



SHREE VASISHTHA VIDHYALAYA, CBSE

Summer Assignment 2026 - 27

Class-XII (Commerce)



Classes XI–XII

Dear Vashithians,

“The highest education is that which does not merely give us information but brings our lives in harmony with all existence.” — Rabindranath Tagore

As you step into the summer break, remember - this is not merely time away from school, but an opportunity to reconnect with yourself. It is a season to explore ideas, nurture curiosity, and grow beyond the boundaries of the classroom.

Learning does not pause; it simply transforms.

In moments of rest and play, in quiet reading and active exploration, and in reflection and creativity—true understanding unfolds. The holiday homework has been thoughtfully designed not as a checklist, but as a meaningful journey - a canvas where imagination meets logic and knowledge connects with real-life experiences.

Plan your time with intention. Set clear goals, prioritize wisely, and maintain a balanced routine. Equally important is the ability to pause, reflect, and rejuvenate - because a refreshed mind learns best. Stay organized, be consistent, and seek guidance whenever needed, for growth becomes richer when shared.

Let reading become your companion this summer. Choose any one novel from the following - Things Fall Apart, To Kill a Mockingbird, or Animal Farm and engage deeply with its ideas. Reflect, question, and articulate your understanding through a thoughtful review that captures both insight and perspective.

Stay connected with the world around you. Cultivate the habit of reading newspapers daily and create a scrapbook of articles, visuals, and ideas that inspire you. Express your thoughts as you reflect on issues shaping our society.

Aligned with the vision of the National Education Policy 2020, these experiences aim to nurture not only academic excellence but also creativity, critical thinking, and essential life skills. Education, after all, is not merely about acquiring knowledge - it is about understanding, questioning, and evolving.

To further enrich your learning journey, explore the SWAYAM platform - an initiative by the Ministry of Education, Government of India - offering a wide range of online courses by NCERT. Choose thoughtfully, learn independently, and broaden your horizons.

This summer, let curiosity guide you, discipline strengthen you, and creativity define you.

Read with depth.

Think with clarity.

Create with confidence.

Grow with purpose.

***Wishing you a meaningful
and magical summer!***

Warm regards,
SVV Family

“Summer brings the time to rest, But learning too can be at its Best!”

SUMMER ASSIGNMENT: 2026-27

CLASS: XII (COMMERCE STREAM)

General Instructions: -

1. All the subject assignments have to be done in separate files using project papers.
2. Submission date: - 15th June, 2026 (Monday)
3. The Summer Break is scheduled from 03rd May 2026 - 07th June, 2026. The students will resume the school from 5th June, 2026 (Friday).

Note: - These assignments are a part of your internal assessment & will be marked accordingly out of 10.

ENGLISH CORE (301)

- Q1. "Lost opportunities teach the greatest lessons." Reflect on this idea with reference to The Last Lesson and your own life experiences.
- Q2. "Poverty is not just economic but also a loss of dreams." Analyze this statement with reference to Lost Spring.
- Q3. Explore how My Mother at Sixty-Six highlights the theme of aging and emotional separation in modern families.
- Q4. Develop a speech on "Power of Silence and Peace" inspired by Keeping Quiet.
- Q5. Study the issue of child labour in India and connect your findings with Lost Spring. Suggest realistic solutions.
- Q6. Your school is organizing a workshop on Cyber Safety for students. Draft a notice inviting students to attend the workshop.
- Q7. As the Secretary of the Music Club of your school, draft a notice inviting students to audition for the Annual Music Competition.
- Q8. Draft Mind Maps of the Lessons The Last Lesson & Lost Spring.
- Q9. Prepare comprehensive notes on all the poetic devices used in the poems My Mother at Sixty-Six by Kamala Das and Keeping Quiet by Pablo Neruda.
- Q10. Write a Detailed Summary of the Lesson The Third Level along with the Character sketch of Charley and Sam

ECONOMICS (030)

- Q1. Money flows are opposite to real flows. How?
- Q2. 'Final goods include only those goods which are consumed by the households.' Defend or refute the given statement.
- Q3. "Circular flow principle is based on the assumption that one's expenditure will become other's income." Explain the given statement.
- Q4. What lowers the significance of GDP as an index of welfare?
- Q5. "Credit creation is inversely related to the reserve deposit ratio." Justify the given statement.
- Q6. Calculate initial deposits, if the total deposits created by the banks are Rs 16,000 crore and legal reserve requirements is 10%.
- Q7. "Rate cuts might not be imminent"- Reserve Bank of India. Why RBI is not ready to cut the rates?
- Q8. RBI lowers repo-rate from 4.40% to 4.00%. Analyse the economic value of this statement from the viewpoint of (1) the households, (ii) investors and (iii) the economy.
- Q9. Given the following data, find the values of Operating Surplus and Net Exports.

Items	(Rs in crore)
Wages and Salaries	2400
National Income	4200
Net exports	?
Net factor income from abroad	200
Gross domestic capital formation	1100

Mixed income of self-employed	400
Private final consumption expenditure	2000
Net indirect taxes	150
Operating surplus	?
Government final consumption expenditure	1000
Consumption of fixed capital	100
Profits	500

Q10. Project work for External Evaluation.

BUSINESS STUDIES (054)

- Q1.** Success of dubbawala (who carry tiffins to offices) of Mumbai is example of which aspect of management? Explain the importance of that aspect.
- Q2.** Management is the life-giving element in every business; without it the resources of production remain resources and shall never become production." Comment
- Q3.** Hema is one of the most successful managers of her company, 'Kobe Ltd'. She uses her creativity and initiative in handling challenging situations at work. The knowledge gained by her during her student days at a renowned management institute as well as through her observation and experience over the years is applied by Hema in a skilful manner in the context of the realities of a given situation. She often reads books and other literature in various fields of management to keep her knowledge updated.
- (i) An aspect of the nature of management is being highlighted in the above description. Identify the aspect.
- (ii) Explain any three features of the aspect identified in part (i).
- Q4.** Three groups of employees of Unique Enterprises are working at different levels. The first group is responsible for survival and growth of organisation with a view of coping with changes going on in the business environment. This group prefers to include the changes immediately in the plan. The second group explains the policies of superiors with the employees and try to develop the feeling of cooperation among all the departments. The third group is responsible for maintaining quality and safety standards and minimising wastages (i) Identify the levels of management described in above para. (ii) State any two functions of each level.
- Q5.** After every three months Mansi offers new scheme to its distributors and agents. She tries her best to bring changes keeping in mind the needs and wants of customers and incentives offered by competitors. This gives first mover advantage to Mansi and edge over the competitors. (i) Identify the characteristic of management followed by Mansi. (ii) Explain it briefly.
- Q6.** 'Blindly following the goal of customer satisfaction has led to many social and environmental ills'. Do you agree? What should be done?
- Q7.** What is meant by direct channels of distribution? List any four methods of direct distribution.
- Q8.** Recently, prices of perfumes, which are one of the major ingredients of agarbattis, have gone up substantially. Since there is keen Competition in the agarbatti market, no manufacturer increased the price of agarbattis. In turn, most of the manufacturer opted to reduce the quantity of perfumes in agarbattis to cut their cost of production. This has resulted in decreased quality of agarbattis though their prices have not changed. In order to overcome this problem, Garden Ltd. introduced a new set of agarbattis under the brand name Khushboo. Khushboo agarbattis captured the agarbattis market very quickly. (i) Identify the product-related issue involved in the above case and explain its three functions. (ii) Mention three features of that concept.
- Q9.** You have an advertising agency. A manufacturer of consumer product like Soap, Tooth Paste has come to you to help him in promotion of his products. Convince him how advertising can assist in giving boost to his sales?
- Q10.** 'Advertising' and 'Personal Selling' both are communication tools used by the marketers to promote their products. Yet they differ in their approach. Differentiate between the two by giving any six differences.
- Q11.** How CRED used social media and influencer marketing to build a strong brand and loyal customer base.
- Q12.** Sujata works as a designer in an export house. As per the terms of an order received by the export house she has to get 1000 units of denim jackets made in 15 days@ Rs. 2000 per jacket. She is able to complete her target production in 20 days because in order to complete the order in 15 days she would have made the workers work over time. As a result the cost of production per jacket may have increased by Rs. 100. In context of the above case. Is Sujata efficient in her work? Explain by giving a suitable example in support of your answer.

- Q13.** Real alliance limited is a well known cement company in India. It is able to earn adequate revenues over costs. Its capital base, number of employees and production turnover has increased manifolds over the years. The rate of profitability of the business is also creditable. The employees of the company are happy and satisfied with their remuneration, working conditions, promotion policy etc. as a part of its moral obligation, the company has taken many initiatives for providing employment to specially abled persons and promoting literacy in the village adopted by it. In the context of the above case: a) Identify and explain the various types of objectives of management being fulfilled by real alliance limited
- Q14.** Coordination is not a separate function of management; it is the essence of management.” Explain with the help of suitable example.
- Q15.** Various tools of communication used by the marketers to promote their products
- 1.why company use all the tools at the same time
 - 2.Name and explain the most commonly used non personal tool which is paid by the marketer

ACCOUNTANCY (055)

- Q1.** Aseem and Nihar started business on 1st April, 2024 with Capitals of ₹3,00,000 and ₹2,00,000 respectively. According to the Partnership Deed, Nihar is to get salary of ₹5,000 per month, Aseem is to get 10% commission on profit after allowing salary to Nihar and interest is to be allowed on capitals @ 6% p.a. Profit-Sharing ratio between the two partners is 3:2.
- Aseem gave loan of ₹1,00,000 to the firm on 1st April, 2024. Interest on loan was agreed to be allowed @8% p.a. Nihar was given loan of ₹2,00,000 on 1st October, 2024 on which interest was charged @ 8% p.a. Manager was to be allowed commission of ₹3,000. Profit of the firm before these adjustments was ₹ 2,50,000.

Pass Journal entries for distribution of Profit and Prepare Profit and Loss appropriation Account. The firm closes its books of account on 31st March every year.

- Q2.** Ajay and Vijay are partners sharing profits in the ratio of 3:2. Ajay contributes ₹2,00,000 as his capital while Vijay did not contribute capital. The partnership Deed provides for interest on capital @ 8% p.a. and salary to Vijay of ₹8,000 per month. Profit before providing for interest on capital and partner’s salary for the year ended 31st March, 2025 was ₹80,000.

- Q3.** Varun and Vivek were partners in a firm sharing profits in the ratio of 3:2. The balances in their Capital and Current Accounts as on 1st April,2022 were as under:

Particulars	Varun (₹)	Vivek (₹)
Capital Accounts	3,00,000 (Cr)	2,00,000 (Cr)
Current Accounts	1,00,000 (Cr)	28,000 (Dr)

The partnerships deed provided that Varun was to be paid a salary of ₹ 5,000 p.m. whereas Vivek was to get a commission of ₹ 30,000 for the year. Interest on capital was to be allowed @ 8% p.a. whereas interest on drawings was to be charged @ 6% p.a. The drawings of Varun were ₹ 3,000 at the beginning of each quarter while Vivek withdrew ₹ 30,000 on 1st September, 2022.The net profit of the firm for the year, 2022-23, before making the above adjustments was ₹ 1,20,000.

Prepare Profit and Loss Appropriation Accounts and Partners’ Capital and Current Accounts.

- Q4.** X, Y and Z are partners in a firm. X is to get commission of 10% of net profit before charging commission. Y is to get a commission of 15% on net profit after charging all commission s while Z is to get commission @ 3% of Net Sales.Net Profit for the year ended 31st March, 2025 was ₹55,000 and Net Sales was ₹5,00,000.

Determine commission of X, Y and Z. Also, show the distribution of profit.

- Q5.** A and B are partners in a business and their capitals at the end of the year were ₹7,00,000 and ₹6,00,000 respectively. Determine their opening capitals on the basis of the following information:
- (a) Drawings of A and B for the year were ₹75,000 and ₹50,000 respectively.
 - (b) B introduced capital of ₹ 1,00,000 during the year.
 - (c) Interest on capital credited to the Capital Accounts of A and B were ₹15,000 and ₹10,000 respectively.
 - (d) Interest on drawings debited to the Capital Accounts of A and B were ₹7,500 and ₹5,000 respectively.
 - (e) Share of profit credited to Capital Accounts was ₹1,00,000 each.
- Q6.** Partnership Deed provides for interest on drawings @10% p.a. Calculate the amount of Shiv’s quarterly drawings for the year ended 31st March,2025 in each of the following cases:

- (i) When he withdrew uniform amount in the beginning of each quarter and total yearly interest on drawings was ₹1,500
- (ii) When he withdrew uniform amount at the end of each quarter and total yearly interest on drawings was ₹900.
- (iii) When he withdrew uniform amount in the middle of each quarter and total yearly interest on drawings was ₹2,400.

Q7. Ajay, Manish and Sachin were partners sharing profits in the ratio 5:3:2. Their Capitals were ₹6,00,000; ₹8,00,000 and ₹11,00,000 as on 1st April, 2021. As per partnership deed, Interest on Capitals were to be provided @ 10% p.a. For the year ended 31st March, 2022, Profit of ₹2,00,000 was distributed without providing for interest on Capitals.

Pass an adjustment entry and show the working clearly.

Q8. Monika, Bhoomika and Kamolika are partners sharing profits in the ratio of 6:4:1. Kamolika is guaranteed minimum amount of ₹3,00,000 as her share in profits. The firm earned net profit of ₹22,00,000 for the year ended 31st March, 2022.

Prepare Profit & Loss Appropriation Account of the firm for the year ended 31st March, 2022.

Q9. Maanika, Bhavi and Komal are partners sharing profits in the ratio of 6:4:1. Komal is guaranteed minimum amount of ₹2,00,000 as her share in profits. The firm incurred a loss of ₹22,00,000 for the year ended 31st March, 2022. Pass necessary Journal entry regarding deficiency borne by Maanika and Bhavi and Prepare Profit and Loss Appropriation Account.

Q10. Simran purchased Anita's business on 1st April, 2025. It was agreed to value goodwill at three years' purchase of average normal business profit of the last four years. Profit of Anita's business for the last four years were:

Year Ended	₹
31 st March, 2022	90,000
31 st March, 2023	1,60,000
31 st March, 2024	1,80,000
31 st March, 2025	2,20,000

Following further facts are identified from the books of account:

- During the year ended 31st March, 2022, an asset was sold at a gain (profit) of ₹10,000.
- During the year ended 31st March, 2023, a machine was damaged in an accident and ₹30,000 was written off as loss in Profit & Loss Account.
- During the year ended 31st March, 2024, firm's assets were not insured due to oversight insurance premium being ₹ 10,000. It is an expense, incurred every year.

Calculate the value of Goodwill.

Q11. Lalit and Lavit are partners sharing profits equally. They admit Luv into partnership for equal share. Goodwill was agreed at two years' purchase of average profit of last four years were:

Year Ended	Normal profit/(Loss) ₹
31 st March, 2022	70,000
31 st March, 2023	1,00,000
31 st March, 2024	55,000 (Loss)
31 st March, 2025	1,44,000

Books of account of the firm were perused and following was noticed:

- Firm had profit on sale of building (abnormal gain) of ₹ 10,000 during the year ended 31st March, 2022.
- Firm incurred loss on sale of computers (abnormal loss) of ₹ 20,000 during the year ended 31st March, 2023.
- Repairs to car of ₹ 50,000 was wrongly debited to Vehicles Account on 1st June, 2023. Depreciation was charged on Vehicles @ 12% p.a. on Straight Line Method.

Calculate the value of Goodwill.

Q12. Calculate capital employed by the two approaches from the following Balance Sheet:

Liabilities	₹	Assets	₹
Capital A/cs:		Land and Building	4,00,000
Amrit	2,00,000	Goodwill	60,000
Sudhir	<u>2,00,000</u>	Investments	1,00,000
General Reserve	1,80,000	Stock	1,00,000

Loan from Bank	1,00,000	Sundry Debtors	1,40,000
Sundry Creditors	1,80,000	Cash at Bank	60,000
		<i>Deferred Revenue Expenditure</i>	
Outstanding Expenses	20,000	Advertisement Suspense	20,000
	8,80,000		8,80,000

Q13. Average profit earned by a firm is ₹ 2,50,000 which includes overvaluation of stock of ₹10,000 on average basis. Capital invested in the business is ₹14,00,000 and the normal rate of return is 15%. Calculate goodwill of the firm on the basis of 4 times the Super Profit.

From the following information, Calculate value of Goodwill of M/s Amrit & Amar:

- At three years' purchase of Average Profit.
- At three years' purchase of Super Profit.
- On the basis of Capitalisation of Super profit.
- On the basis of Capitalisation of Average Profit.

Information:

- Average Capital Employed- ₹ 10,00,000.
- Net Profit/Loss of the firm for the past years: 2023- ₹3,00,000 (Profit); 2024- ₹2,50,000 (Loss); 2025- ₹8,50,000 (Profit).
- Normal Rate of Return on capital is 15%
- Management Cost as remuneration to each partner (Amrit and Amar) for their service- ₹ 5,000 per month.
- Assets (excluding Goodwill) - ₹ 12,00,000; Liabilities - ₹ 1,00,000.

Q14. Nitin and Megha are partners in a firm sharing profits and losses in the ratio of 2:1. With effect from 1st April, 2025, they decided to share profits and losses equally. On that date, their Balance sheet showed debit balance of Profit & Loss Account of ₹1,50,000.

Pass the necessary adjustment Journal entry in the books if the partners decide to show Profit & Loss Account balance (Dr.) in the books of the reconstituted firm.

Q15. X, Y and Z who are presently sharing profits and losses in the ratio of 5:3:2 decide to share future profits & losses equally with effect from 1st April, 2025. Goodwill of the firm is valued at ₹1,80,000. Goodwill already exists in the books at ₹ 30,000.

Pass the necessary Journal entries for the adjustment of Goodwill.

Q16. Sonu, Sumit and Sahil are partners in a firm sharing profits and losses in the ratio of 5:3:2. They decide to share profits and losses in the ratio of 2:5:3 with effect from 1st April, 2025. Land (having book value of ₹1,00,000) was found undervalued by ₹5,00,000. The stock (having book value of ₹14,00,000) was found overvalued by ₹8,00,000.

Pass the necessary adjustment entry without affecting the existing figures.

INFORMATICS PRACTICES (065)

Q1. Python – Series Based Questions

During your upcoming summer vacation, you plan to visit several cities across India.

You notice that petrol prices fluctuate significantly from one state to another.

To analyze this economic variation, perform the following tasks using the Python Pandas library.

Task 1: Data Categorization and Storage Create a Pandas Series named Energy_Crisis.

Store the petrol prices of at least 10 cities you plan to visit. The City Names should serve as the index, and the Petrol Prices should be the data values.

Task 2: Data Manipulation and Analysis Write the Python statements to perform the following operations on the Energy_Crisis series:

- Append Data: Add a new city and its petrol price to the existing series.
- Update Data: Modify the price of an existing city in the series.
- Data Cleaning: Delete any one record from the series using its index.
- Data Inspection: * Display the first 5 records of the series.
 - Display the last 5 records of the series.
- Metadata Management: Change the internal name of the series to "Summer_Analysis".
- Structural Analysis: * Display the Shape and Size of the series.
 - Find the total number of non-NaN values present.
 - Check and display whether the series is currently empty.

Task 3: Precise Data Retrieval (Advanced Indexing)

Using the Energy_Crisis series created in Task 1, write the commands to perform the following specific data retrieval operations:

1. Label-Based Access: Use the .loc attribute to retrieve the petrol price for "Mumbai".
2. Position-Based Access: Use the .iloc attribute to retrieve the petrol price of the 4th city in the series.
3. Single Value Retrieval (Label): Use the .at attribute to quickly extract the price for "Bangalore".
4. Single Value Retrieval (Position): Use the .iat attribute to retrieve the very first price in the series.

SID	SName	Gender	DOB	Marks	Stream
1	Amit	Male	2005-01-15	78	Science
2	Neha	Female	2004-07-20	85	Commerce
3	Rahul	Male	2005-03-10	67	Arts
4	Sneha	Female	2004-11-25	92	Science
5	Karan	Male	2005-06-18	55	Commerce
6	Pooja	Female	2004-09-12	74	Arts
7	Arjun	Male	2005-02-08	88	Science
8	Riya	Female	2004-12-30	81	Commerce
9	Vikas	Male	2005-04-22	60	Arts
10	Anjali	Female	2004-08-05	95	Science

- (i) Create the student table with appropriate data type.
- (ii) Insert a records
- (iii) Display all records from the Student table.
- (iv) Show only the names and marks of all students.
- (v) Display details of students who scored more than 80 marks.
- (vi) List all female students.
- (vii) Show students who belong to the Science stream.
- (viii) Display students who scored less than 70 marks.
- (ix) Find students born after 1st January 2005.
- (x) Display students from Science stream AND having marks greater than 85.
- (xi) Show students from Arts OR Commerce stream.
- (xii) Display students whose stream is either Science or Arts using IN operator.
- (xiii) Find students whose names start with letter 'A'.
- (xiv) Display students whose names end with 'a'.
- (xv) Display all students sorted by marks in ascending order.
- (xvi) Display all students sorted by marks in descending order.
- (xvii) Update marks of student Amit to 90 and display the updated record.

PHYSICAL EDUCATION (048)

Q.1 Design a mini sports event plan for your school:

- Name of event
- Activities included
- Equipment required
- Safety measures
- Expected outcomes

APPLIED MATHS (241)

- Q1. The value of $-70 \pmod{13}$ is
- Q2. The unit digit of 7^{295}
- Q3. If $48 \equiv 12 \pmod{m}$, then the sum of the greatest and least value of m
- Q4. Find the set of value of x satisfying $x+1 \equiv 32 \pmod{7}$
- Q5. A grocer wishes to sell a mixture of two variety of pulses worth Rs.16 per kg. In what ratio must he mix the pulses to reach this selling price, when cost of one variety of pulses is Rs.14 per kg and the other is Rs.24 per kg?

- Q6. Cost of two types of pulses is Rs.15 and Rs, 20 per kg, respectively. If both the pulses are mixed together in the ratio 2:3, then what should be the price of mixed variety of pulses per kg?
- Q7. How much coffee of variety A, costing Rs. 5 a kg should be added to 20 kg of Type B coffee at Rs.12 a kg so that the cost of the two-coffee variety mixture be worth Rs. 7 a kg?
- Q8. In one hour, a boat goes 13 km/hr in the direction of the stream and 7 km/hr against the direction of the stream. What will be the speed of the boat in still water?
- Q9. A boat is moving 2 km against the current of the stream in 1 hour and moves 1 km in the direction of the current in 10 minutes. How long will it take the boat to go 5 km in stationary water?
- Q10. A speedboat, whose speed in 15 km/hr in still water goes 30 km downstream and comes back in a total of 4 hours 30 minutes. What is the speed of the stream in km/hr?
- Q11. It takes two pipes A and B, running together, to fill a tank in 6 minutes. It takes A 5 minutes less than B to fill the tank, then what will be the time taken by B alone to fill the tank?
- Q12. If two pipes can fill a tank in 24 and 20 minutes respectively and another pipe can empty 3 gallons of water per minute from that tank. When all the three pipes are working together, it takes 15 minutes to fill the tank. What is the capacity of the tank?
- Q13. It takes 20 minutes for pipe A to fill the tank completely and it takes 30 minutes for pipe B to fill the tank completely. If both the inlets are opened together, then how much time will be taken to fill the tank completely?
- Q14. Pipe A can fill the tank 3 times faster in comparison to pipe B. It takes 36 minutes for pipe A and B to fill the tank together. How much time will pipe B alone take to fill the tank?
- Q15. A can run 100 meters in 10 seconds and B can run the same distance in 12 seconds. By how many meters does A beat B?
- Q16. In a 1000-meter race, A runs at 5 m/s and B at 4 m/s. How long does A take to beat B?
- Q17. Two runners start at the same time on a circular track of 400 meters. Their speeds are 8 m/s and 6 m/s. When will they meet again at the starting point?
- Q18. A gives B a head start of 10 meters in a 100-meter race. If A runs at 8 m/s and B at 6 m/s, who wins the race?
- Q19. If A is a square matrix such that $A^2 = I$, find A^{-1} .
- Q20. If $A = \begin{bmatrix} a & b \\ c & d \end{bmatrix}$, show that: $A \cdot A^T$ is a symmetric matrix.
- Q21. If $A = \begin{bmatrix} 1 & 2 \\ 3 & 4 \end{bmatrix}$, $B = \begin{bmatrix} 2 & 0 \\ 1 & 2 \end{bmatrix}$,
Find:
(a) $A + B$ (b) AB (c) BA
Verify that matrix multiplication is **not commutative** using matrices A and B.
Find $2A - 3B$ for given matrices.
- Q22. Solve the system using matrix method: $x + y + z = 6$
 $2x + 3y + z = 10$
 $x + 2y + 3z = 11$
- Q23. Find the inverse of the matrix using adjoint method: $\begin{bmatrix} 1 & 2 & 3 \\ 0 & 1 & 4 \\ 5 & 6 & 0 \end{bmatrix}$
- Q24. If $A = \begin{bmatrix} 1 & 2 & 3 \\ 0 & 1 & 4 \\ 5 & 6 & 0 \end{bmatrix}$, $B = \begin{bmatrix} -1 & 0 & 1 \\ 2 & 3 & 0 \\ 4 & 1 & 2 \end{bmatrix}$ find: (a) $A + B$ (b) AB
- Q25. If $A = \begin{bmatrix} 3 & 1 & 2 \\ 0 & 1 & 3 \\ -2 & -1 & 0 \end{bmatrix}$ and $B = \begin{bmatrix} 0 & 1 & 2 \\ 2 & -1 & -2 \\ 0 & 1 & 3 \end{bmatrix}$ check AB and BA are equal
- Q26. Solve using Cramer's Rule: $x + y + z = 6$, $2x + 3y + z = 10$, $x + 2y + 3z = 11$
- Q27. Solve using Cramer's Rule $x + y + z = 3$, $2x + 5y + 7z = 0$, $2x + y - z = 1$

Q28. Find the value of x $[x \ 4 \ -1] \begin{bmatrix} 2 & 1 & -1 \\ 1 & 0 & 0 \\ 2 & 2 & 4 \end{bmatrix} [x \ 4 \ -1]^T = 0$

Q29. If $A = \begin{bmatrix} 1 & 0 & 1 \\ 0 & 1 & 2 \\ 0 & 0 & 4 \end{bmatrix}$, then show that $|3A| = 3^3|A|$

Q30. If $A = \begin{bmatrix} 1 & 3 & 2 \\ 2 & 0 & -1 \\ 1 & 2 & 3 \end{bmatrix}$ find A^2 and show that $A^2 = A^{-1}$

MARKETING (812)

- Q1. Collect various 03 to 05 packages for fast moving consumer goods. Create a practical file demonstrating environmental friendly packaging and labeling strategies adopted by various firms keeping in mind sustainable development goals
- Q2. Create a detailed practical file highlighting the movement of few (3 to 5) products through different stages of product life cycle. Diagrammatic representation and creative inputs are welcome. Encourage the students to take products from Aviation industries, semi-conductors Arms and ammunitions for self-reliant India, railway coaches, and IT sectors
- Q3. On the basis of area explain branding with the help of real-life examples
- Q4. Which channel is suitable for consumer durable/ non-durable/ FMCG/ Industrial Goods & Why?
- Q5. What are prerequisites of Active listening ?
- Q6. Distinguish between generic market and product market
- Q7. Ms. Simron, an insurance agent, met a potential client, Mr. Sharma, while dressed casually in faded jeans and sandals. During the meeting, she frequently checked her phone and messages, giving a poor impression. Later, she forgot a rescheduled meeting due to running personal errands.
- Questions:**
1. What types of non-verbal communication did Ms. Simron fail to manage?
 2. How should Ms. Simron have handled the communication differently to build trust?
- Q8. Provide a information about your favourite brand and why ?
- Q9. Explain core of the following product and also explain there additional feature
(A) soap (B) bike (C) cellphones (D) home appliances
- Q10. Why labelling is considered as important for product in terms of
(A) informative aspect (B) legal aspect