocks	(-)10
(iv) Exports	10
(v) Single use producer goods	120

Q29. Find net national product at market price:

(i) Personal taxes	200
(ii) Wages and salaries	1200
(iii) Undistributed profit	50
(iv) Rent	300
(v) Corporation Tax	200
(vi) Private Income	2000
(vii) Interest	400
(viii) Net Indirect Tax	300
(ix) Net factor income to abroad	20
(x) Profit	500
(xi) Social security contributions by employers	250

Q30. Define the problem of double counting in the computation of national income . State any two approaches to correct the problem of double counting.

Or

“Gross domestic product (GDP) does not give us a clear indication of economic welfare of a country.” Defend or refute the given statement with valid reason.

Money and Banking

Money

Q1. What are demand deposits?

Q2. Define money supply and explain its components.

Or

Explain the concept of money supply and components.

Or

State the meaning and components of money supply.

Q3.State the most important function of money?.

Q4. What are time deposits?

Q5. Explain “difficulty in storing wealth” problem faced in the barter system of exchange.

Q6. Distinguish between Fiat money and Fiduciary money.

Banking

Q1. Explain the ‘lender of Last Resort’ function of the central bank.

Q2. Explain ‘banker to the government’ function of the central bank.

Or

Explain government’s banker function of Central Bank

Q3. Explain the Banker’s Bank function of the central bank.

Q4. What is central bank?

Q5. Explain the ‘currency authority’ function of Central Bank.

Or

Explain the ‘bank issue’ function of Central Bank.

Q6 Government of India has recently launched “Jan Dhan Yojna” aimed at every household in the country to have at least one bank account. Explain how deposits made under the plan are going to affect national income of the country.

Q7. Currency is issued by the central bank, yet we say that commercial banks create money. Explain. How is this money creation by commercial banks likely to affect the national income? Explain.

Or

Why do we say that commercial banks create money while we also say that the central bank has the sole right to issue currency. Explain. What is the likely impact of money creation by commercial banks on national income?

Q8. Explain how bank rate is helpful in controlling credit creation.

Q9. Explain how open market operations are helpful in controlling credit creation.

Q10. Explain how ‘margin requirements’ are helpful in controlling credit creation.

Q11. Explain the role of ‘cash reserve ratio’ in controlling credit creation.

Q12. Explain the ‘varying reserve requirements’ method of credit control by the central bank.

Q13. Explain how repo rate can be helpful in controlling credit creation.

Q14. Explain the role of ‘reverse repo rate’ in controlling credit creation.

Or

Explain the role of reverse repo rate in controlling money supply.

Q15. Explain the process of credit creation by commercial banks.

Or

Explain the money creation function of commercial banks.

HOME SCIENCE

This vacation is a boon for you all. Set your target to complete the following projects so as to be comfortable in the months of July and August.

The projects have already been discussed with you in the class.

They are as follows-

1. Identify the problems of adjustment of adolescents with the help of any tool (Questionnaire, Interview Schedule or any other) and make a report.
2. Spend a day with aged person and observe their needs and problems. Write a report.
3. List and discuss at least 4 areas of agreement and disagreement of self with
a. Mother b. Father c. Siblings d. Friends
This completes your Unit 1

NOTE: Use A4 size papers and make a file.

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

MATHEMATICS

Dear students

Summer vacation is here and being a board student all of you need to use this time to hone your skills.

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

1. Exercise on continuity and differentiability.
Pg 107 exercise 5.3.
Q 1 to Q82.
2. Exercise 6 .3
Pg 135
Q1 to Q 34

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 Society
- Unit II Contemporary Problems of Indian Society
- Unit III Cultural Heritage of India

- Unit IV India's Freedom Struggle
- Unit V Constitutional Values
- Unit VI Human Rights

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