



ST. ANGEL'S SCHOOL
AUTUMN HOLIDAYS
HOMEWORK(2017-18)
CLASS XII
(COMMERCE)

ENGLISH

Poem5 Aunt Jennifer's Tigers By Adrienne Rich

Q1 What kind of image do we form of Aunt Jennifer's Tigers?

Q2 Each stanza convey a different idea.What is the idea behind each stanza?

Q3 What does Aunt Jennifer's death signify?

LESSON 5 INDIGO

Louis Fischer

SHORT QUES

Q1 How do we know that ordinary people too contributed to the freedom movement?

Q2 What was the typical Gandhi pattern? What did he want of India ?

Q3 Mention some issues Gandhi undertook in Champaran?

Q4 When was the first time civil disobedience had triumphed in modern India?

Q5 What were the two things Gandhi did on arriving at Champaran?

LONG ANSWER

Q1 Now the peasants saw that they had rights and defenders .They learned courage:Elucidate.

Lesson 6 Going places

Short Ques

Q1 Jansie became melancholic. What do you think was the reason behind it?

Q2 The evening blacked in the windows or Sophie's mood too, if so, what was the reason behind it?

Q3 'Damn that Geoff, this was a Geoff thing not a Jansie thing'. Express briefly what did Sophie mean by this expression?

Q4 'I will have to live with burden'. What was Sophie's burden?

Q5 How is the title 'Going Places'?

Long Ques

Q1 Jansie is a pragmatic whereas Sophie is a dreamer. Draw a contrast between these two adolescents.

Q2 Geoff as well as Danny Casey are examples of Sophie's hero worship. Elaborate citing examples from the story.

Lesson 7 Evans Tries an O' Level by Colin Dexter

Short Ques

Q1 Evans is a genius in his own right way. Discuss.

Q2 A call was made during the examination regarding a correction in the question paper. Who made the call and why?

Q3 What did Stephen observe after visiting Evans cell after McLeery had left?

Long Ques

Q1 The Governor of H.M, Oxford, made a slightly unusual request to the Secretary of the Examination Board. What was the request? Why was it unusual?

Q2 What loopholes in the Governor's arrangement helped Evans escape from prison?

Notice – Writing

Q1. The International Book Fair is being held at Pragati Maidan between 7 November-14 November. As the librarian, write a notice informing students about it.

Advertisement – Writing

Q2. You plan to sell your two wheeler. Draft a suitable advertisement in not more than 50 words to be inserted in the classified columns of a local daily, giving all necessary details of the two wheeler. You are Sumit/ Sudha,15,Krishna Nagar,Delhi.

Report-Writing

Q3. You are Sharad/ Shalini ,a reporter for ‘The News Indian Express’.Write a report in 100-125 words on the fire accident that took place in the area of Textile Market, Ahmedabad.

Letter-Writing

Q4.You are Ankit/Amrita, staying at 4 ,Pyeroft road, Chennai. You have come across an advertisement in ‘The Times of India’ for recruitment of computer engineer trainees by Shivani Software. Apply in response to this advertisement giving your detailed bio-data. Invent all necessary details.

Q5. As Librarian of West Coast Senior Secondary School, Green Park Area Kanpur, write a letter to Messer Keerti Book House,31/70 Nirala Nagar,Lucknow,[placing an order for supply of certain books.You are Rajeev/Renu.

Article-Writing

Q6. It can be observed that in every nook and corner, young boys and girls keep on talking on cellphone for hours together .This is not proper use of cellphones.Write an article in 150-200 words for National Daily on the topic ,Cellphone is for communication not for Amusement.

Q7. Write an article for your school magazine on ‘The Need for Education of Girls in the National Development’. (word- limit:200 words)

MATHS

CHAPTER 9 DIFFERENTIAL EQUATION

Q1. Find a particular solution of the differential:

$$\frac{dy}{dx} + y \cot x = 4x \csc x \quad (x \neq 0)$$

Gives that $y=0$ when $x = \frac{\pi}{2}$

Q2. $(x - dy - ydx) y \sin \frac{x}{y} = (ydx + xdy) x \cos \frac{x}{y}$

Q3. $x^2 y dx - (x^3 + y^3) dy = 0$

Q4. $\left(\frac{e^{-2\sqrt{x}}}{\sqrt{x}} - \frac{y}{\sqrt{x}} \right) \frac{dy}{dx} = 1 \quad (x \neq 0)$

Q5. $\frac{dy}{dx} + y \cos x = 4x \csc x$

Q6. $(x^2 - 1) \frac{dy}{dx} + 2xy = \frac{2}{(x^2 - 1)}$

Q7. $\frac{dy}{dx} + y \cot x = 2x + x^2 \cot x \quad (x \neq 0)$

Given that $y=0$ when $x = \frac{\pi}{2}$

Q8. $2ye^{\frac{x}{y}} dx + (y - 2xe^{\frac{x}{y}}) dy = 0$

Given that $x=0$ when $y=1$.

CHAPTER 10

VECTORS

Q1. For any two vectors \vec{a} and \vec{b} , show that

$$(1+|\vec{a}|^2) ((1+|\vec{b}|^2))=|(1-\vec{a}\cdot\vec{b})|^2+|\vec{a}+\vec{b}+(\vec{a}\times\vec{b})|^2$$

Q2. Let $\vec{a}, \vec{b}, \vec{c}$ be unit vectors such that $\vec{a}\cdot\vec{b} = \vec{a}\cdot\vec{c}=0$ and the angle between \vec{b} and \vec{c} is $\frac{\pi}{6}$,

prove that $\vec{a}=\pm 2(\vec{b}\times\vec{c})$.

Q3. For any vector \vec{a} , prove that

$$|\vec{a}\times\hat{i}|^2 + |\vec{a}\times\hat{j}|^2 + |\vec{a}\times\hat{k}|^2 = 2|\vec{a}|^2$$

Q4. If $\hat{i} + \hat{j} + \hat{k}$, $2\hat{i} + 5\hat{j}$, $3\hat{i} + 2\hat{j} - 3\hat{k}$ and $\hat{i} - 6\hat{j} - \hat{k}$ are the position vectors of the

Points A, B, C and D. Find the angle between \overrightarrow{AB} and \overrightarrow{CD} . Deduce that \overrightarrow{AB} and \overrightarrow{CD} are

Collinear.

Q5. Show that $(\vec{a}\times\vec{b})^2 = \begin{vmatrix} \vec{a}\cdot\vec{a} & \vec{a}\cdot\vec{b} \\ \vec{a}\cdot\vec{b} & \vec{b}\cdot\vec{b} \end{vmatrix}$

Q6. Let $\vec{a} = 2\hat{i} + \hat{k}$, $\vec{b} = \hat{i} + \hat{j} + \hat{k}$ and $\vec{c} = 4\hat{i} - 3\hat{j} + 7\hat{k}$ be three vectors. Find a vector \vec{r} which satisfies $\vec{r}\times\vec{b} = \vec{c}\times\vec{b}$ and $\vec{r}\cdot\vec{a} = 0$

Q7. If $\vec{a}\times\vec{b} = \vec{c}\times\vec{d}$, $\vec{a}\times\vec{c} = \vec{b}\times\vec{d}$. Show that $\vec{a} - \vec{d}$ is parallel to $\vec{b} - \vec{c}$.

Q8. Decompose the vector $6\hat{i} - 3\hat{j} - 6\hat{k}$ into two vectors which are parallel and perpendicular to $\hat{i} + \hat{j} + \hat{k}$ respectively.

Q9. Let $\vec{a}, \vec{b}, \vec{c}$ be three non zero vectors such that any two of them are non collinear

If $\vec{a} + 2\vec{b}$ is collinear with \vec{c} and $\vec{b} + 2\vec{c}$ is collinear with \vec{a} , then prove that

$$\vec{a} + 2\vec{b} + 6\vec{c} = 0$$

CHAPTER 12
LINEAR PROGRAMMING

- Q1. A company makes two kinds of leather belts .Belt A is high quality and belt B is lower quality . The respective profits are Rs. 8 and Rs. 6 per belt . Each belt of type A requires twice as much time as a belt of type B and if all belts were of type B , company could make 1000 belts per day . The supply of leather is sufficient for only 800 belts per day . Belt A requires a fancy buckle and only 400 buckles per day are available and 700 buckles are available for Belt B . what should be daily production to maximize profit .
- Q2. A co-operative society of farmers has 50 hectares of land to grow two crops X and Y. the profit from crop X and Y per hectare are estimated at Rs. 10,500 and Rs. 9000 respectively .To control weeds , a liquid herbicide has to be used for crops X and Y rates of 20 and 10 liters per hectare . further no more than 800 liters of herbicide should be used in order to protect fish and wild life using a pond which collects drainage from this land .How much land should be allocated to each crop so as to maximize the profit .
- Q3. A manufacturer of patent medicines is preparing a production plan on medicines A and B. There are sufficient raw material available to make 20,000 bottles of A and 40,000 bottles of B, but there are only 45,000 bottles into which either of the medicines can be put . Further it takes 3 hours to prepare enough material to fill 1,000 bottles of A , it takes 1 hour to prepare enough material to fill 1,000 bottles of B and there are 66 hours available for his operation . The profit is Rs 16 per bottle for A and Rs 14 per bottle for B . How should the manufacturer schedule his production in order to maximize his profit .

BUSINESS STUDIES

Chapter 9: Financial Management

- Q.1. What is the primary objective of 'Financial Management'?
- Q.2. Explain in brief any five factors that should be taken into consideration while determining capital structure for a business.
- Q.3. Explain any five points of importance of financial planning.
- Q.4 Sarah Ltd. is a company manufacturing cotton yarn. It has been consistently earning good profits for many years. This year too, it has been able to generate enough profits. There is availability of enough cash in the company and prospects of growth in the future. It is a well managed organization and believes in quality, equal employment opportunities and good remuneration practices. It has many shareholders who prefer to receive a regular income from their investments. It has taken a loan of Rs. 40 lakhs from IDBI and is bound by certain restrictions on the payment of dividend according to the terms of loan agreement. The above discussion about the company leads to various factors which decide how much profits should be retained and how much has to be distributed by the company. Quoting the lines from the above discussion identify and explain any such four factors.
- Q.5. Neelabh is engaged in 'Transport Business' and transports fruits and vegetables to different states. Stating the reason in support of your answer, identify the working capital requirements of Neelabh. Neelabh also wants to expand and diversify his transport business, explain any two factors that will affect his fixed capital requirements.
- Q.6. When is financial leverage is favorable?

Chapter 10: Financial Market

- Q.1. Explain any four functions of Stock Exchange.
- Q.2. 'Financial market plays an important role in the allocation of scarce resources in an economy by performing various functions'. Explain any three functions of financial market.
- Q.3. Differentiate between 'Capital Market' and 'Money Market'.
- Q.4. Ganesh Steel Ltd is a large and credit worthy company manufacturing steel for the Indian Market. It now wants to cater to the Asian Market and decides to invest in new hi-tech machines. Since the investment is large, it requires long term finance. It decides to raise funds by issuing equity shares. The issue of equity shares involves huge floatation cost. To meet the expenses of floatation cost, the company decides to tap the money-market.
- a). Name and explain the money market instruments the company can use for the above purpose.
- b). What is the duration for which the company can get funds through this instrument?
- c). State any other purpose for which this instrument can be used.
- Q.5. What is meant by 'Primary Market'? Briefly explain the concept of 'Initial Public Offer'.

ACCOUNTANCY

- Complete your Project Work
- Assignment

Chapter 5: Retirement and Death of a partner

- Q.1 What do you understand by 'Gaining Ratio'?
- Q.2 Why is it necessary to revalue assets and reassess liabilities at the time of retirement of a partner?
- Q.3 Why is it necessary to distribute Reserves Accumulated, Profits and Losses at the time of retirement or death of a partner?
- Q.4 What are the adjustments required on the retirement or death of a partner?
- Q.5 X wants to retire from the firm. The profit on revaluation of assets on the date of retirement is Rs. 10,000. X is of the view that it should be distributed among all the partners in their old profit-sharing ratio whereas Y and Z are of the view that this profit should be divided between Y and Z in new profit-sharing ratio. Who is correct in this case?
- Q.6 X, Y and Z are partners sharing profits and losses in the ratio of 3 : 2 :1 . Z retires and the following Journal entry is passed in respect of Goodwill:

Y's Capital A/c	...Dr.	20,000
To X's Capital A/c		10,000
To Z's Capital A/c		10,000

The value of goodwill is Rs. 60,000. What is the new profit-sharing ratio between X and Y?

- Q.7 State the ratio in which profit or loss on revaluation will be shared by the partners when a partner retires.
- Q.8 P, Q & R were partners in a firm sharing profits in the ratio of 7:2:1. on 1st April 2013 their balance sheet was as follows:-

Balance sheet of P, Q & R as at 1 April 2013

Liabilities	Amt(Rs.)	Assets	Amt.(Rs.)
Capital A/c		LAND	12,00,000
P		BUILDING	9,00,000
9,00,000		FURNITURE	3,60,000
Q	26,40,000	STOCK	6,60,000
8,40,000		DEBTORS	
R	3,60,000	6,00,000	5,70,000
9,00,000	5,40,000	LESS:- PROVISION	2,10,000
GENERAL RESERVE	3,60,000	30,000	
WORKMEN'S	39,00,000	CASH	
COMPENSATION FUND			39,00,000
CREDITORS			

On the above date, Q Retired. The following were agreed:-

- Goodwill of the firm was valued at Rs. 12,00,000.
- Land was to be appreciated by 30% and building was to be depreciated by Rs. 3,00,000
- Value of furniture was to be reduced by Rs. 60,000.
- The liabilities for workmen compensation fund were determined at Rs. 1,40,000.
- Amount payable to Q was transferred to his loan account.
- Capitals of P & R were to be adjusted in their new profit sharing ratio. For this purpose current accounts of the partners will be opened.

Prepare Revaluation Account, Partner's Capital Accounts & Balance sheet of the new firm.

Q9. Vikas, vishal and vaibhav were partners in a firm sharing profits in the ratio of 2:2:1. The firm closes its books on 31st march every year. On 31st December 2015 vaibhav died. On that date his capital account showed a credit balance of Rs.3,80,000 and goodwill of the firm was valued at Rs. 1,20,000. There was a debit balance of Rs. 50,000 in the profit & loss account. Vabhav's share of profit in the year of his death was to be calculated on the basis of average profit of last five years. The average profit of last five years was Rs. 75,000.

Pass necessary journal entries in the books of the firm of vaibhav's death.

Q10 A, B & C are partners in a firm whose books are closed on 31st march each year . A died on 30th june 2009 and according to the agreement, the share of profits of a deceased partner upto the date of the death is to be calculated on the basis of average profit for the last 5 years. The net profits for the last 5 years have been:2005- Rs. 14,000; 2006 – Rs. 18,000; 2007- Rs. 16,000; 2008- Rs. 10,000 (loss) and 2009- Rs. 16,000. Calculate A's share of the profits upto the date of death and pass necessary journal entry.

ECONOMICS

DETERMINATION OF INCOME AND EMPLOYMENT

AGGREGATE DEMAND AND RELATED CONCEPT

Q1 What is AD? . What are its component?

Q2 What is PC ? Discuss its two types.

Q3 What is PS ? What are its two types?

Q4 Explain the concept of ex - ante and ex-post saving investment

Q5 What is Investment? What are its two types?

Q6 Distinguish between induced investment and autonomous investment

Q7. Distinguish between APS and MPS. The value which of these 2 can be negative and when.

Q8. Distinguish between APC and MPC. The value of which of these can be greater than 1 and when.

Q9. Give the meaning of involuntary unemployment and full employment

INCOME DETERMINATION AND MULTIPLIER

Q1. Explain the determination of equilibrium level of income by A) AD & AS approach b) Saving and investment approach

Q2. Explain the determination of eq. output under fixed price model.

Q3. Can an economy be in a state of under employment eq? Use diagram

Q4. Discuss the state of full employment eq with diagram.

Q5. What is multiplier? What can be its minimum value and why?

Q6. Discuss the working investment multiplier with example

Q7. Explain the relationship between MPC and multiplier with example.

INFORMATICS PRACTICES

- Complete your Project File
- Complete your Project File
- Assignment

Chapter 7 WEB APPLICATIONS

1. Differentiate between HTML and XML.
2. Which HTML tags are used for making a table and adding rows in a HTML document?
3. How is tag different from tag of HTML?
4. Write a HTML code for the following table:

ECODE	NAME	DESIGNATION
E001	ANU	MANAGER
E002	KUSH	CLERK

5. Write a HTML code to generate following result :
 - Landmarks
 - Mountains
 - Lakes
6. Write attributes of following tags:
 - (i) FONT
 - (ii) IMAGE

Chapter 9 MORE ON DATABASES AND SQL

- Q1. Explain Referential Integrity.
- Q2. Explain equi-join with example.
- Q3. Explain UNION with example.
- Q4. If table1 has 2 rows 3 columns and table2 has 3 rows 2 columns. How many rows and columns will be in Table1 X Table2 (Cartesian Product).
- Q.5 Consider the following Tables EMPLOYEES and EMP_SALARY.

TABLE : EMPLOYEES

EMP_ID	FIRSTNAME	LASTNAME	ADDRESS	CITY
101	SAM	TONES	33 ELM. ST.	PARIS
102	SARAH	ACHERMAN	440 U.S. 110	NEW YORK
103	MANILA	SENGUPTA	24 FRIENDS STREET	NEW DELHI
104	GEORGE	SMITH	83 FIRST STREET	HOWARD

TABLE : EMPSALARY

EMP_ID	SALARY	BENEFITS	DESIGNATION
101	75000	15000	MANAGER
102	85000	25000	DIRECTOR
103	45000	10000	CLERK
104	32000	7500	SALESMAN

Write SQL commands to:

- Display lowest and highest salary.
- Display number of employees in each city.
- Display number of employees whose 2nd character of First Name is 'A'.
- Display average salary of each designation.
- Display name of employees whose salary is in the range 20000 and 30000.
- To display emp_id, firstname, address and city of all the employees living in NEW DELHI.
- To display the contents of employees table in descending order of lastname.
- To display the firstname, lastname and city of all salesman.
- To increase the benefits of clerks by 1000.
- Display first Name and corresponding Designation.
- Identify the Foreign Key (if any) of these tables. Justify your choice.

Chapter 10 ADVANCED RDBMS CONCEPTS

Q1. What do you understand by a database transaction?

Q2. Define the following terms : a) COMMIT b) ROLLBACK C) SAVEPOINT

Q3. What happens when Autocommit is set on?

Q4. Write output of the last SQL Select statement :

```
mysql> START TRANSACTION;  
mysql> INSERT INTO STUDENT VALUES (1,"ANU");  
mysql> UPDATE STUDENT SET NAME = "TANU WHERE NAME="ANU";  
mysql> SAVEPOINT A;  
mysql> INSERT INTO STUDENT VALUES (1,"ANU");  
mysql>DELETE FROM STUDENT WHERE RNO=1;  
mysql>ROLLBACK TO A;  
mysql>SELECT * FROM STUDENT;
```

Q5. Name two statements that can be used to end a transaction.

Q6. What happens to the current transaction is a DDL statement is executed?

Chapter 11 IP APPLICATIONS

Q1. Write two features of e-Governance.

Q2. Write two features of e-Business.

Q3. Write two features of e-Learning.

Q4. Write the important guidelines that we should keep in mind while developing an efficient application.

Q5. Write Web address of National Portal of India.

Q6. Write an example of a front-end and back-end.

Q7. Anuja is creating a form for her practical file. Help her to choose most appropriate controls from List Box, Combo Box, TextField, TextArea, Radio Button, Check box, Label and Command button for the following entries from user:

- (i) A message "Enter Marks" in front of a Text Field.
- (ii) An input to choose more than one subject from a set of choices.
- (iii) An input for entering remarks
- (iv) An input for accepting Gender.

PSYCHOLOGY

Ch-6 Attitude and Social Cognition

1. Define attitude. Discuss the components of an attitude.
2. What are the factors that influence the formation of an attitude?
3. Explain the concept of pro-social behaviour.
4. Differentiate between prejudice and stereotype.
5. How does social facilitation take place?

Highlight the importance of schemas in social cognition

PHYSICAL EDUCATION

CHAPTER 8

Q1. What is Tidal Volume?

Q2. What is Blood Pressure?

Q3. What is stroke Volume?

Q4. What are the important functions of a skeleton system?

Q5. Give five physiological differences between males and females.

Q6. What are systole, diastole and pause?

Q7. "Physical Fitness of an individual is multi-dimensional". Explain.

Note: Do the Holidays Home work in P.Ed. Register