

SHRI JAIN PUBLIC SCHOOL, BIKANER



CLASS - XII

COMMERCE



HOLIDAY HOMEWORK 2023-24

ACCOUNTANCY

- Q.1 What is meant by Partnership?
- Q.2 What is meant by 'Unlimited Liability of a partner'?
- Q.3 Would a "Charitable dispensary" run by 8 members be deemed a partnership firm? Give reason in support of your answer.
- Q.4 What is meant by Partnership Deed?
- Q.5 State the provisions of Indian Partnership Act, 1932, regarding interest on partner's capital and interest on partner's loan when there is no Partnership Deed.
- Q.6 State the provisions of Indian Partnership Act, regarding the payment of remuneration to a partner for the services rendered.

OR

In the absence of any provision in the Partnership Deed, at what rate is a working partner entitled for remuneration?

- Q.7 A, B and C are partners and decided that no interest on drawings is to be charged to any partner. But after one year 'C' wants that interest on drawings should be charged to every partner. State how 'C' can do this.
- Q.8 What advantages does a firm perceive in having a "Partnership Deed"?
- Q.9 Can a partner be exempted from sharing the losses in a firm? If yes, under what circumstances?
- Q.10 Do all firms need a Deed and registration?
- Q.11 State the provisions of Partnership Act, 1932, in the absence of a Partnership Deed regarding (i) Interest on Partner's Drawings and (ii) Interest on Advances other than Capital.
- Q.12 What share of profits would a "sleeping partner" who has contributed 75% of the Total Capital get in the absence of a Deed?
- Q.13 Is a sleeping partner liable to the acts of other partners?
- Q.14 A, B and C decided that interest on capital will be provided to each partner @ 5% p.a. But after one year, C wants that no interest on capital is to be provided to any partner. State how 'C' can do this?
- Q.15 A Partnership Deed provides for payment of interest on capital but there was a loss instead of profit during the year 2010-2011. At what rate will the interest on capital be allowed?
- Q.16 Give two circumstances in which the fixed capital of partners may change.
- Q.17 How would you calculate interest on drawings of equal amounts drawn on the last day of every month?
- Q.18 When is it that the Capital Account of a partner does not show a 'Debit Balance' in spite of regular and consistent losses year after year?
- Q.19 How would you calculate interest on drawings on unequal amounts drawn at unequal intervals?
- Q.20 Where would you record 'interest on drawings' when capital is fixed?
- Q.21 Suresh and Ramesh are partners in a firm with a capital of ₹3,00,000 and ₹4,00,000 respectively. They do not have a partnership Deed. Ramesh wants to share the profits in the ratio of capitals. State with reason whether the claim is valid.
- Q.22 Ram and Mohan are partners in a firm without any Partnership Deed. Their capitals are: Ram ₹8,00,000 and Mohan ₹6,00,000. Ram is an active partner and looks after the business. Ram wants that profit should be shared in proportion of capitals. State with reasons whether his claim is valid or not.
- Q.23 The firm XYZ earned a profit of ₹2,75,000 during the year ended 31st March, 2009, 10% of this profit was to be transferred to General Reserve. Pass the necessary Journal entry for the same.
- Q.24 Do all firms of business organisations prepare the Profit and Loss Appropriation Account?
- Q.25 List any four essential elements of Partnership.

- Q.26 State the main provision of the Partnership Act relating to accounting, if there is no Partnership Deed.
- Q.27 G, H and R have partners in a firm sharing profits in the ratio of 7:4:9. Their fixed capitals were : G Rs.2,00,000, H Rs.75,000 and R Rs.3,50,000. Their partnership deed provided for the following :
- Interest on capital @ 9% per annum.
 - Salary of Rs.6,000 per month to H and to manager Rs.1,000 p.m.
 - Interest on drawings @ 6% per annum.
- During the year ended 31st March, 2021 the firm earned a profit of Rs.1,82,000. Interest on G's drawings was rs.750, on H drawings Rs.450 and on R's drawings Rs.1250.
- Prepare P/L Appropriation Account.
- Q.28 VK and MK are partners sharing profits and losses in the ratio of 3:2. Their capitals as on 1st April, 2020 are Rs.2,00,000 and Rs.1,50,000 respectively. On 1st July, 2020 VK advanced a loan of Rs.1,00,000 to firm and after 3 months MK advanced a loan of Rs.50,000 to the firm. Show the distribution of profit/losses in the following cases on 31st March 2021:
- Case 1 : When there is no partnership deed and profit for the year was Rs.10,000
- Case 2 : The partnership deed is silent as to the interest on partners's loan. The profits before interest on loan was Rs.5,000 the year.
- Case 3 : As per the partnership deed interest on partners's loan will be paid @ 1% p.a. Loss for the year was Rs.15,000.
- Q.29 Why is it necessary to have a Partnership Deed?
- Q.30 Distinguish between Fixed Capital and Fluctuating Capital.
- Q.31 LK and BK were partners in a firm sharing profits in the ratio of 3:2. Their fixed capitals on 1st April, 2020 were Rs.2,00,000 and Rs.4,00,000. They agreed to allow interest on capital @ 12% per annum and interest on their drawings Rs.450 and Rs.750. The firm incurred a loss of Rs.60,000 during the year, 31st March, 2021. The drawings of LK and BK during the year were Rs.6,000 and Rs.10,000 respectively. Prepare an account showing distribution of profits / losses and show your working clearly. Interest on capital will be paid whether firm incurs a loss.
- Q.32 A and B have started partnership business on 1st August 2020 and sharing profits in the ratio of 3:2. B has advanced a loan Rs.1,00,000 to the firm on 15 September 2020 and claims 10% p.a. interest on it. They have also obtained a loan from ICI. Calculate interest on B's loan and bank loan when partnership business. Calculate interest on B's loan and bank loan when partnership deed is silent on interest on loan and also show distribution profit/loss among the partners when trading profit at the end of the year 31st March 2021 was Rs.14,250.
- Q.33 A, B and C were partners in a firm having capitals of '60,000, '60,000 and '80,000 respectively. Their Current Account balances were A: '10,000; B '5,000 and C '2,000 (Dr.) According to the Partnership Deed, the partners were entitled to interest on capital @ 5% p.a. C being the working partner was also entitled to a salary of '6,000 p.a. The profits were to be divided as:
- The first '20,000 in proportion to their capitals.
 - Next '30,000 in the ratio of 5:3:2.
 - Remaining profits to be shared equally.
- The firm made a profit of '1,56,000 before charging any of the above items. Prepare the Profit and Loss Appropriation Account and pass the necessary Journal entry for apportionment of profit.
- Q.34 Sharma and Verma were partners in a firm sharing profits in the ratio of 4:1. Their capitals on 1st April, 2006 were: Sharma '5,00,000 and Verma '1,00,000. The Partnership Deed provided that Sharma will get a commission of 10% on the net profit after allowing a salary of '5,000 per month to Verma. The profit of the firm for the year ended 31st March, 2007 was '2,80,000. Prepare the Profit and Loss Appropriation Account of Sharma and Verma for the year ended 31st March, 2007.

- Q.35 G, H, and R were partners in a firm sharing profits in the ratio of 7:4:9. Their fixed capitals were G- '2,00,000, H- '75,000 and R- '3,50,000. Their Partnership Deed provided for the following:
- Interest on capital @ 9% p.a.
 - Salary of '6,000 per month to H.
 - Interest on drawing @ 6% p.a.
- During the year ended 31st December, 2009, the firm earned a profit of '1,70,000. Interest on G's drawings was '750, on H's drawings '450 and on R's drawings '1,250. Prepare the Profit and Loss Appropriation Account for the year ended 31st December, 2009.
- Q.36 D, E and F were partners in a firm sharing profits in the ratio of 5:7:8. Their fixed capitals were D- '5,00,000; E- '7,00,000 and F- '8,00,000. Their Partnership Deed provided for the following:
- Interest on Capital @ 10% p.a.
 - Salary of '10,000 per month of F.
 - Interest on drawings @ 12% p.a.
- D withdrew '40,000 on 31st January, 2009; E withdrew '50,000 on 31st March, 2009 and F withdrew '30,000 on 31st December, 2009. During the year ended 31st December 2009, The firm earned a profit of '3,50,000. Prepare the Profit and Loss Appropriation Account for the year ended 31st December 2009.
- Q.37 L, M and N were partners in a firm sharing profits in the ratio of 3:4:5. Their fixed capitals were L - '4,00,000; M- '5,00,000 and N- '6,00,000 respectively. The Partnership Deed provided for the following:
- Interest on capital @ 6% p.a.
 - Salary of '30,000 p.a. to N.
 - Interest on partners' drawings will be charged @ 12% p.a. During the year ended 31st March 2009, the firm earned a profit of '2,70,000. L withdrew '10,000 on 1st April, 2008, M withdrew '12,000 on 30th September, 2008 and N withdrew '15,000 on 31st December, 2008. Prepare the Profit and Loss Appropriation Account for the year ended 31st March, 2009.
- Q.38 K and P were partners in a firm sharing profits in 4:3 ratio. Their capitals on 1st April, 2009 were: K '80,000 and P '60,000. The Partnership Deed provided as follows:
- Interest on capital and drawings will be allowed and charged @ 12% p.a. and 10% p.a. respectively.
 - K and P will be entitled to get monthly salary of '2,000 and '3,000 respectively.
- The profits for the year ended 31st March, 2010 were '1,00,300.. The drawings of K and P were '40,000 and '50,000 respectively. Interest on K's drawings was '2,000 and on P's drawings '2,500. Prepare the Profit and Loss Appropriation Account of K and P for the year ended 31st March, 2010 assuming that the capitals of the partners were fluctuating.
- Q.39 Malti, Paro and Arti are partners in a firm having fixed capitals of '80,000, '40,000 and '50,000 respectively sharing profits as 7:6:4. The rate of interest on capital was agreed at 10% p.a. but was wrongly credited to them at 12% p.a. Give the necessary adjustment entry to adjust the balances of Partners' Capital Accounts.
- Q.40 X, Y and Z sharing profits in the ratio of 2:2:1. Their capital accounts shows the following balance on 1st April 2021: X Rs.4,00,000 Cr. ; Y Rs.3,00,000 Cr. and Z (50,000) Dr.
- Z took a loan of Rs.1,00,000 from the firm on 1st October 2021 @ 10% p.a.
- As per the partnership deed:
- Interest on capital to be allowed @ 5% p.a.
 - Interest on capital to be allowed @ 8% p.a.
 - Salary to Y Rs.3,000 per month next annual salary to Z Rs.30,000.
 - X to be allowed a commission of 10% on Net Distributable Profit after charging such commission.
- X drew an equal amount in the beginning of every month for his personal use. His total drawings were Rs.60,000. Y drew an equal amount at the end of each quarter. His total drawings were Rs.40,000. Z drew Rs.30,000 during the year. Profit for the year ending 31st March 2022 was Rs.1,46,000 before providing for the above. Prepare Profit and Loss Appropriation Account.

- Q.41 Vinod and Sanjeev started a partnership business on 1st July 2021 by contributing Rs.6,00,000 and Rs.5,00,000. Sanjeev took a loan from the firm of Rs.1,00,000 on 1st October 2021 @10% p.a. Vinod advanced a loan of Rs.2,00,000 to the firm @ 10% p.a. on 31st Dec. 2021. As per the partnership deed:
- Interest on capital is allowed @ 8% p.a.
 - Sanjeev will get a salary of Rs.1,000 per month.
 - Interest on drawings is to be charged @ 5% p.a.
 - Profits / losses to be shared in the ratio of 3:2.
- Vinod withdrew Rs.3,000 at the end of every month for personal use, Sanjeev withdrew an equal amount in the middle of each month and his total drawings was Rs.32,000. The profit for the year ending 31st March 2022 was RS.1,95,000 Prepare profit and Loss Appropriation Account.
- Q.42 A, B and C are partners in a firm. On 1.4.2005, their capitals stood at '50,000, '25,000 and '25,000 respectively. As per the provisions of the Partnership Deed.
- C was entitled for a salary of '5,000 p.a.
 - Partners were entitled to interest on capital @ 5% p.a.
 - Profits were to be shared in the ratio of partners' capitals.
- The net profit for the year 2005-06 of '33,000 was distributed equally without providing for the above terms. Pass an adjustment entry in Journal to rectify the above error.
- Q.43 Ravi and Mohan were partners in a firm sharing profits in the ratio of 7:5. Their respective fixed capitals were: Ravi- '10,00,000 and Mohan - '7,00,000. The Partnership Deed provided for the following:
- Interest on capital @ 12% p.a.
 - Ravi's salary '6,000 per month and Mohan's salary '60,000 per year.
- The profit for the year ended 31.3.2007 was '5,04,000 which was distributed equally, without providing for the above. Pass an adjustment entry.
- Q.44 Kumar and Raja were partners in a firm sharing profits in the ratio of 7:3. Their fixed capitals were: Kumar '9,00,000 and Raja '4,00,000. The Partnership Deed provided the following but the profit for the year was distributed without providing for:
- Interest on capital @ 9% p.a.
 - Kumar's salary '50,000 per year and Raja's salary '3,000 per month.
- The profit for the year ended 31st March, 2007 was '2,78,000. Pass the adjustment entry.
- Q.45 A, B and C were partners. Their capitals were '30,000, '20,000 and '10,000 respectively. According to the Partnership Deed, they were entitled to an interest on capital @ 5% p.a. In addition B was also entitled to draw a salary of '500 per month. C was entitled to a commission of 5% on the profits after charging and interest on capital, but before charging the salary payable to B. The net profits for the year were '30,000, distributed in the ratio of their capitals without providing for any of the above adjustments. The profits were to be shared in the ratio of 2:2:1. Pass the necessary adjustment entry showing the workings clearly.
- Q.46 A, B and C were partners in a firm. Their capitals were A-'30,000; B-'20,000 and C- '10,000 respectively. According to the partnership Deed, they were entitled to an interest on capital @ 5% p.a. In addition B was also entitled to draw a salary of '500 per month. C was entitled to a commission of 5% on the profits after charging the interest on capital, but before charging the salary payable to B. The net profits for the year were '30,000 distributed in the ratio of their capitals without providing for any of the above adjustments. The profits were to be shared in the ratio 2:1:2. Pass the necessary adjustment entry showing the workings clearly.
- Q.47 A, B, C and D are partners sharing profits and losses in the ratio of 4:3:3:2. Their fixed capitals on 31st March, 2010 were '60,000, '90,000, '1,20,000 and '90,000. After preparing the final accounts for the year ended 31st March, 2010 it was discovered that interest on capital @12% p.a. was not allowed and interest on drawings amounted to '2,000; '2,500; '1,500 and '1,000 respectively was also not charged. Pass the necessary adjustment Journal entry showing your workings clearly.

- Q.48 Ram and Shyam were partners in a firm. After crediting the profits of the year ₹2,00,000 in their Capital Accounts, the balances of their capitals were; Ram ₹4,00,000 and Shyam ₹3,00,000. During the year Ram withdrew ₹80,000 and Shyam ₹1,00,000. It was found that interest on capital and drawings @ 10% p.a. as provided in the partnership agreement had not been allowed and charged to the Partners' Capital Account. Pass the necessary adjustment entry.
- Q.49 A, B and C are partners in a firm sharing profits in the ratio of 2:2:1. C is guaranteed a minimum amount of ₹10,000 as his share of profit every year. Deficiency, if any, on that account shall be borne by B. The profits for two years ended 31st March, 2003 and 31st March, 2004 were ₹50,000 and ₹60,000 respectively. Prepare the Profit and Loss Appropriation Account for two years.
- Q.50 The partners of a firm distributed the profits for the year ended 31st March, 2003, ₹90,000 in the ratio of 3:2:1 without providing for the following adjustments:
 (i) A and C were entitled to a salary of ₹1,500 p.a.
 (ii) B was entitled to a commission of ₹4,500.
 (iii) B and C had guaranteed a minimum profit of ₹35,000 p.a. to A.
 (iv) Profits were to be shared in the ratio of 3:3:2.
 Pass the necessary Journal entry for the above adjustments in the books of the firm.
- Q.51 The partnership agreement between Maneesh and Girish provides that :
 (i) Profits will be shared equally;
 (ii) Maneesh will be allowed a salary of Rs. 400 p.m;
 (iii) Girish who manages the sales department will be allowed a commission equal to 10% of the net profits, after allowing Maneesh's salary;
 (iv) 7% interest will be allowed on partner's fixed capital.
 (v) 5% interest will be charged on partner's annual drawings;
 (vi) The fixed capitals of Maneesh and Girish are Rs. 1,00,000 and Rs. 80,000, respectively. Their annual drawings were Rs. 16,000 and 14,000, respectively. The net profit for the year ending March 31, 2015 amounted to Rs. 40,000;
 Prepare firm's Profit and Loss Appropriation Account. [NCERT]
- Q.52 Simmi and Sonu are partners in a firm, sharing profits and losses in the ratio of 3:1. The profit and loss account of the firm for the year ending March 31, 2015 shows a net profit of Rs. 1,50,000. Prepare the Profit and Loss Appropriation Account by taking into consideration the following information: [NCERT]
 (i) Partners capital on April 1, 2014;
 Simmi, Rs. 30,000; Sonu, Rs. 60,000;
 (ii) Current accounting balances on April 1, 2014;
 Simmi, Rs. 30,000 (cr); Sonu, Rs. 15,000 (cr);
 (iii) Partners drawings during the year amounted to
 Simmi, Rs. 20,000; Sonu, Rs. 15,000;
 (iv) Interest on capital was allowed @ 5% p.a.;
 (v) Interest on drawing was to be charged @ 6% p.a.
 (vi) Partners salaries : Simmi Rs. 12,000 and Sonu Rs. 9,000. Also show the partners current accounts.
- Q.53 Rakesh and Roshan are partners, sharing profits in the ratio of 3:2 capitals of Rs. 40,000 and Rs. 30,000, respectively. They withdrew from the firm the following amounts, for their personal use : [NCERT]

Rakesh	Month	Rs.
	May 31, 2014	600
	June 30, 2014	500
	August 31, 2014	1,000
	November 1, 2014	400
	December 31, 2014	1,500
	January 31, 2015	300
	March 01, 2015	700
Rohan	At the beginning of each month	400

Interest is to be charged @ 6% p.a. Calculate interest on drawings, assuming that book of accounts are closed on March 31, 2015, every year.

- Q.54 Menon and Thomas are partners in a firm. They share profits equally. Their monthly drawings are Rs. 2,000 each. Interest on drawings is to be charged @ 10% p.a. Calculate interest on Menon's drawings for the year 2006, assuming that money is withdrawn: (i) in the beginning of every month, (ii) in the middle of every month, and (iii) at the end of every month. [NCERT]
- Q.55 Arun, Bobby and Chintu are partners in a firm sharing profit in the ratio of 2:2:1. According to the terms of the partnership agreement, Chintu has to get a minimum of Rs. 60,000, irrespective of the profits of the firm. Any Deficiency to Chintu on Account of such guarantee shall be borne by Arun. Prepare the profit and loss appropriation account showing distribution of profits among partners in case the profits for year 2015 are: (i) Rs. 2,50,000; (ii) 3,60,000. [NCERT]
- Q.56 Ashok, Brijesh and Cheena are partners sharing profits and losses in the ratio of 2 : 2 : 1. Ashok and Brijesh have guaranteed that Cheena share in any year shall be less than Rs. 20,000. The net profit for the year ended March 31, 2015 amounted to Rs. 70,000. Prepare Profit and Loss Appropriation Account. [NCERT]
- Q.57 Ram, Mohan and Sohan are partners with capitals of Rs. 5,00,000, Rs. 2,50,000 and 2,00,000 respectively. After providing interest on capital @ 10% p.a. the profits are divisible as follows: [NCERT]
 Ram $\frac{1}{2}$, Mohan $\frac{1}{3}$ and Sohan $\frac{1}{6}$. But Ram and Mohan have guaranteed that Sohan's share in the profit shall not be less than Rs. 25,000, in any year. The net profit for the year ended March 31, 2015 is Rs. 2,00,000, before charging interest on capital.
 You are required to show distribution of profit.
- Q.58 Amit, Babita and Sona form a partnership firm, sharing profits in the ratio of 3:2:1, subject to the following: [NCERT]
 (i) Sona's share in the profits, guaranteed to be not less than Rs. 15,000 in any year.
 (ii) Babita gives guarantee to the effect that gross fee earned by her for the firm shall be equal to her average gross fee of the preceding five years, when she was carrying on profession alone (which is Rs. 25,000). The net profit for the year ended March 31, 2015 is Rs. 75,000. The gross fee earned by Babita for the firm was Rs. 16,000
 You are required to show Profit and Loss Appropriation Account (after giving effect to the above).
- Q.59 On March 31, 2015 the balance in the capital accounts of Eluin, Monu and Ahmed, after making adjustments for profits, drawing, etc; were Rs. 80,000, Rs. 60,000 and Rs. 40,000 respectively. Subsequently, it was discovered that interest on capital and interest on drawings had been omitted. [NCERT]
 The partners were entitled to interest on capital @ 5% p.a. The drawings during the year were Eluin Rs. 20,000; Monu, Rs. 15,000 and Ahmed, Rs. 9,000. Interest on drawings chargeable to partners were Eluin Rs. 500, Monu Rs. 360 and Ahmed Rs. 200. The net profit during the year amounted to Rs. 1,20,000. The profit sharing ratio was 3:2:1. Record necessary adjustment entries.
- Q.60 Azad and Benny are equal partners. Their capitals are Rs. 40,000 and Rs. 80,000, respectively. After the accounts for the year have been prepared it is discovered that interest at 5% p.a. as provided in the partnership agreement, has not been credited to the capital accounts before distribution of profits. It is decided to make an adjustment entry at the beginning of the next year. Record the necessary journal entry. [NCERT]
- Q.61 Kavita and Pradeep are partners, sharing profits in the ratio of 3:2. They employed Chandan as their manager, to whom they paid a salary of Rs. 750 p.m. Chandan deposited Rs. 20,000 on which interest is payable @ 9% p.a. At the end of 2001 (after the division of profit). It was decided that Chandan should be treated as partner w.e.f. Jan. 1, 1998 with $\frac{1}{6}$ th share in profit. His deposit being considered as capital carrying interest @ 6% p.a. like capital of other partners. Firm's profit after allowing interest on capital were as follows : [NCERT]

		(Rs.)
2012	Profit	59,000
2013	Profit	62,000
2014	Loss	(4,000)
2015	Profit	78,000

Record the necessary journal entries to give effect to the above.

Q.62 Mohan, Vijay and Anil are partners, the balance on their capital accounts being Rs. 30,000, Rs. 25,000 and Rs. 20,000 respectively. In arriving at these figures, the profits for the year ended March 31, 2015 amounting to Rupees 24,000 had been credited to partners in the proportion in which they shared Rs. 5,000, Rs. 4,000 and Rs. 3,000, respectively. Subsequently, the following omissions were noticed: [NCERT]

- (a) Interest on Capital, at the rate of 10% p.a, was not charged
 - (b) Interest on Drawings: Mohan Rs. 250, Vijay Rs. 200, Anil Rs. 150 was not recorded in the books.
- Record necessary corrections through journal entries.

Q.63 Anju, Manju and Mamta are partners whose fixed capitals were Rs. 10,000, Rs. 8,000 and Rs. 6,000, respectively. As per the partnership agreement, there is a provision for allowing interest on capitals @ 5% p.a. but entries for the same have not been made for the last three years. The profit sharing ratio during there years remained as follows: [NCERT]

Year	Anju	Manju	Mamta
2013	4	3	5
2014	3	2	1
2015	1	1	1

Make necessary and adjustment entry at the beginning of the fourth year i.e. Jan. 2015.

Q.64 Ravi and Sonu are partners in a firm. They do not have partnership deed. Ravi presents the following Profit and Loss Appropriation Account to his partner Sonu:

PROFIT AND LOSS APPROPRIATION ACCOUNT
for the year ending 31st March, 2014

Dr			Cr			
Particulars			Amt. (₹)	Particulars		Amt. (₹)
To Salary A/c				By Net Profit (as per Profit and Loss A/c)		35,000
Ravi			4,000			
To interest on Ravi's Loan (10% of ₹20,000)			2,000			
To interest on Capital						
Ravi (₹30,000x6%) 1,800						
Sonu (₹20,000x6%) 1,200			3,000			
To Profit transferred to: (3:2)						
Ravi's Capital A/c						
15,600			26,000			
Sonu's Capital A/c						
10,400						
			35,000			35,000

Sonu feels that Ravi has contravened the provisions of law. Prepare the revised Profit and Loss Appropriation Account on proper lines.

Q.65 Ram and Mohan are partners in a firm. They admitted Rakhi as a partner without capital for 1/3rd share in the profit of the firm. She is blind by birth but having good management qualities. The new partnership agreement provides for the following:

- (i) 10% of the trading profit will be donated to Prime Minister's Relief Fund.
- (ii) 5% of the trading profit will be donated to the National Blind Relief Fund.
- (iii) Products will be sold at a discount of 15% on Maximum Retail Price to the people living below poverty line.
- (iv) New retail shops will be opened in the Naxal affected areas of the country.
- (v) New jobs of sales persons will be reserved for the girls belonging to Scheduled Castes and Scheduled Tribes. Trading profit of the firm for the year ended 31st March, 2012 was 10,00,000, identify any four considered by Ram, Mohan and Rakhi while preparing the new partnership deed and also prepare 'Profit and Loss Appropriation Account' of Ram, Mohan and Rakhi for the year ended 31st March, 2012.

Q.66 A and B are partners sharing profits and losses in the ratio of 3:2. Their capitals are '5,00,000 and '1,00,000 respectively. A is entitled to interest on capital @ 10% p.a. and B is entitled to salary @ '5,000 per month. The net profit before providing for interest on capital and partner's salary for the year ended 31st December 2014 was Rs.77,000. Show the distribution of profits.

- Q.67 X and Y started a partnership business on 1st April, 2013 with capitals of ₹2,00,000 and ₹1,00,000 respectively. During the year, X withdrew ₹1,000 at the beginning of every month and Y withdrew ₹2,000 at the end of every month. The terms of partnership deed are:
- Interest on Capital @ 12% p.a. and interest is to be charged on drawings @ 6% p.a.
 - X is to get a monthly salary of ₹2500.
 - Y is entitled to a commission @ 10% on net profits after charging X's salary and his own commission.
 - 20% of the net distributable profits to be transferred to General Reserve.
 - Sharing of profit or loss will be in the ratio of their Capital Contribution.
- The profit before making above appropriations was ₹3,60,000. Prepare Profit and Loss Appropriation Account and Partners' Capital Accounts for the year ended 31st March, 2014.
- Q.68 From the following Balance Sheet of X and Y, calculate interest on capital @ 10% p.a. for the year ended 31st December 2014;

Liabilities	Amt. (₹)	Assets	Amt. (₹)
X's Capital	2,60,000	Sundry Assets	4,10,000
Y's Capital	1,30,000	X's Drawings	10,000
Profit and Loss Appropriation A/c (2014)	30,000		
	4,20,000		4,20,000

During the year, X's drawings were Rs. 10,000 and Y's drawings were Rs. 20,000. Profit during the year was Rs. 60,000.

- Q.69 Following is the Balance Sheet of A and B as at 31st December 2014.

Liabilities	Amt. (₹)	Assets	Amt. (₹)
A's Capital	2,00,000	Sundry Assets	3,70,000
B's Capital	1,00,000	A's Drawings	20,000
Reserve fund	40,000		
Profit and Loss Appropriation A/c (2014)	50,000		
	3,90,000		3,90,000

During the year, A's drawings were ₹35,000 and B's drawings were ₹30,000. Profits during the year was ₹1,70,000. Out of the profits, ₹40,000 have been transferred to reserve fund for future. Calculate interest on capital @ 10% p.a. for 2014.

- Q.70 X and Y are partners sharing profits and losses in the ratio of 2:1. They had capitals of ₹3,00,000 and ₹2,00,000 respectively. Both the partners are entitled to interest on capitals @ 5%
- Y is entitled to salary of ₹1,500 per month.
 - X is entitled for commission @ 10% on net profits after charging Y's salary and interest on capitals, but before his own commission.
 - Y is entitled for commission @ 10% on net distributable profits after charging his own commission.
- The profit earned for the year ended 31.03.14 is ₹98,000. Prepare Profit and Loss Appropriation Account.
- Q.71 A and B are partner sharing profits and losses equally. The firm earned a profit of ₹2,70,000 for the year ended 31.3.12. A and B had capitals of ₹3,00,000 and ₹2,00,000 respectively. Current Accounts Balances on April 1, 2011; A ₹20,000 (Cr); ₹10,000 (Cr). Their deed provides that:
- A and B withdrew ₹20,000 and ₹30,000 respectively during the year.
 - Interest on capital is to be allowed @ 5% p.a.
 - Interest on drawing is to be charged @ 6%
 - A is entitled for commission @ 10% on net profits after charging B's salary, interest on capitals and his own commission.
 - B is entitled to salary of ₹25,000 Prepare Profit and Loss Appropriation Account and partners' Current and Capital A/c for the year ended 31st March 2012.
- Q.72 Satnam and Qureshi after doing their MBA decided to start a partnership firm to manufacture ISI marked electronic goods for economically weaker section of the society. Satnam also expressed his willingness to admit Juliee as a partner without capital who is specially abled but a very creative and intelligent friend of him. Qureshi agreed to this. They formed a partnership on 1st April 2012 on the following terms.
- Satnam will contribute ₹4,00,000 and Qureshi will contribute ₹2,00,000 as capitals.
 - Satnam, Qureshi and Juliee will share profits in the ratio of 2:2:1.

(iii) Interest on capital will be allowed @ 6% p.a.

Due to shortage of capital Satnam contributed ₹50,000 on 30th September, 2012 and Qureshi contributed ₹20,000 on 1st January 2013 as additional capitals. The profit of the firm for the year ended 31st March, 2013 was ₹3,37,800.

(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.

Q.73 Soniya, Charu and Smita started a partnership firm on April 1, 2006. They contributed ₹5,00,000, ₹4,00,000 and ₹3,00,000 respectively as their capitals and decided to share profits and losses in the ratio of 3:2:1. The partnership provides that Soniya is to be paid a salary of ₹10,000 per month and Charu a commission of ₹50,000. It also provides that interest on capital be allowed @ 6% p.a. The drawings for the year were Soniya ₹60,000, Charu ₹40,000 and Smita ₹20,000. Interest on drawings was charged as ₹2700 as Soniya's drawings, ₹1800 on Charu's drawings and ₹900 on Smita's drawings. The net amount of profit as per Profit and Loss Account for the year 2006-07 was ₹3,56,600.

(i) Record necessary journal entries.

(ii) Prepare profit and loss appropriation account

(iii) Show capital accounts of the partners.

Q.74 Mona, Nisha and Priyanka are partners in a firm. They contributed Rs. 50,000 each as capital three years ago. At that time, Priyanka agreed to look after the business as Mona and Nisha were busy. The profits for the past three years were ₹15,000, ₹25,000 and ₹50,000 respectively. While going through the books of accounts, Mona noticed that the profit had been distributed in the ratio of 1:1:2. When she enquired from Priyanka about this, Priyanka answered that since she looked after the business, so she should get more profit. Mona disagreed and it was decided to distribute profit equally retrospectively for the last three years.

(a) You are required to make necessary corrections in the books of accounts of Mona, Nisha and Priyanka by passing an adjustment entry.

(b) Identify the value which was not practiced by Priyanka while distributing profits.

Q.75 Mannu and Shrishti are partners in a firm sharing profit in the ratio of 3:2. Following is the balance sheet of the firm as on March 31st, 2006 [NCERT]

Liabilities	Amt (₹)	Assets	Amt(₹)
Capital A/cs		Drawings	
Mannu 30,000		Mannu 4,000	
Shrishti 10,000	40,000	Shrishti 2,000	6,000
		Other Assets	34,000
	40,000		40,000

Profit for the year ended March 31st, 2006 was ₹5,000 which was divided in the agreed ratio, but interest @ 5% p.a. on capital and @ 6% p.a. on drawings was inadvertently omitted. Adjust interest on drawings on an average basis for 6 months. Give the adjustment entry.

Q.76 X and Y are partner sharing profit and losses in the ratio of 2:1. On 31st March, 2014 (after division of the year's profit), they decided to take their Manager

Z into partnership, with effect from 1st April 2011. As a manager, Z was getting monthly salary of Rs. 1500 and Z had also advanced Rs.2,00,000 to the firm by way of a loan on which he is getting interest @ 12% p.a. During the three financial years, firm's profits after adjusting salary to Z, interest on loan and interest on capital of the partners were:

Year Ended	Profits and Losses (₹)
31st March 2012	3,00,000 (Profit)
31st March, 2013	1,00,000 (Loss)
31st March, 2014	4,00,000 (Profit)

As per the new agreement:

* Z is to be given 1/4th share in the profits; and

* Z will be entitled to annual salary of 40,000 and

* Z's loan shall be treated as his capital carrying interest at 6% per annum the capitals of other partners.

Record the necessary entries to give effect to the above arrangement. (Note: Interest on Capital is to be allowed as a charge)

- Q.77 Ram and Shyam are partners sharing profits and losses in the ratio of 3:1. They agreed to admit their manager, Hari as a partner with effect from 1st January 2014 for 1/4th share in of profit. Hari has deposited ₹30,000 as security. He was getting a salary of ₹24,000 per annum and a commission of 10% on the net profit after charging his salary and commission. As per partnership deed, the security deposited by Hari is to be treated as his share of capital. Any excess amount which Hari will get as a partner over the receipt as a manager would be borne by Ram and Shyam in the ratio of 3:2. Profit for the year 2014 was ₹2,00,000 before payment of salary and commission to Hari. Prepare Profit and Loss Appropriation Account of the firm during 2014.
- Q.78 A and B are in partnership sharing profits and losses in the ratio of 4:1. They decided to admit C, their manager, as a partner with effect from 1st January, 2014 for 1/8th share in profits. C, as a manager was getting salary of ₹9,600 per annum and commission of 5% of the net profits after charging such salary and commission. In terms of the partnership deed, any excess amount which C will be entitled to receive as a partner over the amount which would have been due to him as a manager, would be personally borne by A out of his share of profit. Profit for the year ended 31st December, 2014, amounted to ₹1,35,600 before payment of salary and commission. Prepare Profit and Loss Appropriation Account of the firm during 2014.
- Q.79 Mollie, Ananya and Isha are partners in a CA firm, sharing profits and losses in the ratio of 2:2:1. All the partners have agreed to the following terms:
 *Isha's share of profits is guaranteed to be not less than ₹25,000 p.a.
 *Mollie gives a guarantee to the effect that the gross fee earned by her for the firm will not be less than the average gross fee earned by her during the preceding four years when she was carrying on the profession alone (the average of which works out at Rs. 40,000)
 The profits earned by the firm for the year ended 31st March, 2014 are ₹70,000. The gross fees earned by Mollie for the firm is just ₹30,000. Prepare the Profit and Loss Appropriation Account, showing your working clearly.
- Q.80 A, B, C and D are partners having capitals of Rs.2,00,000; Rs.1,50,000, Rs. 1,00,000 and Rs. 50,000 respectively. They share profits and losses in the ratio of 3:2:2:1. They have agreed upon the following terms:
 (i) Partners are entitled to interest on capital @ 8% p.a.
 (ii) C will get salary @ ₹5,000 per month.
 (iii) B's share of profits excluding interest on capital has been guaranteed to be not less than ₹2,60,000.
 (iv) D's share of profits including interest on capital has been guaranteed by A to be not less than ₹1,10,000.
 The profits for the year ended 31st March, 2014 were ₹9,00,000 before any appropriations. Prepare the Profit and Loss Appropriation Account.
- Q.81 X and Y were partners sharing profits in the ratio of 3:1. Their capitals as on 1st January 2014 were Rs.3,00,000 and Rs.2,00,000 respectively. On 1st April 2014, they admitted Z as a partner for 1/5th share. Z introduced ₹2,00,000 as capital and X personally guaranteed Z that his share of profits, after charging interest on capital @ 12% p.a., would not be less than Rs.50,000 p.a. Profit for the year ended 31st December 2014 before interest on capital was ₹3,00,000 and 20% of this profit relates to first three months of the year. Prepare Profit and Loss Appropriation Account.
- Q.82 A, B and C entered into partnership on 1st July, 2013 to share profits and losses in the ratio of 3:2:1. A personally guaranteed that C's share of profit after charging interest on capital @ 6% p.a. would not be less than Rs.18,000 p.a. The capital contribution were A Rs.1,00,000; B Rs.50,000 and C Rs.50,000. The profits for the period ended 31st March, 2014 were Rs.69,000. Show the distribution of profits.



BUSINESS STUDIES

TECHNIQUES BY F.W. TAYLOR:

- Differential Piece wage system
- Functional foremanship
- Time Study
- Motion Study

PRINCIPLES:

- Scalar chain
- Unity of command
- Centralization & Decentralization
- Division of work
- Case Study Sheet of Chapter 01



PREVIOUS YEARS' BOARD QUESTIONS FOR PRACTICE

Very Short Answer Questions (1 mark)

1. Find the value of x and y if :

$$2 \begin{bmatrix} 1 & 3 \\ 0 & x \end{bmatrix} + \begin{bmatrix} y & 0 \\ 1 & 2 \end{bmatrix} = \begin{bmatrix} 5 & 6 \\ 1 & 8 \end{bmatrix}$$

[CBSE (Delhi) 2008]

2. If $\begin{bmatrix} x+3 & 4 \\ y-4 & x+y \end{bmatrix} = \begin{bmatrix} 5 & 4 \\ 3 & 9 \end{bmatrix}$, find x and y .

[CBSE (F) 2008]

3. If matrix $A = \begin{bmatrix} 1 & 2 & 3 \end{bmatrix}$ write AA' , where A' is the transpose of matrix A .

[CBSE (Delhi) 2009]

4. Find the value of x , if $\begin{pmatrix} 3x+y & -y \\ 2y-x & 3 \end{pmatrix} = \begin{pmatrix} 1 & 2 \\ -5 & 3 \end{pmatrix}$.

[CBSE (AI) 2009]

5. If $A = \begin{pmatrix} 2 & 3 & -5 \\ 1 & 4 & 9 \\ 0 & 7 & -2 \end{pmatrix}$ and $B = \begin{pmatrix} 2 & 1 & -1 \\ -3 & 4 & 4 \\ 1 & 5 & 2 \end{pmatrix}$, then find $a_{22} + b_{21}$.

[CBSE (F) 2009]

6. If $\begin{pmatrix} 1 & 2 \\ 3 & 4 \end{pmatrix} \begin{pmatrix} 3 & 1 \\ 2 & 5 \end{pmatrix} = \begin{pmatrix} 7 & 11 \\ k & 23 \end{pmatrix}$, then write the value of k .

[CBSE (Delhi) 2010]

7. If $A = \begin{pmatrix} \cos \alpha & -\sin \alpha \\ \sin \alpha & \cos \alpha \end{pmatrix}$, then for what value of α is A an identity matrix?

[CBSE (Delhi) 2010]

8. Write a square matrix of order 2, which is both symmetric and skew-symmetric. [CBSE (F) 2010]

9. If $\begin{pmatrix} 3 & 4 \\ 2 & x \end{pmatrix} \begin{pmatrix} x \\ 1 \end{pmatrix} = \begin{pmatrix} 19 \\ 15 \end{pmatrix}$, find the value of x .

[CBSE (F) 2010]

10. For a 2×2 matrix, $A = [a_{ij}]$, whose elements are given by $a_{ij} = \frac{i}{j}$, write the value of a_{12} .

[CBSE (Delhi) 2011]

11. If a matrix has 5 elements, write all possible orders it can have.

[CBSE (AI) 2011]

12. Write the values of $x - y + z$ from the following equation :

[CBSE (F) 2011]

$$\begin{bmatrix} x+y+z \\ x+z \\ y+z \end{bmatrix} = \begin{bmatrix} 9 \\ 5 \\ 7 \end{bmatrix}$$

13. If $\begin{pmatrix} 2 & 3 \\ 5 & 7 \end{pmatrix} \begin{pmatrix} 1 & -3 \\ -2 & 4 \end{pmatrix} = \begin{pmatrix} -4 & 6 \\ -9 & x \end{pmatrix}$, write the value of x .

[CBSE (Delhi) 2012]

14. Simplify : $\cos \theta \begin{bmatrix} \cos \theta & \sin \theta \\ -\sin \theta & \cos \theta \end{bmatrix} + \sin \theta \begin{bmatrix} \sin \theta & -\cos \theta \\ \cos \theta & \sin \theta \end{bmatrix}$

15. Find value of $x + y$ from the following equation :

$$2 \begin{bmatrix} x & 5 \\ 7 & y-3 \end{bmatrix} + \begin{bmatrix} 3 & -4 \\ 1 & 2 \end{bmatrix} = \begin{bmatrix} 7 & 6 \\ 15 & 14 \end{bmatrix}$$

16. If $A^T = \begin{bmatrix} 3 & 4 \\ -1 & 2 \\ 0 & 1 \end{bmatrix}$ and $B = \begin{bmatrix} -1 & 2 & 1 \\ 1 & 2 & 3 \end{bmatrix}$, then find $A^T - B^T$.

17. If A is a square matrix such that $A^2 = A$, then write the value of $(I + A)^2 - 3A$. [CBSE (F) 2011]

18. If $x \begin{bmatrix} 2 \\ 3 \end{bmatrix} + y \begin{bmatrix} -1 \\ 1 \end{bmatrix} = \begin{bmatrix} 10 \\ 5 \end{bmatrix}$, write the value of x .

19. Find the value of a, b, c and d if $\begin{bmatrix} a-b & 2a+c \\ 2a-b & 3c+d \end{bmatrix} = \begin{bmatrix} -1 & 5 \\ 0 & 13 \end{bmatrix}$
20. If $\begin{bmatrix} 9 & -1 & 4 \\ -2 & 1 & 3 \end{bmatrix} = A + \begin{bmatrix} 1 & 2 & -1 \\ 0 & 4 & 9 \end{bmatrix}$, then find the matrix A .
21. For what value of x , is the matrix $A = \begin{bmatrix} 0 & 1 & -2 \\ -1 & 0 & 3 \\ x & -3 & 0 \end{bmatrix}$ a skew-symmetric matrix?
22. If matrix $A = \begin{bmatrix} 1 & -1 \\ -1 & 1 \end{bmatrix}$ and $A^2 = kA$, then write the value of k .
23. If A is a 3×3 matrix, whose elements are given by $a_{ij} = \frac{1}{3}[-3i + j]$, then write the value of a_{23} .
24. If $2\begin{bmatrix} 3 & 4 \\ 5 & x \end{bmatrix} + \begin{bmatrix} 1 & y \\ 0 & 1 \end{bmatrix} = \begin{bmatrix} 7 & 0 \\ 10 & 5 \end{bmatrix}$, find $(x - y)$.
25. Solve the following matrix equation for $x : [x \ 1] \begin{bmatrix} 1 & 0 \\ -2 & 0 \end{bmatrix} = O$.
26. If A is a square matrix such that $A^2 = A$, then write the value of $7A - (I + A)^3$, where I is an identity matrix.
27. If $\begin{bmatrix} x-y & z \\ 2x-y & w \end{bmatrix} = \begin{bmatrix} -1 & 4 \\ 0 & 5 \end{bmatrix}$, find the value of $x + y$.
28. Use elementary column operation $C_2 \rightarrow C_2 - 2C_1$ in the matrix equation $\begin{bmatrix} 4 & 2 \\ 3 & 3 \end{bmatrix} = \begin{bmatrix} 1 & 2 \\ 0 & 3 \end{bmatrix} \begin{bmatrix} 2 & 0 \\ 1 & 1 \end{bmatrix}$.
29. If $\begin{bmatrix} a+4 & 3b \\ 8 & -6 \end{bmatrix} = \begin{bmatrix} 2a+2 & b+2 \\ 8 & a-8b \end{bmatrix}$ write the value of $a - 2b$.

Answer Questions (4 Marks)

1. Let $A = \begin{bmatrix} 3 & 2 & 5 \\ 4 & 1 & 3 \\ 0 & 6 & 7 \end{bmatrix}$. Then express A as a sum of two matrices such that one is symmetric and the other is skew-symmetric. [CBSE (Delhi) 2008]

2. If $A = \begin{bmatrix} 1 & 2 & 2 \\ 2 & 1 & 2 \\ 2 & 2 & 1 \end{bmatrix}$, verify that $A^2 - 4A - 5I = O$. [CBSE (Delhi) 2008]

3. Using elementary transformations, find the inverse of the following matrix:

$$\begin{bmatrix} 1 & 2 & 3 \\ 2 & 5 & 7 \\ -1 & -4 & -5 \end{bmatrix}$$

[CBSE (AI) 2008]

4. Using elementary transformations, find the inverse of the following matrix:

$$\begin{bmatrix} 2 & -1 & 4 \\ 4 & 0 & 2 \\ 3 & -2 & 7 \end{bmatrix}$$

[CBSE (PKL) 2008]

5. Obtain the inverse of the following matrix, using elementary operations:

$$A = \begin{bmatrix} 3 & 0 & -1 \\ 2 & 3 & 0 \\ 0 & 4 & 1 \end{bmatrix}$$

[CBSE (AI) 2009]

6. Using elementary transformations, find the inverse of the following matrix:

$$\begin{bmatrix} 2 & 5 \\ 1 & 3 \end{bmatrix}$$

[CBSE (Delhi) 2010]

7. Express the following matrix as the sum of a symmetric and skew-symmetric matrix, and verify your result:

$$\begin{pmatrix} 3 & -2 & -4 \\ 3 & -2 & -5 \\ -1 & 1 & 2 \end{pmatrix}$$

[CBSE (AI) 2010]

8. For the following matrices A and B , verify that $(AB)' = B'A'$.

$$A = \begin{pmatrix} 1 \\ -4 \\ 3 \end{pmatrix}, B = (-1 \ 2 \ 1)$$

[CBSE (AI) 2010]

9. Using elementary transformations, find the inverse of the following matrix:

$$A = \begin{pmatrix} 6 & 5 \\ 5 & 4 \end{pmatrix}$$

[CBSE (F) 2010]

10. Using elementary transformations, find the inverse of the matrix:

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

[CBSE (Delhi) 2011]

11. Using elementary transformations, find the inverse of the matrix:

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

12. 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 $(AB)^{-1}$.

Answers

Very Short Answer Questions

1. $x = 3, y = 3$ 2. $x = 2, y = 7$ 3. [14]

4. $x = 1, y = -2$ 5. 17

6. 17

7. $\alpha = 0^\circ$

8. $\begin{bmatrix} 0 & 0 \\ 0 & 0 \end{bmatrix}$

9. 5

10. $\frac{1}{2}$

11. $1 \times 5, 5 \times 1$ 12. 1

13. 13

14. $\begin{bmatrix} 1 & 0 \\ 0 & 1 \end{bmatrix}$

15. 11

16. $\begin{bmatrix} 4 & 3 \\ -3 & 0 \\ -1 & -2 \end{bmatrix}$

17. 1

18. 3

19. $a = 1, b = 2, c = 3, d = 4$

20. $\begin{bmatrix} 8 & -3 & 5 \\ -2 & -3 & -6 \end{bmatrix}$

21. $x = 2$

22. $k = 2$

23. 1

24. $x - y = 10$

25. $x = 2$

26. -1

27. $x + y = 3$

28. $\begin{bmatrix} 4 & -6 \\ 3 & -3 \end{bmatrix} = \begin{bmatrix} 1 & 2 \\ 0 & 3 \end{bmatrix} \begin{bmatrix} 2 & -4 \\ 1 & -1 \end{bmatrix}$

29. $a = 2, b = 1, a - 2b = 0$

Short Answer Questions

1. $\begin{bmatrix} 3 & 3 & \frac{5}{2} \\ 3 & 1 & \frac{9}{2} \\ \frac{5}{2} & \frac{9}{2} & 7 \end{bmatrix} + \begin{bmatrix} 0 & -1 & \frac{5}{2} \\ 1 & 0 & \frac{-3}{2} \\ \frac{-5}{2} & \frac{3}{2} & 0 \end{bmatrix}$

3. $\begin{bmatrix} 3 & -2 & -1 \\ -4 & 1 & -1 \\ 2 & 0 & 1 \end{bmatrix}$

4. $\begin{bmatrix} -2 & \frac{1}{2} & 1 \\ 11 & -1 & -6 \\ 4 & \frac{-1}{2} & -2 \end{bmatrix}$

5. $\begin{bmatrix} 3 & -4 & 3 \\ -2 & 3 & -2 \\ 8 & -12 & 9 \end{bmatrix}$

6. $\begin{bmatrix} 3 & -5 \\ -1 & 2 \end{bmatrix}$

7. $\begin{bmatrix} 3 & \frac{1}{2} & \frac{-5}{2} \\ \frac{1}{2} & -2 & -2 \\ \frac{-5}{2} & -2 & 2 \end{bmatrix} + \begin{bmatrix} 0 & \frac{-5}{2} & \frac{-3}{2} \\ \frac{5}{2} & 0 & -3 \\ \frac{3}{2} & 3 & 0 \end{bmatrix}$

9. $\begin{bmatrix} -4 & 5 \\ 5 & -6 \end{bmatrix}$

10. $\begin{bmatrix} 1 & -2 & -3 \\ -2 & 4 & 7 \\ -3 & 5 & 9 \end{bmatrix}$

11. $\begin{bmatrix} 1 & -1 & 1 \\ -8 & 7 & -5 \\ 5 & -4 & 3 \end{bmatrix}$

12. $\begin{bmatrix} 9 & -3 & 5 \\ -17 & 7 & -6 \\ 1 & 0 & 2 \end{bmatrix}$

PREVIOUS YEARS' BOARD QUESTIONS FOR PRACTICE

Very Short Answer Questions (1 mark)

1. Find the cofactor of a_{12} in the following : $\begin{vmatrix} 2 & -3 & 5 \\ 6 & 0 & 4 \\ 1 & 5 & -7 \end{vmatrix}$.

2. Evaluate : $\begin{vmatrix} \sin 30^\circ & \cos 30^\circ \\ -\sin 60^\circ & \cos 60^\circ \end{vmatrix}$.

3. If $\begin{vmatrix} 2x+5 & 3 \\ 5x+2 & 9 \end{vmatrix} = 0$, find x .

4. Write the value of the determinant $\begin{vmatrix} 2 & 3 & 4 \\ 4 & 6 & 8 \\ 6x & 9x & 12x \end{vmatrix}$.

5. Write the value of determinant $\begin{vmatrix} a-b & b-c & c-a \\ b-c & c-a & a-b \\ c-a & a-b & b-c \end{vmatrix}$.

6. Find the value of x if $\begin{vmatrix} x & 4 \\ 2 & 2x \end{vmatrix} = 0$.

[CBSE (AI) 2009]

7. If $A = \begin{bmatrix} 1 & 2 \\ 4 & 4 \end{bmatrix}$, then find the value of k if $|2A| = k|A|$.

[CBSE (F) 2009]

8. What is the value of the determinant $\begin{vmatrix} 0 & 2 & 0 \\ 2 & 3 & 4 \\ 4 & 5 & 6 \end{vmatrix}$?

[CBSE (Delhi) 2010]

9. If A is a square matrix of order 3 and $|3A| = K|A|$, then write the value of K . [CBSE (Delhi) 2010]

10. What positive value of x makes the following pair of determinants equal?

$$\begin{vmatrix} 2x & 3 \\ 5 & x \end{vmatrix}, \begin{vmatrix} 16 & 3 \\ 5 & 2 \end{vmatrix}$$

[CBSE (AI) 2010]

11. Write the adjoint of the matrix : $\begin{pmatrix} 2 & -1 \\ 4 & 3 \end{pmatrix}$.

[CBSE (AI) 2010]

12. What is the value of the following determinant?

$$\Delta = \begin{vmatrix} 4 & a & b+c \\ 4 & b & c+a \\ 4 & c & a+b \end{vmatrix}$$

[CBSE (F) 2010]

13. For what value of x , the matrix $\begin{bmatrix} 5-x & x+1 \\ 2 & 4 \end{bmatrix}$ is singular?

[CBSE (Delhi) 2011]

14. Write A^{-1} for $A = \begin{bmatrix} 2 & 5 \\ 1 & 3 \end{bmatrix}$.

[CBSE (Delhi) 2011]

15. Evaluate : $\begin{vmatrix} \cos 15^\circ & \sin 15^\circ \\ \sin 75^\circ & \cos 75^\circ \end{vmatrix}$

[CBSE (AI) 2011]

16. If $A = \begin{bmatrix} 2 & 3 \\ 5 & -2 \end{bmatrix}$, write A^{-1} in terms of A .

[CBSE (AI) 2011]

17. If $\begin{vmatrix} x & x \\ 1 & x \end{vmatrix} = \begin{vmatrix} 3 & 4 \\ 1 & 2 \end{vmatrix}$, write the positive value of x .

[CBSE (F) 2011]

18. If $\Delta = \begin{vmatrix} 5 & 3 & 8 \\ 2 & 0 & 1 \\ 1 & 2 & 3 \end{vmatrix}$, write the minor of the element a_{23} .

[CBSE (Delhi) 2012]

19. Let A be a square matrix of order 3×3 . Write the value of $|2A|$, where $|A| = 4$. [CBSE (AI) 2012]

20. Write the value of the determinant : $\begin{vmatrix} 102 & 18 & 36 \\ 1 & 3 & 4 \\ 17 & 3 & 6 \end{vmatrix}$

[CBSE (F) 2012]

21. If $\begin{vmatrix} x+1 & x-1 \\ x-3 & x+2 \end{vmatrix} = \begin{vmatrix} 4 & -1 \\ 1 & 3 \end{vmatrix}$, then write the value of x .

[CBSE (Delhi) 2013]

22. If A_{ij} is the cofactor of the element a_{ij} of the determinant $\begin{vmatrix} 2 & -3 & 5 \\ 6 & 0 & 4 \\ 1 & 5 & -7 \end{vmatrix}$, then write the value of $a_{32} \cdot A_{32}$.

23. If A is a square matrix and $|A| = 2$, then write the value of $|AA'|$, where A' is the transpose of A .

24. If $A = \begin{bmatrix} 3 & 10 \\ 2 & 7 \end{bmatrix}$, then write A^{-1} .

25. If $\begin{vmatrix} 2x & 5 \\ 8 & x \end{vmatrix} = \begin{vmatrix} 6 & -2 \\ 7 & 3 \end{vmatrix}$, write the value of x .

26. If $\begin{vmatrix} 3x & 7 \\ -2 & 4 \end{vmatrix} = \begin{vmatrix} 8 & 7 \\ 6 & 4 \end{vmatrix}$, find the value of x .

27. If A is a 3×3 matrix, $|A| \neq 0$ and $|3A| = k|A|$, then write the value of k .

Short and Long Answer Questions (4, 6 marks)

1. Using properties of determinants prove the following :

$$\begin{vmatrix} 1+a^2-b^2 & 2ab & -2b \\ 2ab & 1-a^2+b^2 & 2a \\ 2b & -2a & 1-a^2-b^2 \end{vmatrix} = (1+a^2+b^2)^3$$

2. Using properties of determinants prove the following :

$$\begin{vmatrix} a^2+1 & ab & ac \\ ab & b^2+1 & bc \\ ca & cb & c^2+1 \end{vmatrix} = 1+a^2+b^2+c^2$$

3. Using properties of determinant, show that :

$$\begin{vmatrix} 1 & a^2+bc & a^3 \\ 1 & b^2+ca & b^3 \\ 1 & c^2+ab & c^3 \end{vmatrix} = -(a-b)(b-c)(c-a)(a^2+b^2+c^2)$$

4. Using inverse of matrix, solve the following system of equation:

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

Using properties of determinants, prove the following (Q. 7 to 12)

5. $\begin{vmatrix} 1 & 1+p & 1+p+q \\ 2 & 3+2p & 4+3p+2q \\ 3 & 6+3p & 10+6p+3q \end{vmatrix} = 1.$

6. $\begin{vmatrix} 1 & x & x^2 \\ x^2 & 1 & x \\ x & x^2 & 1 \end{vmatrix} = (1-x^3)^2.$

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

[CBSE (Delhi) 2010]

$$\begin{vmatrix} x & x^2 & 1+px^3 \\ y & y^2 & 1+py^3 \\ z & z^2 & 1+pz^3 \end{vmatrix} = (1+pxyz)(x-y)(y-z)(z-x), \text{ where } p \text{ is any scalar.}$$

[CBSE (AI) 2010]

Using matrices, solve the following system of equations:

$$x + 2y - 3z = -4; \quad 2x + 3y + 2z = 2; \quad 3x - 3y - 4z = 11$$

[CBSE (AI) 2010]

If a, b, c are positive and unequal, show that the value of determinant $\begin{vmatrix} a & b & c \\ b & c & a \\ c & a & b \end{vmatrix}$ is negative.

[CBSE (AI) 2010]

If $A = \begin{pmatrix} 2 & -3 & 5 \\ 3 & 2 & -4 \\ 1 & 1 & -2 \end{pmatrix}$, find A^{-1} . Using A^{-1} solve the following system of equations:

$$2x - 3y + 5z = 16; \quad 3x + 2y - 4z = -4; \quad x + y - 2z = -3$$

[CBSE (F) 2010]

Prove the following, using properties of determinants :

$$\begin{vmatrix} a+bx^2 & c+dx^2 & p+qx^2 \\ ax^2+b & cx^2+d & px^2+q \\ u & v & w \end{vmatrix} = (x^4-1) \begin{vmatrix} b & d & q \\ a & c & p \\ u & v & w \end{vmatrix}$$

[CBSE (F) 2010]

Using properties of determinants, solve the following for x :

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

[CBSE (AI) 2011]

Using properties of determinants, solve the following for x :

$$\begin{vmatrix} x+a & x & x \\ x & x+a & x \\ x & x & x+a \end{vmatrix} = 0$$

[CBSE (AI) 2011]

Prove, using properties of determinants :

$$\begin{vmatrix} y+k & y & y \\ y & y+k & y \\ y & y & y+k \end{vmatrix} = k^2(3y+k)$$

[CBSE (F) 2011]

Use 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:

$$x - y + 2z = 1; \quad 2y - 3z = 1; \quad 3x - 2y + 4z = 2$$

[CBSE (F) 2011]

17. Solve for x, y, z :

$$\frac{2}{x} + \frac{3}{y} + \frac{10}{z} = 4; \quad \frac{4}{x} - \frac{6}{y} + \frac{5}{z} = 1; \quad \frac{6}{x} + \frac{9}{y} - \frac{20}{z} = 2.$$

18. Using matrices, solve the following system of linear equations:

$$x - y + 2z = 7; \quad 3x + 4y - 5z = -5; \quad 2x - y + 3z = 12$$

19. Using properties of determinant show that:

$$\begin{vmatrix} b+c & q+r & y+z \\ c+a & r+p & z+x \\ a+b & b+q & x+y \end{vmatrix} = 2 \begin{vmatrix} a & p & x \\ b & q & y \\ c & r & z \end{vmatrix}$$

20. Using properties of determinant prove that:

$$\begin{vmatrix} b+c & a & a \\ b & c+a & b \\ c & c & a+b \end{vmatrix} = 4abc$$

21. Using matrices solve the following system of equations:

$$2x + 3y + 3z = 5$$

$$x - 2y + z = -4$$

$$3x - y - 2z = 3$$

22. Using properties of determinants, prove that

$$\begin{vmatrix} a & a+b & a+b+c \\ 2a & 3a+2b & 4a+3b+c \\ 3a & 6a+3b & 10a+6b+3c \end{vmatrix} = a^3$$

23. Using matrix solve the following system of equations:

$$x - y + z = 4$$

$$2x + y - 3z = 0$$

$$x + y + z = 2$$

OR

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

24. A school wants to award its students for the values of Honesty, Regularity and Hard work with a total cash award of ₹ 6,000. Three times the award money for Hard work added to that given for honesty amounts to ₹ 11,000. The award money given for Honesty and Hard work together double the one given for Regularity. Represent the above situation algebraically and find the award money for each value, using matrix method. Apart from these values, namely, Honesty, Regularity and Hard work, suggest one more value which the school must include for award.

25. Using properties of determinants, prove the following:

$$\begin{vmatrix} x & x+y & x+2y \\ x+2y & x & x+y \\ x+y & x+2y & x \end{vmatrix} = 9y^2(x+y)$$

Answers

Very Short Answer Questions

1. 46

2. 1

3. -13

4. 0

5. 0

6. +2

7. 4

8. 8

9. 27

10. 4

11. $\begin{bmatrix} 3 & 1 \\ -4 & 2 \end{bmatrix}$

12. 0

13. 3

14. $\begin{bmatrix} 3 & -5 \\ -1 & 2 \end{bmatrix}$

15. 0

16. $\frac{1}{19}A$

17. 2

18. 7

19. 32

20. 0

21. $x = 2$

22. 110

23. 4

24. $\begin{bmatrix} 7 & -10 \\ -2 & 3 \end{bmatrix}$

25. $x = +6$

26. $x = -2$

27. $k = 27$

Short and Long Answer Questions

6. $x = 1, y = 2, z = 3$

9. $x = 3, y = -2, z = 1$

11. $A^{-1} = \begin{bmatrix} 0 & 1 & -2 \\ -2 & 9 & -23 \\ -1 & 5 & -13 \end{bmatrix}, x = 2, y = 1, z = 1$

13. $x = 4$

14. $x = \frac{-a}{3}$

16. $x = 0, y = 5, z = 3$

17. $x = 2, y = 3, z = 5$

18. $x = 1, y = 1, z = 1$

21. $x = 2, y = 2, z = -1$

23. $x = 2, y = -1, z = 1$ OR $(AB)^{-1} = \begin{bmatrix} 9 & -3 & 5 \\ -2 & 1 & 0 \\ 1 & 0 & 2 \end{bmatrix}$

24. Award money for (i) honesty = ₹ 500 (ii) regularity = ₹ 2,000 (iii) Hard work = ₹ 3500; The school can also include **Punctuality** for students.

26. $x = 3, y = 4, z = 5$; The management can include **cleanliness** for awarding the members.

27. No. of students in 1st group = 5, 2nd group = 3, 3rd group = 2
Punctuality may also be included for giving awards.

29. i.e., ₹ 100 for discipline

₹ 200 for politeness and

₹ 300 for punctuality

One more value like sincerity or truthfulness can be awarded.

31. i.e., ₹ 200 for sincerity,

₹ 300 for truthfulness and ₹ 400 for helpfulness.

One more value like honesty, kindness etc. can be awarded.

33. i.e., ₹ 300 for tolerance, ₹ 400 for kindness and ₹ 500 for leadership are awarded.

One more value like punctuality, honesty etc may be awarded.

HINDI

1. निम्नलिखित विषयों पर रचनात्मक लेख लिखिए।

- अध्ययन का आनंद
- आधुनिकता और नारी

2. निम्नलिखित विषयों पर औपचारिक पत्र लिखिए।

- अपने क्षेत्र में पेड़-पौधों के अनियंत्रित कटाव को रोकने के लिए अपने जिलाधिकारी को एक प्रार्थना-पत्र लिखिए।
- अपने मोहल्ले में वर्षा के कारण उत्पन्न हुई जल-भराव की समस्या की ओर ध्यान आकृष्ट कराने के लिए नगरपालिका के स्वास्थ्य अधिकारी को पत्र लिखिए।

3. आरोह भाग गद्य पाठ – 1 (भक्तिन) प्रश्नोंत्तर, पाठ-2 (बाजार दर्शन) प्रश्नोंत्तर

ECONOMICS

Q.1 From the following data, calculate national income.

S.No	Items	Rs. In Cr.
1	Profit	1500
2	Rent	1300
3	Nit	350
4	Mixed income of self employed	600
5	Compensation of employees	3000
6	Reimbursement to employees for medical expenses for medical expenses	300
7	Depreciation	200
8	Excess of factor income to Rest of the world over facto income from rest of the world	50
9	Excess of imports over exports	40
10	Interest	1100

Q.2 Given the following data and using income method calculate.

- (a) Net domestic income
- (b) Gross domestic income
- (c) Net national in income
- (d) Net national product at market price

S.No	Items	Rs. In Cr.
1	Indirect taxes	9000
2	Subsidies	1800
3	Depreciation	1700
4	Mixed income for self employed	28000
5	Operating surplus	10,000
6	NFIA	-300
7	Compensation of employees	24000

Q.3 Calculate GDP_{mp} and GNP_{FC} from following data.

S.No	Items	Rs. In Cr.
1	Operating surplus	700 cr.
2	Profit	100 cr.
3	Wages & salaries (cash)	1000 cr.
4	Interest	200 cr.
5	Consumption of fixed capital	50 cr.
6	NFIA	-10 cr.
7	Value of benefits in kind provided to employees	200 cr.
8	Goods & service tax	150 cr.
9	Subsidies	10 cr.

Q.4 Calculate GNP_{mp}

S.No	Items	Rs. In Cr.
1	Mixed income of self employed	800 cr.
2	Consumption of fixed capital	50 cr.
3	Wages & salaries	700 cr.
4	Compensation of employees from abroad	20 cr.
5	Rent on land	200 cr.
6	Royalty of sub soil assets	30 cr.
7	Interest paid by production units	150 cr.
8	Interest paid by consumers	100 cr.
9	Profit	300 cr.
10	Social security contribution by employers	100 cr.
11	Property and entrepreneurial income from abroad	-20 cr.
12	Net indirect taxes	200 cr.

Q.5 Calculate GNP_{mp}

S.No	Items	Rs. In Cr.
1	Compensation of employees	2500 cr.
2	Profit	700 cr.
3	Mixed income of self employed	7,500 cr.
4	Govt. final consumption expenditure	3000 cr.
5	Rent	400 cr.
6	Interest	350 cr.
7	NFIA	50 cr.
8	Net current transfer to abroad	100 cr.
9	NIT	150 cr.
10	Depreciation	70 cr.
11	Net export	40 cr.

Q.6 Calculate NNP_{mp}

S.No	Items	Rs. In Cr.
1	Transfer payments by government	7 cr.
2	Govt. final consumption expenditure	50 cr.
3	Net imports	-10 cr.
4	Net domestic fixed capital formation	60 cr.
5	Private final consumption expenditure	300 cr.
6	Net factor Income to abroad	-5 cr.
7	Closing stock	8 cr.
8	Opening stock	8 cr.
9	Depreciation	12 cr.
10	Corporation tax	60 cr.
11	Retained earning of corporations	20 cr.

Q.7 Find NDPFC from the following Data.

S.No	Items	Rs. In Cr.
1	Gross domestic fixed investment	10,000 cr.
2	Inventory investment	5000 cr.
3	Depreciation	2000 cr.
4	Indirect tax	1000 cr.
5	Subsidies	2000 cr.
6	Consumption expenditure	20,000 cr.
7	Residential construction investment	6000 cr.

Q.8 From the following data, calculate GDP at both (A) market price, and (b) factor cost

S.No	Items	Rs. In Cr.
1	Gross investment	90 cr.
2	Net exports	10 cr.
3	NIT	5 cr.
4	Depreciation	15 cr.
5	NFIA	-5 cr.
6	Private consumption expenditure	350 cr.
7	Govt. purchase of goods & services	100 cr.

Q.9 A farmer purchase Rs.1000 worth of seeds, Rs.2000 worth of fertilizers, and pays 1500 as water charges to raise a wheat crop. He produces 50 quintals of wheat and sell the same at Rs.200 per quintal. Calculate value added by farmer.

Q.10 Find net value added at market price.

S.No	Items	Rs. In Cr.
1	Fixed capital good with a life span of 5 years	16 lakh
2	Raw materials	6 lakh
3	Sales	25 lakh
4	Net change in stock	-(2) lakh
5	Taxes on production	1 lakh

Q.11 Given the following data, find the Net value added at factor cost by farmer producing wheat.

S.No	Items	Rs. In Cr.
1	Sales of wheat by the farmer in the local market	6,80,000 cr.
2	Purchase of a tractor	5,00,000 cr.
3	Procurement of wheat by the govt from the farmer	20,000 cr.
4	Consumption of wheat by the farming family during the year	5,000 cr.
5	Subsidy	2,000 cr.
6	Expenditure on the maintenance of existing capital stock	10,000 cr.

Q.12 Calculate GVAmP from the following :

S.No	Items	Rs. In Cr.
1	Purchase by firm A from firm B	100 cr.
2	Purchase by firm B from firm A	150 cr.
3	Sales by firm A	200 cr.
4	Sales by firm B	300 cr.
5	Exports by firm B	30 cr.
6	Change in stock of firm A	-20 cr.
7	Change in stock of firm B	10 cr.

Q.13 Calculate national income from following data.

S.No	Items	Rs. In Cr.
1	Purchase of materials etc by firm A from firm B	20 cr.
2	Purchase of materials etc by firm B from firm A	30 cr.
3	Value of output produced by firm A	100 cr.
4	Value of output produced by firm B	80 cr.
5	Payment of indirect tax by firm A	10 cr.
6	Payment of indirect tax by firm B	5 cr.
7	Consumption of fixed capital by firm B	5 cr.
8	Consumption of fixed capital by firm A	10 cr.
9	Net change in stock of firm A	(-) 7 cr.
10	Net change in stock of firm B	7 cr.
11	NFIA	(-) 5 cr.

Q.14 Calculate compensation of employees from the following data

S.No	Items	Rs. In Cr.
1	Profit after tax	20 cr.
2	Interest	45 cr.
3	Gross domestic product at market price	200 cr.
4	Goods & service tax	10 cr.
5	Consumption of fixed capital	50 cr.
6	Rent	25 cr.
7	Corporate tax	5 cr.

Q.15 From the following data, calculate (A) GDPFC (B) factor income to abroad.

S.No	Items	Rs. In Cr.
1	Compensation to employees	1000 cr.
2	Profits	200 cr.
3	Dividends	80 cr.
4	Gross national product at market price	1800 cr.
5	Rent	250 cr.
6	Interest	200 cr.
7	Gross domestic capital formation	300 cr.
8	Net fixed capital formation	200 cr.
9	Change in stock	50 cr.
10	Factor income from abroad	80 cr.
11	Net indirect taxes	120 cr.

Q.16 Calculate "Depreciation on capital assets from the following data"

S.No	Items	Rs. In Cr.
1	Capital value of the assets	1000 cr.
2	Estimated life of the assets	20 yr.
3	5 year value	NIL

FINE ART

Assignment

Submit your pencil sketch file positively after summer break.

- Create a object study of your choice and paint it with tempera watercolors.
- Draw any two compositions on an A1 size seat and fill it with tempera water colours.

INFORMATION TECHNOLOGY

(1) Write SQL commands for the following on the basis of given table STUDENT

Table : STUDENT1

No.	Name	Stipend	Stream	AvgMark	Grade	Class
1	Karan	400.00	Medical	78.5	B	12B
2	Divakar	450.00	Commerce	89.2	A	11C
3	Divya	300.00	Commerce	68.6	C	12C
4	Arun	350.00	Humanities	73.1	B	12C
5	Sabina	500.00	Nonmedical	90.6	A	11A
6	John	400.00	Medical	75.4	B	12B
7	Robert	250.00	Humanities	64.4	C	11A
8	Rubina	450.00	Nonmedical	88.5	A	12A
9	Vikas	500.00	Nonmedical	92.0	A	12A
10	Mohan	300.00	Commerce	67.5	C	12C

- (a) Select all the Nonmedical stream students from STUDENT1.
- (b) List the names of those students who are in class 12 sorted by Stipend.
- (c) List all students sorted by AvgMark in descending order
- (d) Display a report, listing Name, Stipend, Stream and amount of stipend received in a year assuming that the Stipend is paid every month.

(2) Write SQL queries for the following :

- (a) Insert all those records of table Accounts into table Pending where amt_outstanding is more than 10000.
- (b) Increase salary of employee records by 10% (table employee).
- (c) Add a constraint in table Empl that declares column Grade not null.
- (d) Drop the table Empl.

(3) Consider the table TEACHER given below. Write commands in SQL for (i) to (iv) and output for (v) to (viii)

TEACHER

ID	Name	Department	Hiredate	Category	Gender	Salary
1.	Tanya Nanda	SocialStudies	1994-03-17	TGT	F	25000
2.	Saurabh Sharma	Art	1990-02-12	PRT	M	20000
3.	Nandita Arora	English	1980-05-16	PGT	F	30000
4.	James Jacob	English	1989-10-16	TGT	M	25000
5.	Jaspreet Kaur	Hindi	1990-08-01	PRT	F	22000
6.	Disha Sehgal	Math	1980-03-17	PRT	F	21000
7.	Siddharth Kapoor	Science	1994-09-02	TGT	M	27000
8.	Sonali Mukherjee	Math	1980-11-17	TGT	F	24500

- (i) To display all information about teachers of PGT category.
- (ii) To list the names of female teachers of Hindi department.
- (iii) To list names, departments and date of hiring of all the teachers in ascending order of date of joining
- (iv) SELECT DISTINCT(category) FROM teacher ;

ENGLISH

(to be done in a Project File)

1. Collect three invitation cards of different events and paste them .
2. Collect three job advertisements from English newspaper and paste them .Write job applications for the same .
3. Collect 3 articles on different topics from English newspaper and paste them. Find new words from these articles, search their meanings and write the same.
4. Write a report on a Counseling Session on career options conducted in your school, in 200 words.

TOPICS OF SPEECH (ASL)

COMMERCE – B

In order to enhance the Listening and Speaking competencies for internal Assessment as per CBSE guidelines, Students need to prepare a speech on the given topics according to their Roll no.(200 words)

R.NO.	TOPICS NAME
1.	All we have to fear is fear itself
2.	Influence of western culture
3.	Change is permanent
4.	Non-violence – The supreme religion
5.	Opportunity seldom knocks twice at the same door.
6.	Time is money.
7.	A stitch in time saves nine
8.	Education : 'Panacea for all'
9.	Child labour : A stain on the face of mankind
10.	Significance of domestic chores
11.	How can you contribute to your society / country
12.	Money makes the mare go.
13.	Books are man's best friend.
14.	Winners never quit, Quitters never win.
15.	Challenges faced by teachers of 21 st Century.
16.	Challenges faced by students of 21 st century.
17.	Media : The fourth pillar of democracy
18.	Cleanliness is next to Godliness.
19.	He who wants everything, ends up with nothing.
20.	Solitude : Boon for wise, Bane for fools
21.	Our mind is like a parachute that works only when it is open.
22.	Covid – 19 – A pandemic
23.	Use of technology in this pandemic

24.	Mythological serials and their impact
25.	Uniform / Dress code in schools
26.	Importance of family
27.	Real Learning – Learning through experience.
28.	Vegetarianism
29.	Social network – a source of positivity
30.	Social network – a source of negativity
31.	Significance of work from home.
32.	Need of love more than medicines for patients
33.	Positive face of lockdown
34.	Negative face / impact of lockdown
35.	What is new normal ?
36.	Role of T.V. during this lockdown
37.	Role of sanitation workers in society
38.	Doctors are God.
39.	Nursing : A noble profession
40.	Self-medication is dangerous
41.	My country, My pride
42.	Abuses of Child Labour
43.	Wild Life Conservation
44.	Water : a Valuable Asset
45.	Care of Elderly People
46.	Importance of Women Education
47.	A Friend in Need Is a Friend Indeed
48.	Justice Delayed is Justice Denied.
49.	Real Learning – Learning through experience.
50.	Vegetarianism

TOPICS OF SPEECH (ASL)

COMMERCE – C

In order to enhance the Listening and Speaking competencies for internal Assessment as per CBSE guidelines, Students need to prepare a speech on the given topics according to their Roll no.(200 words)

R.NO.	TOPICS NAME
1.	Rights and duties of an individual
2.	Covid – 19 : A Pandemic
3.	World on the verge of Illrd world war
4.	Compassion, Generosity and charity : Important virtues
5.	Easy to preach ; difficult to follow
6.	Necessity is the mother of invention
7.	Are developed countries really developed ?
8.	Wisdom cannot be attained through education
9.	Changing values in 21 st century
10.	Role of UNO in 21 st century
11.	Entrepreneurship. Its role in development.
12.	Role of native language in country's development
13.	Human beings : The most selfish race
14.	Human beings : The most rational animal
15.	Role of parents
16.	Community workers / Helpers
17.	Cyber crime
18.	Keyboard warriors
19.	Significance of writing skills

20.	Jack of all but master of one
21.	Need of moral values in our life
22.	All we have to fear is fear itself
23.	Influence of western culture
24.	Change is permanent
25.	Non-violence – The supreme religion
26.	Opportunity seldom knocks twice at the same door.
27.	Time is money.
28.	A stitch in time saves nine
29.	Education : 'Panacea for all'
30.	Child labour : A stain on the face of mankind
31.	Significance of domestic chores
32.	How can you contribute to your society / country
33.	Money makes the mare go.
34.	Books are man's best friend.
35.	Winners never quit, Quitters never win.
36.	Challenges faced by teachers of 21 st Century.
37.	Challenges faced by students of 21 st century.
38.	Media : The fourth pillar of democracy
39.	Cleanliness is next to Godliness.
40.	He who wants everything, ends up with nothing.
41.	Solitude : Boon for wise, Bane for fools
42.	Our mind is like a parachute that works only when it is open.
43.	Cleanliness is next to Godliness.
44.	Use of technology in this pandemic
45.	Mythological serials and their impact
46.	Uniform / Dress code in schools
47.	Importance of family

INFORMATICS PRACTICES

Q.1

LOANS

ID	CUS_NAME	LOAN_AMT	INSTALLMENT	INT_RATE	STARTDATE	AGE
C1	SAMEER	300000	36	12.00	2019-07-19	36
C2	ARYAN	500000	60	10.00	2018-03-22	65
C4	RAM	800000	48	NULL	2018-03-08	48
C6	PRERNA	300000	24	10.00	2020-12-06	54
C7	SHIKHA	900000	36	12.50	2020-01-03	42
C8	RADHA	1000000	60	NULL	2017-07-29	62

He has written the following queries:

- (i) `select (year(curdate)-year(StartDate))*12 as Installments_over`
`from loans`
- (ii) `select CUS_NAME,monthname(Startdate) from LOANS where 60-age<=0;`

(OR)

Based on the table given above, help Harshit, write queries for the following:

- (i) To display the earliest loan start date.
- (ii) To display the names and loan amount of those customers whose loan started in 'March'.

ART INTEGRATED PROJECT

Make a project in separate file

Compare the business opportunities available in Rajasthan and Nagaland .

NB : Repeat, revise and Practice the entire, syllabus covered in class till date for better performance in PERIODIC TEST – 1.

