

SANT NIRANKARI PUBLIC SCHOOL, FARIDABAD
CLASS XII (2019-20) HOLIDAYS HOMEWORK

SUBJECT – ENGLISH

NOTICES

1. You are Srinivas / Srinidhi of D.P. Public School, Nagpur . As a student Editor of your school magazine, draft a notice in not more than 50 words for your school notice board inviting articles / sketches from the students of all classes.
2. You are Rohit / Ritu , Secretary, Welfare Association, ABC Colony, Chennai, Write a notice in not more than 50 words to be placed on the notice board informing the residents that there would be no water supply for two days in your colony due to major pipeline repair work.
3. You are Scout Master / Guide Captain of K.R. Sagar Public School, Mysore. You have decided to send a troop of scouts and guides of your school to the Jamboree to be held at Lucknow for a week. Draft a notice in not more than 50 words to be placed on the school notice board inviting the names of those scouts and guides who are interested to participate in the jamboree. Invent the necessary details.

ADVERTISEMENTS

1. You are Mohan of Raja ki Mandi, Agra. You want a dance teacher for your younger sister. Write an advertisement to be published in the classified columns of a local daily.
2. You propose to sell your flat as you are going abroad. Draft an advertisement to be published in the classified columns of 'The Times of India', New Delhi. Invent necessary details.
3. You are Manisha. You have started hobby classes for children of 6 to 12 years. Prepare a suitable advertisement giving all the required details (50 words)

POSTERS

1. Your school is planning a campaign in support of eye donation to mobilize the students and society. Design a poster to be displayed in different areas of the locality surrounding your school highlighting the need for eye donation and eye banks.
2. A 'Check Vehicular Pollution' campaign is being organized in your city. Draft a poster to be used in the campaign.
3. Water is precious and each one of us must stop wastage. Prepare a poster in not more than 50 words, for creating that awareness.

LETTERS

1. You are Megha/Maya of class XII of St. Peter School, Pitampura, Delhi. Write a letter to the Manager of Book World, RK Puram, New Delhi inquiring about the availability of few books you need for your school library. Write as secretary of your school library.
2. As a regular commuter by bus from Noida to Delhi, you have been witnessing rash driving by the bus drivers daily without an exception. Write a letter to the Editor, 'The Times of India' drawing the attention of the General Manager, Delhi Transport Corporation to this problem. Your are Priti/Prakash, 15 Udyog Vihar, Noida.
3. As Mr. R. Singh, Head of the Department of Chemistry, Cambridge High School, Pune, you had placed an order with Messrs. Scientific Equipments, Dadar, Mumbai for test tubes and jar for the lab. When the parcel was received you observed that markings on the test tubes were not clear and some of the jars were damaged. Write a letter of complaint seeking immediate replacement.

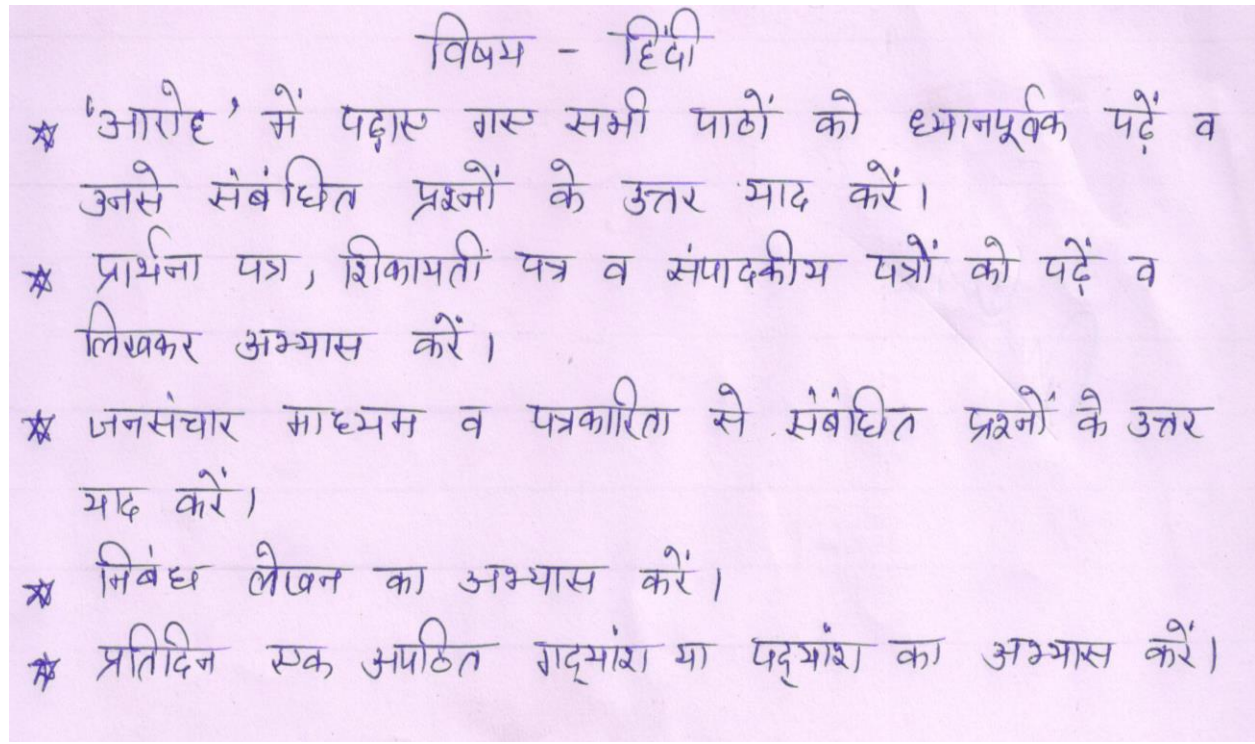
SPEECH

1. Outside the gate of your school there are a few food carts. They don't observe strict hygienic standards. You have observed that so many of your students go to them immediately after the school is over. This can create health problems. As Principal write a speech in **150-200** words on 'Healthy Food' to be delivered in the morning assembly.
2. Today's children are not yet aware of many opportunities awaiting them after they complete their school education. As an academic counselor give a talk to the students of St Antony's School on the need for career guidance and how knowledge of the available careers can benefit the youth. Write the speech in **150-200** words.
3. Water is very precious. Some scientists even go to the extent of saying that the Third World War may be fought on the issue of water. Write a speech in 150-200 words expressing your views to be delivered in the morning assembly in your school.

ARTICLES

1. The invention of mobile phone can be a blessing, but if misused it can prove to be a curse. Write an article in about 150 – 200 words on this invention. You are Karthik / Karishma.
2. Write an article in about 200 words for your school magazine on 'Films and their influence on school-going children'. You are Manpreeth / Manjula, a student of class XII .

Hindi



SUBJECT- MATHEMATICS

Chapter 2 - Inverse Trigonometric Functions

1. Find the principal value of $\sin^{-1}(\frac{-1}{2})$
2. Find the principal value of $\cos^{-1}(\frac{\sqrt{3}}{2})$
3. Find the principal value of $\tan^{-1}(-\sqrt{3})$
4. Find the value of $\tan^{-1}(1) + \sin^{-1}(\frac{-1}{2})$
5. Find the value of $\tan^{-1}(\sqrt{3}) - \cot^{-1}(-\sqrt{3})$
6. Find the value of $\sin^{-1}(\sin(\frac{\pi}{3}))$
7. If $\sin(\sin^{-1}(\frac{1}{5}) + \cos^{-1}(x)) = 1$, then find the value of x
8. Find the value of $\tan^{-1}(2 \cos(2 \sin^{-1}(\frac{1}{2})))$
9. Find the value of $\cot(\tan^{-1} a + \cot^{-1} a)$
10. Find the value of $\sin(\frac{\pi}{3} - \sin^{-1}(\frac{-1}{2}))$
11. Find the principal value of $\tan^{-1} \sqrt{3} - \sec^{-1}(-2)$
12. Prove that $\tan^{-1} \frac{2}{11} + \tan^{-1} \frac{7}{24} = \tan^{-1} \frac{1}{2}$
13. Solve : $\tan^{-1} 2x + \tan^{-1} 3x = \frac{\pi}{4}$
14. Solve : $2 \tan^{-1} \frac{1-x}{1+x} = \tan^{-1} x, x > 0$

Chapter 3 - Matrices

- 1 Find the inverse of the following matrix using elementary operations:

$$A = \begin{pmatrix} 1 & 2 & -2 \\ -1 & 3 & 0 \\ 0 & -2 & 1 \end{pmatrix}$$

- 2 If $A^{-1} = \begin{bmatrix} 3 & -1 & 1 \\ -15 & 6 & -5 \\ 5 & -2 & 2 \end{bmatrix}$ and $B = \begin{bmatrix} 1 & 2 & -2 \\ -1 & 3 & 0 \\ 0 & -2 & 1 \end{bmatrix}$, find $(AB)^{-1}$

- 3 Find X, if $X + \begin{bmatrix} 2 & -1 \\ 3 & -1 \end{bmatrix} = \begin{bmatrix} 2 & 4 \\ 5 & 0 \end{bmatrix}$.

- 4 Find x, if $\begin{bmatrix} x & 1 \end{bmatrix} \begin{bmatrix} 1 & 0 \\ -2 & -3 \end{bmatrix} \begin{bmatrix} x \\ 3 \end{bmatrix} = 0$.

- 5 If $A = \begin{bmatrix} 2 & 3 \\ 4 & 5 \end{bmatrix}$, Prove that $A + A'$ is symmetric and $A - A'$ is skew symmetric matrices
- 6 Using elementary operation, find the inverse of the matrix
- $$A = \begin{bmatrix} -1 & 1 & 2 \\ 1 & 2 & 3 \\ 3 & 1 & 1 \end{bmatrix}$$
- 7 If $A = \begin{bmatrix} -1 & 1 & -1 \\ 3 & -3 & 3 \\ -1 & 4 & 4 \end{bmatrix}$ and $B = \begin{bmatrix} 0 & 4 & 3 \\ 1 & -3 & -3 \\ -1 & 4 & 4 \end{bmatrix}$, compute $A^2 B^2$
- 8 If $f(x) = \begin{bmatrix} \cos x & -\sin x & 0 \\ \sin x & \cos x & 0 \\ 0 & 0 & 1 \end{bmatrix}$, then show that $f(x) f(y) = f(x + y)$.
- 9 If $A = \begin{bmatrix} 0 & 2 \\ 3 & -4 \end{bmatrix}$ and $kA = \begin{bmatrix} 0 & 3a \\ 2b & 24 \end{bmatrix}$, find a, b and k.
- 10 If $AA' = I$ where $A = \begin{bmatrix} b & 2b & c \\ a & b & -c \\ a & -b & c \end{bmatrix}$ find a, b and c.
- 11 If $A = \begin{bmatrix} a & b \\ b & a \end{bmatrix}$ and $A^2 = \begin{bmatrix} \alpha & \beta \\ \beta & \alpha \end{bmatrix}$ Then prove that $\alpha + \beta = (a + b)^2$.
- 12 If $A = \begin{bmatrix} \cos\theta & i\sin\theta \\ i\sin\theta & \cos\theta \end{bmatrix}$, then prove by principle of mathematical induction that $A^n = \begin{bmatrix} \cos n\theta & i\sin n\theta \\ i\sin n\theta & \cos n\theta \end{bmatrix}$.
- 13 Let $A = \begin{bmatrix} 0 & 1 \\ 1 & 0 \end{bmatrix}$, Show that $(aI + bA)^n = a^n I + n a^{n-1} b A$, where I is the identity matrix of order 2 and $n \in \mathbb{N}$.

Chapter 4 - Determinants

- 1 If $A = \begin{pmatrix} 2 & 1 & 3 \\ 4 & -1 & 0 \\ -7 & 2 & 1 \end{pmatrix}$, find A^{-1} and hence solve the system of equations:
 $x + y + 3z = 3$, $4x - y = 3$ and $-7x + 2y + z = 2$.
- 2 If $A = \begin{pmatrix} 1 & -1 & 0 \\ 2 & 3 & 4 \\ 0 & 1 & 2 \end{pmatrix}$ and $B = \begin{pmatrix} 2 & 2 & -4 \\ -4 & 2 & -4 \\ 2 & -1 & 5 \end{pmatrix}$, find AB. Use this to solve the following system of equations. $x - y = 3$, $2x + 3y + 4z = 17$ and $y + 2z = 7$.
- 3 Examine the consistency of the following system of equations.
 $3x - y + 7z = 3$, $2x + y + 3z$, $x + 4y - 2z$
- 4 Examine the consistency of the following system of equations
 $x - y + z = 3$, $2x + y - z = 3$, $-x - 2y + 2z = 1$
- 5 If A is a matrix of order 3 X 3 then verify that $(A^2)^{-1} = (A^{-1})^2$

- 6 If A is a square matrix of order 3 such that $|\text{adj}A| = 64$, find $|A|$
- 7 If A and B are non singular square matrices of the same order, then write the relationship between $\text{adj} AB$, $\text{adj} A$ and $\text{adj} B$.
- 8 If A is invertible matrix of 3×3 and $|A| = 7$ then find $|A^{-1}|$

- 9 If a, b and c are real numbers and

$$\begin{vmatrix} b+c & c+a & a+b \\ c+a & a+b & b+c \\ a+b & b+c & c+a \end{vmatrix} = 0. \text{ Show that either } a+b+c=0 \text{ or } a=b=c.$$

- 10 Using properties of determinants, prove that if x, y and z are different and

$$\begin{vmatrix} x & x^2 & 1+x^3 \\ y & y^2 & 1+y^3 \\ z & z^2 & 1+z^3 \end{vmatrix} = 0, \text{ show that } 1+xyz=0.$$

- 11 Using properties of determinants, prove the following:

$$\begin{vmatrix} (b+c)^2 & a^2 & a^2 \\ b^2 & (c+a)^2 & b^2 \\ c^2 & c^2 & (a+b)^2 \end{vmatrix} = 2abc(a+b+c)^3.$$

- 12 Using properties of determinants, solve the following for x :

$$\begin{vmatrix} x-2 & 2x-3 & 3x-4 \\ x-4 & 2x-9 & 3x-16 \\ x-8 & 2x-27 & 3x-64 \end{vmatrix} = 0$$

- 13 Use the product $\begin{bmatrix} 1 & -1 & 2 \\ 0 & 2 & -3 \\ 3 & -2 & 4 \end{bmatrix} \begin{bmatrix} -2 & 0 & 1 \\ 9 & 2 & -3 \\ 6 & 1 & -2 \end{bmatrix}$ to Solve the system of equations:

$$x - y + 2z = 1, 2y - 3z = 1, 3x - 2y + 4z = 2.$$

- 14 Using matrices solve the following system of equations:

$$2x - 3y + 5z = 11, 3x + 2y - 4z = -5, x + y - 2z = -3$$

- 15 Use matrix method, solve the following system of equations:

$$\frac{2}{x} + \frac{3}{y} + \frac{10}{z} = 4, \frac{4}{x} - \frac{6}{y} + \frac{5}{z} = 1, \frac{6}{x} + \frac{9}{y} - \frac{20}{z} = 2: \text{ where } x \neq 0, y \neq 0, z \neq 0$$

- 16 There are 3 families A, B and C. The number of men, women and children in these families are given below:

	Men	Women	Children
Family A	2	3	1
Family B	2	1	3
Family C	4	2	6

Daily expense of men, women and children are Rs200, Rs150 and Rs 200 respectively. Only men and women earn and children do not. Using matrix multiplication, calculate the daily expense of each family. What impact does more children in the family create on the society?

- 17 Two institutions decided to award their employees for the three values of Resourcefulness, competence and determination in the form of prizes at the rate Rs x, Rs y and Rs z respectively per person. The first institution decided to award 4, 3 and 2 respectively with total prize money of Rs37000 and the second institution decided to award respectively 5, 3 and 4 with total prize money of Rs47000. If all the three prizes per person together amount Rs 12000, then using matrix method find the values of x, y and z.

Chapter 5 - Continuity & Differentiability

- 1 Examine the continuity of $f(x) = x - 5$
- 2 Examine the continuity of $f(x) = \frac{1}{x-3}$, $x \neq 3$
- 3 Find the value of k so that $f(x) = \begin{cases} kx^2, & \text{if } x \leq 2 \\ 3 & \text{if } x > 2 \end{cases}$ is continuous at $x=2$
- 4 If $y=(\log x)^2$ find $\frac{dy}{dx}$
- 5 If $y = e^{\sin x}$ find $\frac{dy}{dx}$
- 6 Find $\frac{dy}{dx}$ if $2x+3y=\sin x$
- 7 Find $\frac{dy}{dx}$ if $y = \cos^{-1} \left(\frac{1-x^2}{1+x^2} \right)$
- 8 Differentiate with respect to x : $y=x^{\log x}$
- 9 Find $\frac{dy}{dx}$ if $x=at^2$, $y= 2at$
- 10 If $y= a\sin x+b\cos x$, then prove that $y'' + y = 0$
- 11 If $y=3\cos(\log x) + 4\sin(\log x)$, Show that $x^2y_2 + xy_1 + y = 0$
- 12 Use Lagrange's mean value theorem to determine a point P on the curve $y=\sqrt{x-2}$, where the tangent is parallel to the chord joining (2,0) and (3,1).
- 13 If $y = x^x + (\sin x)^x$, find $\frac{dy}{dx}$

14 For what values of a and b , the function f defined as:

$$f(x) = \begin{cases} 3ax + b, & \text{if } x < 1 \\ 11, & \text{if } x = 1 \\ 5ax - 2b, & \text{if } x > 1 \end{cases} \text{ is discontinuous at } x=1.$$

15 If $x^y + y^x = a^b$, find $\frac{dy}{dx}$

16 If $x^y + y^x + x^x = a^b$, find $\frac{dy}{dx}$

17 If $\tan\left(\frac{x^2-y^2}{x^2+y^2}\right) = a$, then prove that $\frac{dy}{dx} = \frac{y}{x}$

18 If $\sqrt{1-x^2} + \sqrt{1-y^2} = a(x-y)$, prove that $\frac{dy}{dx} = \sqrt{\frac{1-x^2}{1-y^2}}$

Find the relationship between 'a' and 'b' so that the function 'f' defined by

$$f(x) = \begin{cases} ax + 1, & x \leq 3 \\ bx + 3, & x > 3 \end{cases} \text{ is discontinuous at } x = 3.$$

19 The function $f(x)$ is defined as $f(x) = \begin{cases} x^2 + ax + b, & 0 \leq x < 2 \\ 3x + 2, & 2 \leq x \leq 4 \\ 2ax + 5b, & 4 < x \leq 8 \end{cases}$.

if $f(x)$ is continuous on $[0,8]$, find the values of a and b .

20 If $x^y = e^{x-y}$, prove that $\frac{dy}{dx} = \frac{\log x}{(1+\log x)^2}$.

21 If $y = x^{x^{x^{\dots \infty}}}$ find $\frac{dy}{dx}$

22 Find the value of k for which $f(x) = \begin{cases} \frac{\sqrt{1+kx}-\sqrt{1-kx}}{x} & \text{if } -1 \leq x < 0 \\ \frac{2x+1}{x-1} & \text{if } 0 \leq x < 1 \end{cases}$

is continuous at $x = 0$

Chapter 6 - Applications of Derivatives

Level 1

- 1 A balloon which always remains spherical on inflation, is being inflated by pumping in 900 cubic centimeters of gas per second. Find the rate at which the radius of the balloon increases when the radius is 15 cm.
- 2 A stone is dropped into a quiet lake and waves move in circles at a speed of 5 cm/s. At the instant when radius of the circular wave is 8cm., how fast is the enclosed area increasing?
- 3 A ladder 5 m long is leaning against a wall. The bottom of the ladder is pulled along the ground, away from the wall, at the rate of 2 cm/s. How fast is its height on the wall decreasing when the foot of the ladder is 4m away from the wall?.
- 4 The length x of a rectangle is decreasing at the rate of 5cm/ min. and the width y is increasing at the rate of 4 cm / min. When $x = 8$ cm and $y = 6$ cm, Find the rates of changes of a) the perimeter, and b) the area of the rectangle.

Level 2

- 1 The pressure p and volume v of a gas are connected by the relation $pv^{1/4}=a$, where a is constant. What is the percentage increase in the pressure corresponding to a decrease of $\frac{1}{2}\%$ in volume.
- 2 A spherical ball of salt is dissolving in water in such a manner that the rate of decrease of the volume at any instant is proportional to the surface. Prove that the radius is decreasing at a constant rate.
- 3 A man, $2m$, walks at the rate of $1\frac{2}{3}m/s$ towards a street light which is $5\frac{1}{3}m$ above the ground. At what rate is the tip of his shadow moving? At what rate is the length of the shadow changing when he is $3\frac{1}{3}m$ from the base of the light?

***Do above assignments in a separate notebook and also practice above chapters from NCERT.**

Subject- Accountancy

1. Prepare the comprehensive project of Accountancy as per the CBSE guidelines
2. Revise all the exercise questions of partnership - L. 1, 2, 3 and Not for Profit organizations and then solve the following assignment questions.

CHAPTER-1

FUNDAMENTALS OF PARTNERSHIP

1. David and John were partners in a firm sharing profits in the ratio of 4 : 1. Their capitals on 1.4.2006 were : David Rs.2,50,000 and John Rs.50,000. The partnership deed provided that David will get a commission of 10% on the net profit after allowing a salary of Rs.2,500 per month to John. The profit of the firm for the year ended 31.3.2007 was Rs.1,40,000. Prepare Profit and Loss Appropriation Account.
2. Suresh and Ramesh started business on 1.1.2013 with capitals of Rs.1,20,000 and Rs.80,000 respectively. During the year, Suresh introduced Rs.20,000 to the firm as additional capital on 1.7.2013. They withdrew Rs.1,000 per month for the house expenses in lieu of profit. Interest on capital is to be allowed @ 10% per annum. Calculate the interest payable to Suresh and Ramesh for the year ending 31.12.2013.
3. Vinod and Kumar started business on 1st April, 2013 with capitals of Rs.5,00,000 and Rs.3,00,000 respectively. On 1st October 2013 they decided that their capitals should be 4,00,000 each. The necessary adjustment in the capitals were made by introducing or withdrawing cash. Interest on capital is allowed at 8% p.a. Calculate the interest on Kumar's Capital on 31st March 2014.
4. Find out interest on drawing of Mr. Sharma, if he withdrew Rs.3,000 in the beginning of every month for last six months.. Rate of interest on drawings is 6% p.a.
5. Find out interest on drawing of Mr. Verma, if he withdrew Rs.3,000 at the end of every month for six months ended 31st March 2014. Rate of interest on drawings is 6% p.a.
6. Find out interest on drawing of Mr. Mohan, if he withdrew Rs.4,000 in the middle of every month for six months ended 31st March 2017. Rate of interest on drawings is 6% p.a.
7. On March 31, 2017 after the close of books of accounts, the capital accounts of X, Y and Z

stood at Rs.48,000; 40,000 and Rs 24,000 respectively. The profits for the year Rs.72,000 was distributed equally. Subsequently it was discovered that interest on capital @5% p.a. had been omitted. The profit sharing ratio was 2:2:1. Pass adjustment entry.

8. Ram and Shyam were partners in a firm sharing profits in the ratio of 3:5. Their fixed capitals were Rs.2,50,000 and Rs.4,50,000 respectively. After the final accounts of the year had been closed, it was found that interest on capital at 10% per annum as provided in the partnership agreement has not been credited to the capital accounts of the partners. Give necessary adjustment entry.
9. W, X, Y and Z are partners sharing profits and losses in the ratio of 4:3:3:2. Their fixed capitals on 31.3.2017 were Rs.30,000; Rs.45,000; 60,000 and 45,000 respectively. After preparing the final accounts for the year ended 31.3.2017. it was discovered that interest on capital @12% p.a. was not allowed and interest on drawings amounting to Rs.1,000; 1,250; 750 and 500 respectively was not charged. Give necessary adjustment entry.
10. Vinod, Bitu and Chetan were partners in a firm. On 1.4.2013 their capitals were Rs.1,00,000; Rs.50,000 and Rs.50,000 respectively. As per the provisions of the partnership deed:
 - (i) Chetan was entitled for a salary of Rs.10,000 p.a.
 - (ii) Partners were entitled to interest on capital at 5% p.a.
 - (iii) Profits were to be shared in the ratio of partner's capital.The net profit for the year 2013-14 of Rs.66,000 was divided equally without providing for the above terms. Give adjustment entry.
11. X and Y are sharing profits in the ratio of 3:2. Z was admitted for 1/6th share of profit with a minimum guaranteed amount of Rs.20,000. The firm earned a profit at the end of first financial year Rs.1,08,000. Find out the share of profit which X, Y and Z will get.
12. A, B and C were partners in a firm sharing profits in 2:3:5 ratio. A was guaranteed a minimum profit of Rs.1,00,000. Any deficiency on this account was to be borne by C. The net profit of the firm for the year ended 31.3.2013 was Rs.4,50,000. Prepare Profit and Loss Appropriation Account.
13. A, B and C are partners sharing profits in the ratio of 5:4:1. C is given a guarantee that his share of profits in any given year would be Rs.5,000. Deficiency, if any, would be borne by A and B equally. The profits for the year 2013 amounted to Rs.40,000. Pass necessary journal entries.

14. Ahmad, Bheem and Daniel are partners in a firm. On 1st April 2011 the balance in their capital accounts stood at Rs.8,00,000, Rs.6,00,000 and Rs.4,00,000 respectively. They shared profits in the proportion of 5 : 3 : 2 respectively. Partners are entitled to interest on capital @5% p.a. and salary to Bheem @ Rs.3,000 per month and a commission of Rs.12,000 to Daniel as per the provisions of the partnership deed.

15. Singh and Gupta decided to start a partnership firm to manufacture low cost jute bags as plastic bags were creating many environmental problems. They contributed capitals of Rs. 1,00,000 and Rs. 50,000 on 1st April, 2012 for this. Singh expressed his willingness to admit Shakti as a partner without capital, who is specially abled but a very creative and intelligent friend of his. Gupta agreed to this. The terms of partnership were as follows :

- (i) Singh, Gupta and Shakti will share profits in the ratio of 2 : 2 : 1.
- (ii) Interest on capital will be provided @ 6% p.a.

Due to shortage of capital, Singh contributed Rs. 25,000 on 30th September, 2012 and Gupta contributed Rs. 10,000 on 1st January, 2013 as additional capital. The profit of the firm for the year ended 31st March, 2013 was Rs. 1,68,900.

- (a) Identify any two values which the firm wants to communicate to the society.
 (b) Prepare Profit and Loss Appropriation Account for the year ending 31st March, 2013.

CHAPTER-2

GOODWILL: NATURE AND VALUATION

Compute the value of goodwill on the basis of four years purchases of the average profits based on the last five years. 2010 -90,000 ;2011- (40,000) Loss , 2012 -80,000 ;2013 -70,000 ;2014- 60,000

1. The following were the profit of a business firm:
 2012 Rs.60,000 (including an abnormal gain Rs.25,000)
 2013 Rs.1,20,000 (after charging an abnormal loss Rs.40,000)
 2014 Rs.1,26,000 (excluding Rs.6,000 as insurance premium of property now to be insured)
 Calculate firm's goodwill at two year's purchase of the average profit of the last three years.
2. The books of a business firm showed that the capital employed on 31 December 2013 was Rs.20,00,000 and the profits for the last five years were:

2010	Rs.2,40,000
2011	Rs.2,80,000
2012	Rs.2,70,000
2013	Rs.2,50,000
2014	Rs.3,10,000
3. You are required to find out the value of goodwill based on 3 years purchase of the super profits of the business. Given that the normal rate of return is 10%.
 A and B are partners in a firm sharing profits in the ratio of 2 : 1. Their capitals are Rs.2,00,000 and Rs.1,50,000. Normal rate or return on the capital employed is 10%. Both partners will get annual salary of Rs.25,000 each. Profits of firm are :

Year	Profit/Loss
2008	75,000
2009	90,000
2010	1,20,000

 Calculate the value of goodwill on the basis of 2 years purchase of super profits.
4. A Business earned average profits of Rs.5,00,000 during the last few years and the normal rate of return in similar business is 10%. Find out the value of Goodwill by
 (i) Capitalization of Super Profit method and
 (ii) Super Profit method, if the goodwill is valued at 3 years purchase of super profit.
 The assets of the business were Rs.50,00,000 and its external liabilities Rs.9,00,000.
5. Vinod and Kumar are partners in a firm. Their capitals were: Vinod Rs.6,00,000 and Kumar Rs.4,00,000. During the year 2014 the firm earned a profit of Rs.3,00,000. Calculate the value of goodwill of the firm assuming that the normal rate of return is 20%.
6. A Business has earned average profits of Rs.2,00,000 during the last few years and the normal rate of return in a similar type of business is 10%. Ascertain the value of Goodwill by Capitalisation method. Given that the value of Net Assets of the firm is Rs.16,40,000.
7. Larson, William and Harry are partners in a firm with the capitals of Rs.1,87,500 , Rs.1,50,000 , Rs.1,12,500. Average profit of the business for last few years is Rs.72,000. Normal rate of return in a similar business is 10%. Calculate the value of goodwill by capitalization method.

CHANGE IN PROFIT SHARING RATIO

1. P, Q and R are partners sharing profits in the ratio of $\frac{4}{9} : \frac{1}{3} : \frac{2}{9}$. They have decided to share profits in the ratio of 1 : 1 : 1. Goodwill of the firm is valued at Rs.10,800. Give Journal entries to record the above arrangement.
2. A, B and C are partners sharing profits and losses in the ratio of 3 : 1 : 1. On 1st January 2014, they decided to share profits in equal ratio. The goodwill of the firm is valued at Rs.45,000. Give necessary journal entry due to the change in profit sharing ratio.
3. Akshita, Bakshi and Chanda were partners in a firm sharing profits in 3 : 2 : 1 ratio. They decided to share the future profits in 5 : 3 : 2 ratio. For this purpose the goodwill of the firm was valued at Rs.60,000. Pass an adjustment entry for the treatment of goodwill due to change in profit sharing.
4. Sumit, Bunty and Chandra are partners in a firm sharing profits in the ratio of 3:3:2. They decided to share profits equally w.e.f. April 1, 2014. On that date, the profit and loss account showed the credit balance of Rs.24,000. Instead of closing the Profit and Loss Account, it was decided to record an adjustment entry reflecting the change in the profit sharing ratio. Record necessary journal entry to effect to the same.
5. Vinod, Sunita and Simran are partners in a firm sharing profits in the ratio of 3:2:1. They decided to share profits equally w.e.f April 1, 2014. On that date the profit and loss account showed the credit balance of Rs.60,000 and a balance of Rs.30,000 in general reserve. Instead of closing profit and loss account, it was decided to record an adjustment entry reflecting the change in the profit sharing ratio. Give necessary journal entry to give effect to the same.
6. Krishan and Kumar are partners in a firm sharing profits in the ratio of 3:2. They decided to share future profits equally. On the date of change in profit sharing ratio the profit and loss account showed a debit balance of Rs.20,000. Give necessary entry to give affect to the same.
7. Elephant, Fish and Giraffe are partners sharing profits in the ratio of 7:6:5. Their fixed capitals are Rs.1,40,000; Rs.80,000 and Rs.1,60,000 respectively. It is now decided that the total capital of the firm should be Rs.7,20,000 and should be in the profit sharing ratio of the partners. Calculate the amount of capital to be contributed by the individual partners and record necessary journal entry for the same.

CHAPTER-3

ADMISSION OF A PARTNER

1. A and B were partners in a firm sharing profits in the ratio of 3:2. They admitted Z and M as new partners. The new profit sharing ratio will be 2:2:1:1. Z and M brought in Rs.11,00,000 each for their respective capitals and also necessary amount of premium for goodwill in cash. Goodwill was valued at Rs.9,60,000 for the firm. Calculate the sacrificing ratio of X and Y and pass necessary journal entries for the above transactions in the books of the firm.
- 2 (a) Ashu and Bindu are partners in a firm sharing profits in the ratio of 3 : 2. Chameli is admitted as a partner. Ashu and Bindu surrender $\frac{1}{2}$ of their respective shares in favour of Chameli. Find the new profit sharing ratio and also the sacrificing ratio.

(b) Chameli is to bring his share of premium for goodwill in cash. The goodwill of the firm is estimated at Rs.80,000. Pass necessary entries for the record of goodwill in the above case.
3. AK and BK are partners in a firm sharing profits in the ratio of 5 : 3. They admit CK into the partnership for $\frac{3}{10}$ th share in profits, which he takes $\frac{1}{10}$ th from AK and $\frac{1}{10}$ th from BK.

CK brings in Rs.15,000 as premium in cash out of his share of Rs.39,000. Goodwill account does not appear in the books of AK and BK. Give necessary journal entries.

4. X and Y are partners in a firm sharing profits in 3:2 ratio. They admitted Z as a new partner and the new profit sharing ratio will be 2:1:1. Z brought Rs.20,000 for her share of goodwill. Goodwill already appeared in the books at Rs.10,000. Give necessary journal entries.

5. Vinod and David are partners in a firm sharing profits in the ratio of 3:2. On January 1, 2014 they admit Kumar as a new partner for 1/6th share in the future profits. Kumar brought Rs.1,00,000 for his capital but could not bring any amount for goodwill. The firm's goodwill on Kumar's admission was valued at Rs.75,000. Give necessary journal entries.

6. VK and KK are partners in a firm sharing profits in the ratio of 2:3. On January 1, 2014 they admit PK as a new partner for 1/4th share in the profits. PK brought Rs.80,000 as capital and Rs.18,000 for his 1/4th share in profits. The new profit sharing ratio of VK, KK and PK will be 3:3:2. VK and KK decided to withdraw the premium paid by PK. Record necessary journal entries.

7. P and S are partners in a firm sharing profits in the ratio of 3:2. Their Balance Sheet on 31st March 2013 was as follows:

Liabilities	Rs	Assets	Rs
Bank overdraft	20,000	Cash	8,000
Creditors	30,000	Debtors	30,000
Provision for bad debts	1,000	Bills Receivable	40,000
General Reserve	15,000	Stock	50,000
V's Loan	20,000	Building	90,000
P's capital	1,00,000	Land	1,48,000
S's capital	1,80,000		
	<i>3,66,000</i>		<i>3,66,000</i>

V is admitted into the partnership giving her 1/8th share in profits subject to the following terms:

- (i) V's Loan will be converted into his capital.
 - (ii) The Goodwill of the firm was valued at Rs.80,000 and V brought his share of goodwill premium in cash.
 - (iii) Provision for bad debts was to be made equal to 5% of the debtors.
 - (iv) Stock was to be depreciated by 5%. (v) Land was to be appreciated by 10%.
- Prepare Revaluation A/c, Partners' Capital A/cs and the balance sheet of new firm.

8. Ram and Shyam are partners in a firm sharing profits in the ratio of 3:1. Their Balance [6] Sheet on 31st March 2013 was as follows:

Liabilities	Rs	Assets	Rs
Creditors	2,800	Cash	2,000
Workmen's Compensation Fund	1,200	Debtors 48,000	
General reserve	2,000	Less : Provision <u>4,800</u>	6,000
Ram's capital	6,000	Stock	3,000
Shyam's capital	4,000	Investments	5,000
	<u>16,000</u>		<u>16,000</u>

Mohan is admitted into the partnership giving her 1/5th share in profits subject to the following terms:

- Mohan shall bring in Rs.6,000 as his share of premium.
- That unaccounted accrued income of Rs.100 be provided for.
- The Market Value of Investment was Rs.4,500.
- A debtor whose dues of Rs.500 was written off as bad debts paid Rs.400 in full settlement.
- A claim of Rs.200 on account of workmen's compensation to be provided for. (vi) Mohan to bring to Rs.5,000 as his share of capital.

Prepare Revaluation A/c, Partners' Capital A/cs and the balance sheet of new firm.

9.. Krishna and Suresh are partners in a firm sharing profits in the ratio of 3 : 2. Their balance sheet was as follows on 31.3.2013:

Liabilities	Amount	Assets	Amount
General Reserve	5,000	Plant & Machinery	30,000
Sundry Creditors	15,000	Patents	5,000
Capitals : Krishna 30,000		Furniture	3,000
Suresh <u>20,000</u>	50,000	Stock	16,000
		Debtors	15,000
		Cash	1,000
	<u>70,000</u>		<u>70,000</u>

On that date Mohan is admitted as a partner for 1/5th share on the following terms:

- He is to contribute Rs.14,000 as his share of capital which includes his share of premium for goodwill.
 - Goodwill is valued at 2 years purchase of the average profits of the last 4 years, which were Rs.10,000; Rs.9,000; Rs.8,000 and Rs.13,000 respectively.
 - Plant & Machinery to be written down to Rs.25,000 and patents written up by Rs.8,000.
- Prepare Revaluation A/c, Partners Capital A/cs and Balance Sheet of new firm.

10. A and B are partners in a firm sharing profits in the ratio of 2:1. Their Balance Sheet on 31st March 2013 was as follows:

Liabilities	Rs	Assets	Rs
Bills Payable	10,000	Cash in Hand	10,000
Sundry creditors	58,000	Cash at Bank	40,000
Outstanding expenses	2,000	Sundry Debtors	60,000
A's capital	1,80,000	Stock in Hand	40,000
B's capital	1,50,000	Plant and Machinery	1,00,000
		Building	1,50,000
	<u>4,00,000</u>		<u>4,00,000</u>

C is admitted into the partnership giving her 1/4th share in profits subject to the following terms:

- (i) C will bring in Rs.1,00,000 as his capital and Rs.60,000 as his share of goodwill for 1/4th share in profits.
- (ii) Plant is to be appreciated to Rs.1,20,000 and the value of buildings is to be appreciated by 10%.
- (iii) Stock is found overvalued by Rs.4,000.
- (iv) A Provision for bad and doubtful debts is to be created at 5% of debtors.
- (v) Creditors were unrecorded to the extent of 10,000.

Prepare necessary ledgers , Balance Sheet and Journal entries.

11. Ram and Shyam were partners in a firm sharing profits in the ratio of 3 : 2. On 31. 3. 2013. Their Balance Sheet was as follows: [6]

Liabilities	Amount	Assets	Amount
Sundry Creditors	10,000	Plant and Machinery	10,000
Workmen Compensation fund	5,000	Land and Building	8,000
General Reserve	15,000	Debtors	12,000
Capitals : Ram	10,000	Less: Provision	<u>1,000</u>
Shyam	<u>10,000</u>	Stock	12,000
		Cash	9,000
	<u>50,000</u>		<u>50,000</u>

On the above date Mohan was admitted as a new partner in the firm on the following terms:

- (i) Provision of doubtful debts would be increased by Rs.2,000.
- (ii) The value of land and building would be increased to Rs.18,000.
- (iii) The value of stock would be increased by Rs.4,000.

- (iv) The liability against Workmen's Compensation Fund is determined at Rs.2,000.
 - (v) Mohan brought in as his share of goodwill Rs.10,000 in cash.
 - (vi) Mohan would bring further cash as would make his capital equal to 20% of the total capital of new firm after the above revaluation and adjustments are carried out.
- Prepare Revaluation A/c, Partners Capital A/cs and Balance Sheet of new firm.

12. A and B are partners in a firm sharing profits in the ratio of 3 : 2. Their balance sheet was as follows on 31.3.2013:

Liabilities	Amount	Assets	Amount
General Reserve	10,000	Goodwill	5,000
Sundry Creditors	50,000	Plant & Machinery	65,000
Capitals : A 60,000		Furniture	15,000
B <u>50,000</u>	1,10,000	Investments	20,000
		Stock	20,000
		Debtors	30,000
		Cash	15,000
	1,70,000		1,70,000

On that date C is admitted as a partner on the following terms:

- (a) C is to bring capital Rs.40,000 and Goodwill Rs.15,000.
- (b) Partners agreed to share the future profits in the ratio of 5:3:2.
- (c) Investments will be appreciated by 20% and furniture depreciated by 10%.
- (d) One customer who owed the firm Rs.2,000 becomes insolvent and nothing could be realised from him.
- (e) Creditors will be written back by Rs.2,000.
- (f) Outstanding bills for repairs Rs.1,000 will be provided for. Interest accrued on investments Rs.2,000.
- (g) Capital of the partners shall be proportion to their profit sharing ratio. For this adjustments to be made through cash.

Prepare Revaluation A/c, Partners Capital A/cs and Balance Sheet of new firm.

13. A and B are partners in a firm sharing profits in the ratio of 3:1. Their Balance Sheet on 31st March 2013 was as follows:

Liabilities	Rs	Assets	Rs
Creditors	70,000	Land and Building	40,000
General reserve	10,000	Plant and Machinery	70,000
A's capital	50,000	Investments	26,000
B's capital	80,000	Stock	30,000
		Debtors 35,000	
		Less : Provision 1,000	34,000
		Cash	10,000
	2,10,000		2,10,000

C is admitted into the partnership giving her 1/4th share in profits. C to bring Rs.60,000 as her capital, subject to following terms:

- (i) Goodwill of the firm to be valued at Rs.24,000
- (ii) Land and Building were valued at Rs.65,000 and Plant and Machinery at Rs.60,000
- (iii) Provision for bad and doubtful debts was found in excess by Rs.400
- (iv) A Liability of Rs.1,200 included in sundry creditors was not likely to arise.
- (v) The Capitals of the partners be adjusted on the basis of C's contribution of capital.
- (vi) Excess of shortfall, if any to be transferred to Current Accounts.

Prepare Revaluation A/c, Partners' Capital A/cs and the balance sheet of new firm.

Subject- Business Studies

Revise chapter 1 to 4 and chapter 11 thoroughly

Do the following assignment in your Business studies notebook

1. Smart Ltd's target is to produce 5000 shirts per month at cost of Rs. 50 per shirt The production manager achieved this target at a cost of Rs. 40 per shirt. Do you think Production manager is effective? Give reason.
2. Ms. Catherine passed her MBBS examination in 2010.Later on in the year 2014 she passed her M.S examination as eye surgeon. After completing her studies she joined in a medical college and performing 10 surgeries in a day. What aspect of Ms. Catherine's above experience is science and what aspect is art?
3. ABC power Ltd set up factory for manufacturing solar lanterns in a remote village as there was no reliable electricity in rural areas. The revenue earned by the company was sufficient day by day, so the company decided to increase production to generate higher sales. For this they decided to employ from the nearby villages .The company also decided to open school for the children of its employees. Identify and explain the objectives of management discussed above.
4. The GM of RK Ltd ,Mr.Sanish has divided all the employees of his company in to three levels .Often it is observed that the managers of all levels remain busy sometimes with the planning of their respective departments and sometimes with the comparison of the desired actual results Similarly sometimes they are busy with the process of staffing and sometimes with their motivation. Mr.Sanish knows it very well that the job of management cannot be done by a single person alone, but when all join hands to work together the meaning of management is raised .Thats why he makes all his efforts to effect coordination in all activities. In the above paragraph

two special features of management have been described, identify them by quoting the lines and explain them.

5. Mahi , the manager of a business undertaking is very lax with his fellow employees and subordinates .He does not give them parameters or rules for reporting to work and completion of assignments. Which principle of management is being overlooked and Why?
6. In a manufacturing company as many as 100 laborers are working in the production department. Specialists have been appointed to look after their work .Which technique of management is being followed here?
7. Marketing manager of Nash Co Ltd has set sales target of his sales Executives. But he did not give permission to grant credit facility to the customer, which was so essential on various occasions. Consequently executives failed to achieve the targets. Identify the principle of management being ignored in the above case.
8. Neil and Raunak completed their MBA and started working in a corporate at the same level. Neil had the habit of wrong reporting about his colleagues to impress the boss. All the employees knew about it. At the time of appraisal the performance of Raunak was judged better than Neil Even then the company has decided to promote Neil stating that being a female Raunak will not be able to handle the complicated work. Identify and explain the principle of management not followed by the company.
9. Mr. Akash Sudarsan and some of his friends after completing their MBA course established a company .The company manufactured Energy saving Air conditioners. In order to achieve the main objective Mr. Akash concentrated on these points: to make employment opportunity available, to protect the environment from pollution and sell the quality product at reasonable price. To begin with, Akash and his friends tried to find out as to what would be the labour cost. They also wanted to know about the number of labourers that would be needed to achieve a given target of production. In order to well organize their company they formulated some rules. It was absolutely essential for each employee to stick to these rules. It was also notified that individual who gives suggestions regarding better performance of the company will be given hearty welcome. By quoting the lines Identify the following:
 - 1) One point of importance of management
 - 2) One techniques of management
 - 3) Two principles of management(Fayol)

Project Work of Business Studies

Make a project on any **one** topic as per the CBSE guidelines

1. Principles of Management
2. Marketing Management
3. Stock Exchange
4. Elements of Business Environment

Subject- Economics

* **Prepare the project file on any topic suggested as per guidelines .**

GST

Demonetisation

Inflation

Government budget and economy

Poverty

* Prepare a scrap book from any English newspaper on daily basis on economic matters.

Questions (1) mark

- 1 Domestic income be greater than the national income?
2. Define money flow.
3. What must be added to domestic factor income to obtain national income?
4. Explain the meaning of non-market activities.
5. Define nominal GNP
6. Define Real GNP.
7. Meaning of real flow.

B. 3- 4 Mark Questions

1. Distinguish between GDP_{Mp} and GNP_{FC} .
2. Distinguish between nominal GNP and real GNP.
3. What are the precautions to be taken while calculating national income through product method (value added method).
4. Precautions to be taken while calculating national income through income method.
5. Precautions to be taken while calculations N.I under expenditure method.
6. **Write down the limitations of using GDP as an index of welfare of a country.**
7. **'Machine purchased is always a final good' do you agree? Give reason for your answer.**
8. **What is double counting? How can it be avoided?**
9. **State whether following is true or false. Give reason for your answer.**
 - a) Capital formation is a flow
 - b) Bread is always a consumer good.
 - c) Nominal GDP can never be less than real GDP
 - d) Gross domestic capital formation is always greater than gross fixed capital formation.
10. **Why are exports included in the estimation of domestic product by the expenditure method? Or**
Can the gross domestic product be greater than the gross national product? Explain
11. **How will you treat the following while estimating domestic product of India?**
 - a) Rent received by resident Indian from his property in Singapore.
 - b) Salaries of Indians working in Japanese Embassy in India.
 - c) Profits earned by branch of American bank in India.
 - d) Salaries paid to Koreans working in the Indian embassy in Korea.
12. **How are the following treated in estimating national income from expenditure method? Give reason.**
 - a) Purchase of new car by a household:
 - b) Purchase of raw material by purchase unit:
 - c) Expenditure by the government on scholarship to student:
13. **Are the following items included in the estimating a country's national income? Give reason.**
 - 1) free cloth given to workers:
 - 2) Commission paid to dealer in old car:
 - 3) Growing vegetable in a kitchen garden of the house:

NATIONAL INCOME – NUMERICALS

14. Calculate Value Added at factor cost from the following.

ITEMS Rs. CRORES

- a. Purchase of raw materials 30
- b. Depreciation 12
- c. Sales 200
- d. Excise tax 20
- e. Opening stock 15
- f. Intermediate consumption 48
- g. Closing stock 10

15. Calculate (a) Net National Product at MP

ITEMS Rs. CRORES

- a. Private final Consumption expenditure 200
- b. Net indirect taxes 20
- c. Change in stocks (--)15
- d. Net current transfers from abroad (--)10
- e. Govt. final consumption expenditure 50
- f. Consumption of fixed capital 15
- g. Net domestic capital formation 30
- h. Net factor income from abroad 5
- i. Net imports 10

16. Calculate Gross Domestic Product at Market Price by (a) Production Method and (b) Income Method

ITEMS Rs. CRORES

- a. Intermediate consumption by
 - i) Primary sector 500
 - ii) Secondary sector 400
 - iii) Tertiary sector 400
- b. Value of output by
 - i) Primary sector 1000
 - ii) Secondary sector 900
 - iii) Tertiary sector 700
- c. Rent 10
- d. Compensation of employees 400
- e. Mixed income 650
- f. Operating surplus 300
- h. Net factor income from abroad (--)20
- i. Interest 5
- j. Consumption of fixed capital 40
- k. Net indirect tax

17 ESTIMATE NATIONAL INCOME BY

**(a) EXPENDITURE METHOD (b) INCOME METHOD FROM THE FOLLOWING DATA
Rupees in crores**

- 1. Private final consumption expenditure 210
- 2. Govt: final consumption expenditure 50
- 3. Net domestic capital formation 40
- 4. Net exports (-) 5
- 5. Wages & Salaries 170
- 6. Employer's contribution 10
- 7. Profit 45

8. Interest 20
9. Indirect taxes 30
10. Subsidies 05
11. Rent 10
12. Factor income from abroad 03
13. Consumption of fixed capital 25
14. Royalty 15

(18) CALCULATE NATIONAL INCOME

- Net indirect tax 05
 Net domestic fixed capital formation 100
 Net exports (-) 20
 Gov.: final consumption expenditure 200
 Net current transfer from abroad 15
 Private final consumption expenditure 600
 Change in stock 10
 Net factor from abroad 05
 Gross domestic fixed capital formation 125

(19) CALCULATE NNP AT MARKET PRICE BY PRODUCTION METHOD AND INCOME METHOD

Crores

1. Inter mediate consumption
 - (a) primary sector 500
 - (b) Secondary sector 400
 - (c) tertiary sector 300
2. Value of output of
 - (a) primary sector 1,000
 - (b) Secondary sector 900
 - (c) tertiary sector 700
3. Rent 10
4. Emoluments of employers 400
5. Mixed income 650
6. Operating surplus 300
7. Net factor income from abroad -20
8. Interest 05
9. Consumptive of fixed capital 40
10. Net indirect tax 10

(20) CALCULATE GNP at FACTOR COST BY INCOME METHOD AND EXPENDITURE METHOD.

Rupees in crores

1. Private final consumption expenditure 1000
2. Net domestic capital formation 200
3. Profit 400
4. Compensation of employers 800
5. Rent 250
6. Gov.: final consumption expenditure 500
7. Consumption of fixed capital 60
8. Interest 150
9. Net current transfer from row (-)80
10. Net factor income from abroad (-)10
11. Net exports (-)20
12. Net indirect taxes 80
21. Will the following be a part of domestic factor income of India? Give reasons for your

answers. (6 marks)

(i) Old age pensions given by the Government.

(ii) Factor income from abroad

(iii) Salaries to Indian residents working in Russian Embassy in India.

(iv) Profits earned by a company in India, which is owned by a non-resident.

22. From the following data, calculate National Product at Market Price by

(i) income method and (ii) expenditure method: (6 marks)

(Rs. Crores)

(i) Mixed income of self- employed 400

(ii) Compensation of employees 500

(iii) Private final consumption expenditure 900

(iv) Net factor income from abroad (-) 20

(v) Net indirect tax 100

(vi) Consumption of fixed capital 120

(vii) Net domestic capital formation 280

(viii) Net exports (-)30

(ix) Profits 350

(x) Rent 100

(xi) Interest 150

(xii) Government final consumption expenditure 450

23. Will the following be included in domestic factor income of India? Give reasons for your answer. (6 marks)

(i) Profit earned by a foreign bank from its branches in India.

(ii) Scholarships given by Government of India.

(iii) Profits earned by a resident of India from his company in Singapore.

(iv) Salaries received by Indians working in American Embassy in India.

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

(i) Financial help given to flood victims.

(ii) Profits earned by an Indian bank from its branches abroad.

(iii) Salaries paid to non-resident Indians working in Indian Embassy in America.

(iv) Interest received by an individual from banks. (6 marks)

25. Calculate national income Rs. (Crores)

(i) Private final consumption expenditure 2,000

(ii) Net capital formation 400

(iii) Change in stock 50

(iv) Compensation of employees 1,900

(v) Rent 200

(vi) Interest 150

(vii) Operating surplus 720

(viii) Net indirect tax 400

(ix) Employees' contribution to social security schemes 100

(x) Net exports 20

(xi) Net factor income from abroad (-)20

(xii) Government final consumption expenditure 600

(xiii) Consumption of fixed capital 100

30. How are following treated in calculating national income

(i) Compensation of employees to the residents of Japan working in Indian embassy in Japan.

(ii) Profits earned by a branch of foreign bank in India.

(iii) Rent received by an Indian resident from Russian embassy in India.

C.QUESTION-

2. Define circular flow of income.

3. What is real flow?

4. What is money flow?

5. What are injections?

6. What are leakages?

7. State any four importance Of circular flow.

a) It helps us to understand interdependence between different sectors of the economy.

b) It helps us to understand the size of national income.

c) It tells about the level of economic activities in an economy.

d) It gives us information on injections like investment, government expending and exports and leakages like saving tax and imports.

8. Show circular flow in two sector economy.

9. What do you mean by stock and flow?

10. Define intermediate goods.

11. Define Final goods?

12. Define depreciation?

13. What is intermediate cost?

14. What are transfer payments?

15. What is Value of Output?

Test Paper 1

Q.1) Complete the following formula:

A) National Income=Domestic Income +

B) Net Export=Export-

C) Factor Cost=Market Price-

Q.2) State true or false:

A) National Income is always greater than domestic Income.

B) Resident is a person whose economic interest lies in the country in which he resides.

C) Stock has no time dimension.

D) Distance between Delhi and Kolkota is flow concept.

E) Old age pension is the example Factor Income.

Q.3) Answer in one word or one Sentence:

A) How is Net Indirect Tax Calculated?

B) Name four factors of production.

C) Give two examples non factor income.

D) Who gives subsidy to whom?

E) What is the the difference between Gross investment and Net investment.

F) What is transfer payment?

G) Mention three major components Domestic Income.

H) Define corporate Tax.

I) What do you mean by royalty?

Q.4) Match the following:

1.) wages and salary

2.) Wind fall gains

3.) Double counting

4.) Dividend

5.) change in stock

a) is difference between closing stock and opening stock.

b) means counting value of some things more than once.

c) is component of profit.

d) are not included in national income.

e) component of COE.

Test paper:- 2

State true or false

- Q1 Net factor income from abroad is added to NDP_{FC} to get national Income.
- Q2 Capital formation is flow concept.
- Q3 Real flow is also known as nominal flow.
- Q4 National Income of a country is stock concept.
- Q5 Bread is always consumer good.
- Q5 In final goods no value is to be added.
- Q7 The concept of normal resident applies to individuals only.
- Q8 Market Price is always more than factor cost.
- Q9 Gross investment can be equal to Net investment.
- Q10 Domestic Income Of country can be more its national income.
- Q11 Private includes earned income of private sector from all sources.
- Q12 National disposable income is the disposable income of private income.
- Q13 Goods produced for self consumption will be included in national income.
- Q15 National income is affected by both factor as well as transfer income.
- Q16 Production of services for self consumption is not included in National Income.
- Q17 Purchase of car by a consumer is a part of Gross domestic capital formation.
- Q18 Free services provided by the Govt. will not be included in national income.
- Q19 Measurement of national income at current prices provides a reliable base of comparison.
- Q20 Generation and distribution are the two phases in circulation income.

Test paper:3

Fill in the blanks:

1. received by factors of production for rendering of factor services in production process.
2. Transfer income received Any productive services in return.
3. Capital goods are those final goods, which help in..... of other goods and services.
4. Gross = + Depreciation.
5. Net = Gross -
6. Net Indirect Tax = Indirect tax -
7. Market price = + net indirect taxes.
8. Factor cost = Market price -
9. Domestic Income = National Income -
10. National Income = + NFIA.
11. $GDP_{fc} = GDP_{mp} - \dots\dots\dots$
15. $NDP_{fc} = \text{Wages} + \dots\dots\dots + \text{Interest} + \text{Rent} + \dots\dots + \text{Mixed income of self-employed}.$
16. = Compensation of Employees + Operating Surplus + Mixed Income + NFIA
17. = Govt. Final Consumption Expenditure + Private Final Consumption Expenditure + Gross Domestic Capital Formation + Net Export.
18. Output = Sales +
19. Gross Value Added (GVA) = Output -
20. Gross National Disposable Income (GNDI) = $GNP_{mp} + \dots\dots\dots$

Subject- IP(Informatics Practices)

1. Which HTML tags are used for making a table and adding rows in a HTML document?
2. How is tag different from tag of HTML?
3. Differentiate between HTML and XML.
4. Write MySQL command will be used to open an already existing database "LIBRARY".
5. The Mname Column of a table Member is given below:

Mname
Aakash
Hirav
Vinayak
Sheetal
rajeev

Based on the information, find the output of the following queries:

- (i) Select Mname from members where mname like "%v";
 - (ii) Select Mname from members where mname like "%e";
6. A table "TRAINS" in a database has degree 3 and cardinality 8. What is the number of rows and columns in it?
 7. Differentiate between Alternate key and Candidate key.
 8. What is the purpose of DROP TABLE command in MySQL? How is it different from DELETE command?
 9. Table Employee has 4 records and Table Dept has 3 records in it. Mr. Jain wants to display all information stored in both of these tables. He forgot to specify equi-join condition in the query. How many rows will get displayed on execution of this query?
 10. Consider the table RESULT given below. Write commands in MySQL for (i) to (iv) and output for (v) to (vii)

Table : RESULT

No	Name	Stipend	Subject	Average	Division
1	Sharon	400	English	38	THIRD
2	Amal	680	Mathematics	72	FIRST
3	Vedant	500	Accounts	67	FIRST
4	Shakeer	200	Informatics	55	SECOND
5	Anandha	400	History	85	FIRST
6	Upansna	550	Geography	45	THIRD

- (i) To list the names of those students, who have obtained Division as FIRST in the ascending order of NAME.
- (ii) To display a report listing NAME, SUBJECT and Annual stipend received assuming that the stipend column has monthly stipend.
- (iii) To count the number of students, who have either Accounts or Informatics as Subject.
- (iv) To insert a new row in the table RESULT:

11. Write a MySQL command for creating a table "PAYMENT" whose structure is given below:

Table: PAYMENT

Field Name	Datatype	Size	Constraint
Loan_number	Integer	4	Primary key
Payment_number	Varchar	3	
Payment_date	Date		
Payment_amount	Integer	8	Not Null

12. Write the commands in SQL queries for the following:

- (i) To display the details of Product whose Price is in the range of 40 and 120 (Both value included) .
- (ii) To display the ClientName, City from table Client and ProductName and Price from table Product, with their corresponding matching P_ID.
- (iii) To increase the Price of all the Products by 20.

Table: PRODUCT

P_ID	ProductName	Manufacture	Price
P001	Moisturiser	XYZ	40
P002	Sanitizer	LAC	35
P003	Bath Soap	COP	25
P004	Shampoo	TAP	95
P005	Lens Solution	COP	350

Table: CLIENT

C_ID	ClientName	City	P_ID
01	Dreamz Disney	New Delhi	P002
05	Life Line Inc	Mumbai	P005
12	98.4	New Delhi	P001
15	Appolo	Banglore	P003

13. In a Database School there are two tables Member and Division as shown below:

Table: MEMBER

EmpId	Name	Pay	Divno
1001	Shankhya	34000	10
1003	Ridhima	32000	50
1002	Sunish	45000	20

Table: DIVISION

Divno	Divname	Location
10	Media	TF02
20	Dance	FF02
30	Production	SF01

- (I) Identify the foreign key in the table Member
- (II) What output, you will get, when an equi-join query is executed to get the NAME from Member Table and corresponding from Division Table?

14. Write MySQL command will be used to open an already existing database "CONTACTS".

15. The Doc_name Column of a table Hospital is given below:

Doc_name
Avinash
Hariharan
Vinayak
Deepak
Sanjeev

Based on the information, find the output of the following queries:

- (i) SELECT doc_name FROM HOSPITAL WHERE Doc_name like "%v";
- (ii) SELECT doc_name FROM HOSPITAL WHERE doc_name like "%s_";

Following is the home assignment of 50 marks:

Answer all the questions

1x5=5

1. What is DBMS ?
2. What is an OS ?
3. What is the function of graphics tablet ?
4. What is cache memory ?
5. What is phishing ?

Answer all the questions

2*5=10

- 1 what are the different characters of java ?
- 2 Design a GUI application that should obtain age of a student and then display the age of the student in 2015 ...
- 3 what is a data type in java and describe it's type ...
- 4 write the advantages of using constant in java ...
- 5 what is type conversion and describe its form ?

Answer all the questions

3x5=15

6. Given the following code format

```
int ch = 20;
System.out.println(++ch);
System.out.println(ch);
```

- i) what output does the above code fragment produce ?
- ii) what is the effect of replacing ++ch with ch+1 ?

7. Given the two following expression

a) value = 3 b) value == 3

i) how are these two different ?

ii) what will be the result of the two if the value is 5 initially ?

8. Write a program to display 10 stars in a line..

9. Describe the following terms .

i) Tuple

ii) Attributes

iii) Degree

iv) Cardinality

10. Write the advantages of using database system .

ANSWER ALL QUESTIONS

5X4=20

11. What is a key ? describe different types of keys in database

12. What is a nested loop ? write a program using nested loop

13. Write a program to print the number of days in a week using switch statement

14. what are DDL commands, DML commands, TCL commands in SQL ? Describe them

16. A table "Transport" in a database has degree 3 and cardinality 8. What is the number of rows and columns in it?
17. What is the purpose of ALTER TABLE command in MySQL? How is it different from UPDATE command?
18. Write a MySQL command for creating a table "BANK" whose structure is given below:

Table: BANK

Field Name	Datatype	Size	Constraint
Acct_number	Integer	4	Primary key
Name	Varchar	3	
BirthDate	Date		
Balance	Integer	8	Not Null

19. Define followings:-

- Table constraints (any two)
- Column constraints (any two)
- Equi - join
- Roll back
- Transaction
- Group by
- Having
- Data dictionary