



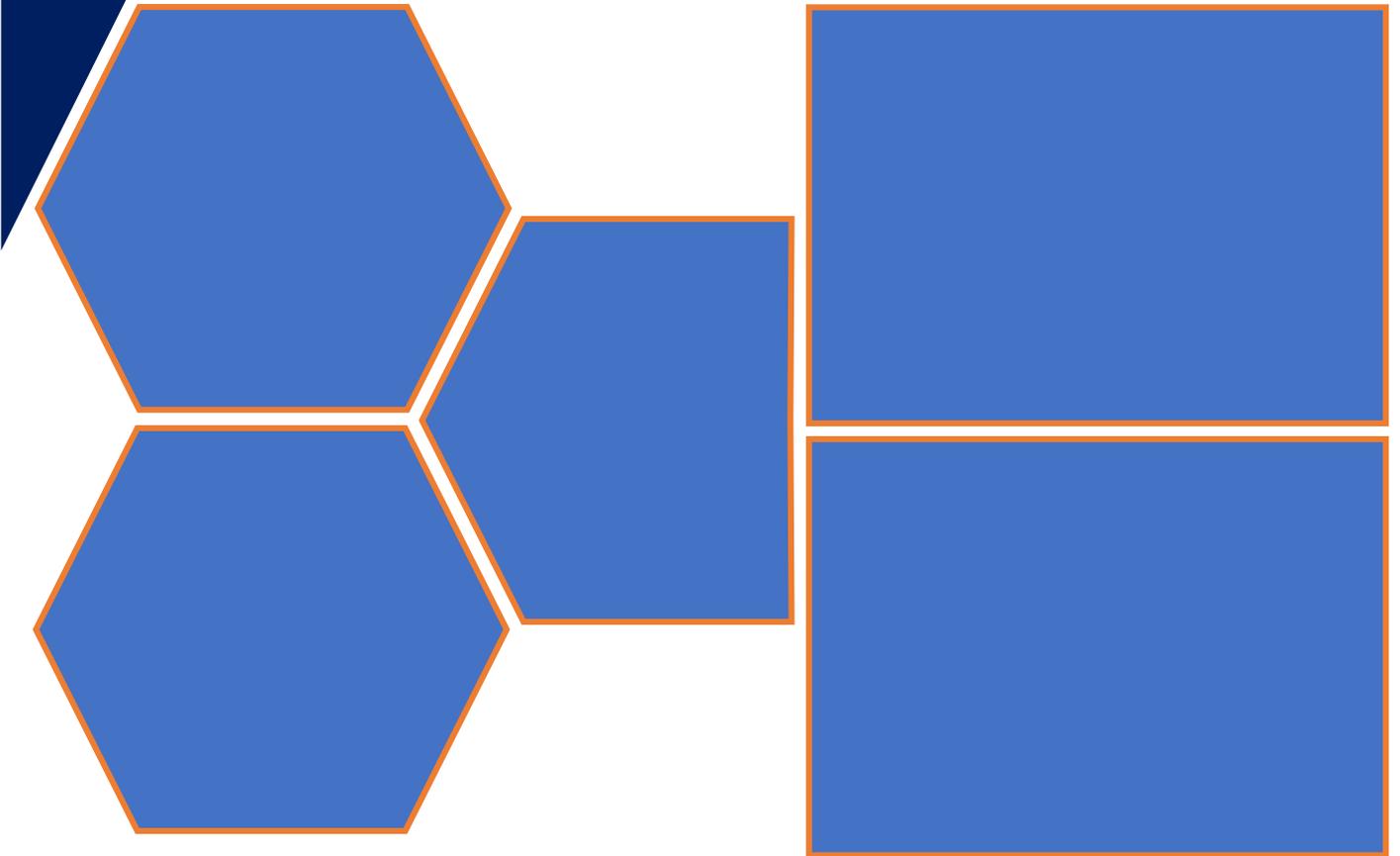
SHREE VASISHTHA

VIDHYALAYA
CBSE – ENGLISH MEDIUM

2023-24

SUMMER ASSIGNMENT

CLASS – XII Commerce



Summer Assignment



Dear Students,

Greetings!

“Searching and learning is where the miracle process all begins”. - Jim Rohn

Vacation is just one letter different than vocation. Summer vacation is the time when you can be more candid and creative with your studies. This is the time when intellectual and other skills can be nurtured and developed. Keeping the same thought these Holiday assignments are designed by your mentors to help you stay in touch with the concepts you’ve learned, to explore new skills and be creative in presentation.

Here are some ways by which you can make your holidays fun and productive.

- Read a newspaper daily. Explore some good books preferably related to the field you wish to pursue in future.
- Play indoor games like Ludo, carom board, scrabble, chess etc.
- Help your parents in small household chores like cleaning the cupboards, watering the plants, making the bed, etc.
- Complete the Holiday Home Work as per the instructions given.
- Most importantly: Limit your screen time.

Have an enjoyable Summer Vacation. Stay Safe.

Regards,

A handwritten signature in black ink, appearing to be 'A.K. Gaur', written in a cursive style.

Dr. A. K. Gaur
Advisor

A handwritten signature in blue ink, appearing to be 'S. Srivastava', written in a cursive style.

Ms. S. Srivastava
Principal

SUMMER ASSIGNMENT: 2022-23

Class: XII (Commerce Stream)

General Instructions:-

1. All the subject assignments have to be done in separate files using project papers.
2. Submission date:- 14th June, (Wednesday)
3. The Summer Break is scheduled from 07th May 2023 – 11th June, 2023. The students will resume the school from 12th June, 2023.

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

ENGLISH CORE (301)

I. Read the passage given below and answer the questions that follow:

1. Twenty-six-year-old Verhaen Khanna is not your garden variety green crusader. He's on a mission to cure 'tree blindness'- the habit of not looking at trees. "People just walk past them," he complains, at his New Friends Colony residence office, clad in Batman pajamas and bathroom slippers. Khanna, as part of New Delhi Nature Society which he set up last year, is educating Delhiites about trees in a unique way- by teaching them how to climb them.
2. A generation ago, the practice was commonplace but with today's increasingly indoor living, learning to scale the neem next door sounds like a spot of daredevilry. Anuj Wadhwa, a 26-year-old garment exporter learnt to shimmy up trees a few months ago. "Spending time with nature and climbing trees become a spiritual exercise for me. Once you're in a tree, you become part of its ecosystem, which includes birds, insects, fruits and flowers," says Wadhwa who can spend 40-45 minutes hanging out on tree branches, sometimes with a cup of green tea in hand.
3. But it's all about barking up the right tree. "It depends on how and where you sit," Khanna points out. "You have to find a cosy nook, maybe a Y-or a V-shaped branch. Find a hook to rest your arm. Or, you can lie down. It can get so comfortable that I have to warn people from falling off to sleep." A trained commercial pilot, Khanna organises periodic campouts around Delhi - Jahanpanah city forest near GK-II, Asola Sanctuary, Lodhi Garden, Nehru Park, colony parks in New Friends Colony, Maharani Bagh, GK-I etc.- where he not only teaches members how to climb trees, but also to make a fire, count GPS satellites and stars.
4. While Khanna provides tents and other equipment on these free jaunts, participants must bring their own food. The tree-lover funds his woody ambitions with his day job as business developer, and as a light painting artist at OLE India- a collaborative of professionals and free thinkers. He has also uploaded tree-climbing tutorials on YouTube. When climbing a straight trunk (coconut or palm), ascend using both arms in tandem (like in a hug) instead of alternating them. But banyan trees, with thick, low lying branches and vines offer a relatively easy climb.
5. Anyone can join NDNS and it's free. The year-old society has been attracting members through word of mouth and sight- the image of men and women sitting atop trees in various city parks. Khanna has organized six outdoor camps in the past year and has taught around 30 people to climb trees. Once up, he briefs participants about the tree and its ecosystem. Details like what kind of fruit and flower it bears, their benefits, the shape and size of leaves, kinds of insects, birds and squirrels living on it, any folk tales associated with it are discussed and shared. Khanna says books, internet and hands-on experience working on farms is the source of his tree knowledge.
6. Tarun Mal, an agriculturist who lives in Gurgaon and runs a farm in Alwar, says the first time he climbed, he feared falling. "But once you're inside the canopy, it's a different world and you don't want to come down," he says. For Masrat Khan, a communication expert, the experience brings out the child in her. When not scaling trees, NDNS members are busy doing "guerilla gardening"- planting hardy local tree varieties like neem, babul and jamun wherever possible and often without permission. Their mission to cure tree blindness continues.

On the basis of your understanding of the passage answer the following questions with the help of the given options:

1) Verhaen Khanna is on a mission to cure

- i. Night blindness
- iii. Colour blindness

- ii. Tree blindness
- iv. Short sightedness

- 2) Spending time with nature and climbing trees has become a
 - i. spiritual exercise
 - ii. physical exercise
 - iii. aerobic exercise
 - iv. All the above
- 3) When climbing a straight trunk use
 - i. both arms in tandem
 - ii. both legs in tandem
 - iii. both arms and legs in tandem
 - iv. alternate arm and leg in tandem
- 4) When not scaling trees, NDNS members are busy doing
 - i. Tree Gardening
 - ii. Flower Gardening
 - iii. Guerrilla Gardening
 - iv. recruiting new members
- 5) Khanna is professionally a
 - i. tree climber
 - ii. businessman
 - iii. commercial pilot
 - iv. botanist
- 6) In addition to tree climbing what other activities does Khanna promote?
 - i. To make a fire, count GPS satellites and stars.
 - ii. To play outdoor games
 - iii. To read
 - iv. To plant trees
- 7) What education is being imparted to Delhiites by Verhaen Khanna?
 - i. is educating Delhiites about trees in a unique way- by teaching them how to do farming
 - ii. is educating Delhiites about trees in a unique way- by teaching them how to climb them
 - iii. is educating them to gain good knowledge about environment
 - iv. is educating them to gain good knowledge about environment through higher education
- 8) What is Anuj Wadhwa's opinion about nature and climbing trees?
 - i. It's an exciting experience
 - ii. It's always a great experience to feel relaxed
 - iii. It's a spiritual experience
 - iv. It's a wastage of time
- 9) What varieties of trees are planted by the NDNS members?
 - i. like neem, babul and jamun wherever possible
 - ii. Foreign varieties
 - iii. Regional varieties
 - iv. None of the above
- 10) Find words from the passage which mean the same as:
 - a) Biological environment (Para 2, 5)
 - i. Ecosystem
 - ii. Nature
 - iii. Ecological balance
 - iv. Biodiversity
- 11) Find words from the passage which mean the same as:
 - a) Excursion (Para 4)
 - i. Jaunts
 - ii. Tutorials
 - iii. Trips
 - iv. Ambitions

II. Answer the following questions in 40-50 words each:

- 1) "This is your last French lesson." How did Franz react to this declaration of M.Hamel?
- 2) Is it possible for Mukesh to realize his dream? Justify your answer?
- 3) Why did Kamala Das add the image of merry children to her poem?
- 4) Why did the booking clerk refuse to accept the money in third level?
- 5) What sort of hunts did the Maharaja offer to organize for the high-ranking British officer? What trait of the officer does it reveal?

III. Answer the following questions in 120-150 words each:

- 1) Everybody during the last lesson is filled with regret. Comment.
- 2) What change did Anees Jung see in Saheb when she saw him standing by the gate of the neighborhood club?

- 3) Why does Kamala Das compare her mother to a late winter's moon?
- 4) What is a first day cover? What is being inferred from Sam's letter to Charley?
- 5) The astrologer's prediction about the death of the Tiger King came to be true. Do you agree with this statement? Explain why or why not.

IV. Attempt the following questions:

- 1) You are Amar/Amrita, Secretary, Cultural Club, Aryamba Public School, Kochi. A charity show has been arranged in your school in aid of cancer patients. Write a notice to be displayed on the school notice board informing the students of the show and asking them to cooperate and make it a success. Draft the notice in about 50 words giving all necessary details.
- 2) Water supply will be suspended for eight hours (10 am to 6 pm) on 6th of March for cleaning of the water tank. Write a notice in about 50 words advising the residents to store water for a day. You are Karan Kumar/Karuna Bajaj, Secretary, Janata Group Housing Society, Palam Vihar, Kurnool.
- 3) You are Navid/Nafeesa of 10, Nehru Nagar, Ahmedabad. The 60 – foot wide main road in Nehru Nagar Market remains congested throughout the day, because of massive encroachments on both sides of the road, causing a lot of inconvenience to pedestrians, especially children and women. Write a letter to the editor of a national daily requesting him to highlight the problems faced by the residents, giving concrete suggestions for improving the situation.
- 4) Lack of job opportunities in rural areas is forcing people to migrate to cities. Every big city thus has a number of slums in it. Life in these slums is miserable. Write a letter in 120 – 150 words to the editor of a national newspaper on how we can improve the living conditions in these slums. You are Karan/Karuna, M114, Mall Road, Delhi.

ECONOMICS (030)

Q1. Assume there are only three industries in the imaginary economy, namely A, B and C. The following data about their transaction are given below:

- (i) A buys ₹100 worth goods from B, sells ₹200 worth of goods to C and ₹100 worth of goods to households.
- (ii) C sells ₹400 worth of goods to household.

Calculate the value of output and income generation by each of the above industries.

Q2. An economy has only two firms A and B. On the basis of following information about the firms, find out (a) Value added by firm A and B (b) GDP_{MP} .

Particulars	₹ in crores
(i) Exports by firm A	20
(ii) Imports by firm A	50
(iii) Sales to households by firm A	90
(iv) Sales to firm B by firm A	40
(v) Sales to firm A by firm B	30
(vi) Sales to household by firm B	60

Q3. Calculate GNP_{FC} by (a) Income Method (b) Expenditure Method:

Particulars	₹ in crores
(i) Sales by firm A	100
(ii) Purchases from firm B by firm A	40
(iii) Purchases from firm A by firm B	60
(iv) Sales by firm B	200
(v) Closing stock of firm A	20
(vi) Closing stock of firm B	35
(vii) Opening stock of firm A	25
(viii) Opening stock of firm B	45
(ix) Indirect taxes paid by both the firms	30

Q4. Calculate NVA_{FC} .

Particulars	₹ in crores
Price per unit of output	25
Output sold	1000
Excise duty	5000

Depreciation	1000
Change in stock	(-)500
Intermediate cost	7000

Q5. From the following data about a firm X for the year 2000-01, calculate the net value added at market price during that year:

Particulars	₹ in crores
(i) Sales	90
(ii) Closing stock	25
(iii) Opening stock	15
(iv) Indirect taxes	10
(v) Depreciation	20
(vi) Intermediate consumption	40
(vii) Purchases of raw material	15
(viii) Rent	5

Q6. Calculate value added by firm A and firm B.

Particulars	₹ in crores
(i) Domestic sales by firm A	4,000
(ii) Exports by firm A	1,000
(iii) Purchases by firm A	1,200
(iv) Sales by firm B	2,940
(v) Purchases by firm B	1,800

Q7. Calculate GVA_{FC}

Particulars	₹ in crores
(i) Sales	180
(ii) Rent	5
(iii) Subsidies	10
(iv) Change in stock	15
(v) Purchases of raw material	100
(vi) Profits	25

Q8. Calculate 'intermediate consumption'

Particulars	₹ in crores
(i) Value of output	200
(ii) Net value added at factor cost	80
(iii) Sales tax	15
(iv) Subsidies	5
(v) Depreciation	20

Q9. Calculate 'intermediate consumption'

Particulars	₹ in crores
(i) Net value added at factor cost	300
(ii) Intermediate consumption	200
(iii) Indirect tax	20
(iv) Depreciation	30
(v) Change in stock	(-)50

Q10. Calculate GDP_{MP}

Particulars	₹ in crores
(i) Private final consumption expenditure	15,000
(ii) Government final consumption expenditure	11,500
(iii) Gross fixed capital formation	1,000
(iv) Increase in stock	200
(v) Exports	500

(vi) Imports	700
(vii) Capital consumption allowances	650
(viii) Net indirect taxes	500

Q11. Calculate National income:

Particulars	(₹)
(i) Opening stock	50
(ii) Closing stock	60
(iii) Consumption of fixed capital	10
(iv) Private final consumption expenditure	500
(v) Net exports	(-)25
(vi) Net factor income from abroad	10
(vii) Compensation of employees	100
(viii) Direct purchases of non-durable goods from abroad by general government	10
(ix) Net purchases of goods and services by general government in domestic market	100
(x) Net capital formation	160
(xi) Net indirect taxes	150

Q12. Calculate National income:

Particulars	₹ in crores
(i) Private final consumption expenditure in domestic market	1750
(ii) Government final consumption expenditure	100
(iii) Consumption of fixed capital	25
(iv) Net exports	(-) 25
(v) Net factor income from abroad	(-) 20
(vi) Gross fixed capital formation	300
(vii) Change in stock	50
(viii) Direct purchases from abroad by resident household	50
(ix) Direct purchases by non-resident in domestic market	100
(x) Net indirect taxes	100

Q13. Calculate NNP_{MP}

Particulars	₹ in crores
(i) Private final consumption expenditure	200
(ii) Net indirect taxes	20
(iii) change in stock	(-) 5
(iv) Net current transfer from abroad	(-) 10
(v) Government final consumption expenditure	50
(vi) Consumption of fixed capital	15
(vii) Net fixed capital formation	30
(viii) Net factor income from abroad	5
(ix) Net imports	10

Q14. Calculate NNP_{FC}

Particulars	₹ in crores
(i) Government final consumption expenditure	60
(ii) Net exports	10
(iii) Change in stock	5
(iv) Consumption of fixed capital	20
(v) Private final consumption expenditure	250
(vi) Net factor income from abroad	(-) 5
(vii) Net domestic capital formation	40
(viii) Net current transfers from abroad	10
(ix) Net indirect taxes	15

means of transportation. The consumer could navigate narrow lanes and bypass traffic congestion problems. The business started growing at 20% month month. Today, it is successfully operating in twelve cities with more than 60,000 consumers. Subhash and his continuously monitor the business environment to improve its present performance so that the business continues to succeed in the long-run also. Identify the point of importance of business environment discussed in the above pan.

- (a) It enables the firm to identify opportunities and getting the first mover advantage
- (b) It helps in improving performance
- (c) It helps the firm to identify threats and early warning signals.
- (d) It helps in tapping useful resources.

Q4. The Court passed an order to ban polythene bags as:

- (i) The bags are creating many environmental problems which affect the life of people in general.
- (ii) Society in general is more concerned about quality of life.

The Government decided to give subsidy to jute industry to promote this business.

Innovative techniques are being developed to manufacture jute bags at low rates. Incomes are rising and people can afford to buy these bags.

Identify the dimension of Business Environment from the line given below:

‘The Government decided to give subsidy to jute industry to promote

- (a) Legal environment
- (b) Social environment
- (c) Political environment
- (d) Technological environment

Q5. Indian ethnic wear like sarees are in great demand in India but Italy does not have such a high demand for same. Which feature of business environment is reflected from this statement?

- (a) Inter-relatedness
- (b) Uncertainty
- (c) Complexity
- (d) Relativity

Q6. The Indian sweet industry has been through many changes over the years. Identifying the growing trend toward healthier options, Ajay Verma started ‘Guilt-free Sweets’, offering variety of sugar-free sweets to the customers. The dimension of business environment highlighted above is:

- (a) Social environment
- (b) Economic environment
- (c) Political environment
- (d) Technological environment

Q7. Sarvodaya Palace is a 40-year-old established hotel in Udaipur. However, recently the travelers started looking for free WiFi, early check in and pet care facilities. The manager sensing the shifts in consumer’s preferences upgraded the hotel and its policies to accommodate all of these. Which feature of business environment is highlighted in the above case?

- (a) Complexity
- (b) Dynamic nature
- (c) Uncertainty
- (d) Reality

Q8. Mohammad Kanjiwal, a beekeeper since April 2021 is now part of the growing tribe of at least 50 urban dwellers across Maharashtra raising bees and harvesting honey in their balconies, rooftops and back gardens. As he had been focussed on eating right the thought of domesticating honey bees to promote healthy consumption habits and seeing honey being cultivated right before his eyes was mesmerising for him. Identify the factor constituting the general environment being discussed above.

- (a) Economic environment
- (b) Social environment
- (c) Technological environment
- (d) Political environment

In an environment of rising petroleum prices and a large middle class population in India. KV Motors Ltd. Recognized the need for small cars in India. It created a product far superior than their competitors not only in terms of quality but also in terms of overall driving experience. It soon became the leader in the small car market. As the Indian government was encouraging foreign investment, MNCs having a big name in car manufacturing entered the Indian market. KV Motors further expanded its service network and quality creating an entry barrier for the competitors. It depicted its strengths through various brand-building activities. As a result, the market share of KV Motors is refusing to go down in spite of all major automakers as its competitors.

- Q9.** 'Threats to law and order' is an example of _____ environment of business.
- (a) Social environment (b) Political environment
(c) Technological environment (d) Legal environment
- Q10.** Just after declaration of lok sabha election 2014 results, the Bombay Stock Exchange's price Index (Sensex) rose by 1000 points in a day. Identify the environmental factors which led to this rise.
- (a) Social environment (b) Political environment
(c) Technological environment (d) Legal environment

- Q11.** Match the dimension/element of business environment in Column I with respective component in Column II:

Column I	Column II
A. Economic Environment	(i) Balance of payments and changes in foreign exchange reserves.
B. Social Environment	(ii) Scientific improvements and innovation.
C. Political Environment	(iii) Planned outlay in private and public sectors.
D. Legal Environment	(iv) The companies Act 2013

- (a) (i), (iv), (ii), (iii) (b) (i), (iv), (iii), (ii)
(c) (iii), (i), (ii), (iv) (d) (ii), (iii), (i), (iv)
- Q12.** After the adoption of various economic reforms by the Indian government, the business scenario in the country has changed. Earlier, the firms used to produce first and go to the market for sale later. But now-a-days firms analyse the needs and wants of the consumers first and then produce goods accordingly.
- Identify the impact of government policy changes on business and industry in India, mentioned in the above case.
- Q13.** "On Your Marks" is a good shoe manufacturing company. The company is the first to start a shoe having a unique technology giving it a long life. However the company knows that it exists in an environment where everything around it counts; so everything around it matters. Therefore, it is trying to observe every small aspect of the business environment. There are various factors which are closely related to each other and can't be understood in isolation like change in lifestyle which can be linked to the improved demand of technologically advanced shoes. However, the company can't be self-satisfied. It will have to adjust to rapidly changing technology, fragmentation of market, changing brand loyalties, etc. It has got good man power and a very well established production department. It knows that various resources in the form of inputs have to be transformed into the best products and sold for increasing its revenue. However, there are various challenges which the company is facing. These are in the form of protests done by labour unions throughout the country which sometimes assume the form of strikes. The board of directors is keen to adapt to this difficult situation. Government is playing a very positive role, like it did a few years back, and is freeing the business environment from unnecessary restrictions and government controls. The company is hopeful of emerging as a winner under such government support.
- (a) Which features of business environment are highlighted in the above case?
(b) Identify the importance of business environment highlighted in the above case?
(c) Which dimension of business environment is highlighted above?
(d) Which economic reform is discussed in the last part of the case?
- Q14.** After completing her MBA, HINA took up a job with a multinational company named COMVIL. The company paid good salaries and perks to its employees. The wages were within the paying capacity of the company that provided the employees with a reasonable standard of living. The company also had a good work-culture and the behavior of superiors was very good towards their subordinates. HINA was very happy in this organization but due to long working hours, she did not have time to

OR

A partner withdrew ₹4,000 per month from 1st July, 2021, in the beginning of every month and interest on drawings was calculated as ₹1,500 at the end of accounting year 31st March 2022. What is the rate of interest on drawings charged?

- (a) 6% p.a. (b) 8% p.a. (c) 10% p.a. (d) 12% p.a.

Q4. Capital employed by a partnership firm is ₹10,00,000. Its average profit is ₹1,20,000. The normal rate of return in similar type of business is 10%. What is the amount of super profit?

- (a) ₹12,000 (b) ₹20,000 (c) ₹1,00,000 (d) ₹1,12,000

OR

X and Y are partners in a firm with capital of ₹1,80,000 and ₹2,00,000. Z was admitted for 1/3rd share in profit and brings ₹3,40,000 as capital. Calculate the amount of goodwill.

- (a) ₹2,40,000 (b) ₹1,00,000 (c) ₹1,50,000 (d) ₹3,00,000

Q5. A and B were partners in a firm sharing profit and losses in the ratio of 3:2. C is admitted for 1/4th Share in profits, on that date Workmen Compensation Reserve stood in the Balance Sheet at ₹60,000. Workmen Compensation claim was ₹70,000. How much share of Workmen Compensation Reserve will be credited to C's Capital Account?

- (a) ₹10,000 (b) ₹3,333 (c) Nil (d) ₹1,667

Q6. Question No. 6 and 7 are based on the given text. Read the text carefully and answer the questions:

X, Y and Z who are sharing profits in the ratio of 5:3:2, decide to share profits in the ratio of 2:3:5 with effect from 1st April, 2022. Workmen Compensation Reserve appears at ₹1,20,000 in the Balance Sheet as at 31st March, 2022.

Workmen Compensation Claim is estimated at ₹1,50,000

- (a) Shown on Liability side of the Balance Sheet ₹1,50,000
(b) Credited to Partners Capital A/c ₹1,20,000
(c) Debited to Revaluation A/c ₹1,50,000
(d) Credited to Revaluation A/c ₹1,20,000

Q7. Workmen Compensation Claim is estimated at ₹80,000

- (a) Credited to Partners Capital A/c ₹40,000
(b) Credited to Revaluation A/c ₹1,20,000
(c) Shown on Liability side of the Balance Sheet ₹1,20,000
(d) Debited to Revaluation A/c ₹80,000

Q8. X, Y and Z are partners in a firm sharing profits and losses in the ratio of 6: 4 :1. X guaranteed a profit of ₹15,000 to Z. The net profit for the year ended 31st March 2022 was ₹99,000. X's share in the profit of the firm will be: -

- (a) ₹30,000 (b) ₹15,000 (c) ₹48,000 (d) ₹24,000

OR

On 31st March 2022, closing capital of A, B and C showed a balance of ₹20,000, ₹18,000 and ₹12,000 respectively. The profit for the year ended was ₹36,000 and partners drawings had been A ₹3,600, B ₹4,500 and C ₹2,700. Calculate opening capital.

- (a) A= ₹8,600, B= ₹10,500 and C= ₹8,700 (b) A= ₹7,600, B= ₹11,500 and C= ₹8,200
(c) A= ₹11,600, B= ₹10,500 and C= ₹2,700 (d) A= ₹9,500, B= ₹5,500 and C= ₹5,600

Q9. Kashyap, Bharadwaj and Vishwamitra are partners in a firm sharing profits and losses in the ratio 3:3:2. On 1st April 2021 their capital balances stood at ₹90,000, ₹80,000 and ₹70,000 respectively. The partnership deed provides interest on capital at 12% p.a. During the year 2021-22, the Net Profit of the firm was ₹1,20,000 distributed equally among the partners without providing interest on capital. You are required to pass an adjustment journal entry to rectify the errors. Show your working clearly.

Q10. A, B and C are partners sharing profits and losses in the ratio of 3:2:1. With effect from 1st April, 2022 they agree to share profits equally. For this purpose, goodwill is to be valued at two year's purchase of the average profit of last four years which were as follows:

Year ending on 31st March, 2019 ₹50,000 (Profit)

Year ending on 31st March, 2020 ₹1,20,000 (Profit)

Year ending on 31st March, 2021 ₹1,80,000 (Profit)

Year ending on 31st March, 2022 ₹70,000 (Loss)

On 1st April, 2021 a Motor Bike costing ₹50,000 was purchased and debited to travelling expenses account, on which depreciation is to be charged @ 20% p.a by Straight Line Method. The firm also paid an annual insurance premium of ₹20,000 which had already been charged to Profit and Loss Account for all the years.

Journalize the transaction along with the working notes.

- Q11.** (a) M/s Aradhya having the assets of ₹10,00,000 and Liabilities of ₹4,20,000. The firm earns the annual profit of ₹90,000. The rate of interest expected from the capital having regard to the risk involved is 15%. Calculate the amount of Goodwill by Capitalization of Super Profit method.
- (b) A earns ₹1,20,000 as its annual profits, the rates of normal profit being 10%. The assets of the firm amounted to ₹14,40,000 and liabilities to ₹4,80,000. Find out the value of goodwill by average capitalization method.
- Q12.** Mohan, Sohan and Suresh were partners in a firm sharing profits in the ratio of 2:2:1. Suresh was guaranteed a profit of ₹70,000. Any deficiency on account of guarantee to Suresh was to be borne by Mohan and Sohan in 3:2 ratio. The profit of the firm for the year ended 31.3.2022 amounted to ₹2,00,000. Prepare Profit and Loss Appropriation Account of the firm for the year ended 31.3.2022.
- Q13.** Asha, Rina, and Chahat were partners in a firm sharing profits and losses in the ratio of 2:2:1 Their balance sheet as at 31st March 2019 was as follows :

Balance Sheet of Asha, Rina and Chahat as at 31st March 2019.

Liabilities		Amount (₹)	Assets		Amount (₹)
Creditors		12,00,000	Plant and Machinery		14,80,000
General Reserve		2,00,000	Stock		2,20,000
Capital:			Sundry Debtors		2,60,000
Asha	3,00,000		Less: Provision for doubtful debts		(20,000)
Rina	2,00,000				2,40,000
Chahat	1,00,000	6,00,000	Bank		60,000
		20,00,000			20,00,000

Asha, Rina, and Chahat decided to share future profits equally with effect from 1st April, 2019. For this, it was agreed that:

(i) Goodwill of the firm be valued at ₹1,50,000.

(ii) Bad debts amounted to ₹40,000. A provision for doubtful debts was to be made @ 5% on debtors. Pass the necessary journal entries to record the above transactions in the books of the firm.

- Q14.** 'B' and 'C' are partners sharing profits in the ratio of 3:2. Following is the Balance sheet as on 31/03/2022.

Balance Sheet

Liabilities	Rs.	Assets	Rs.
Partners' capital account		Land and Building	80,000
B-	60,000	Furniture	10,000
C-	40,000	Machinery	20,000
Provision for bad debts	1,000	Debtors	25,000
Creditors	60,000	Cash	16,000
		Profit & Loss a/c	10,000
	1,61,000		1,61,000

D was admitted as a partner for 1/5th share on the following terms-

- (a) The new ratio of the partners is 2:2:1.
- (b) D brings ₹30,000 as her capital and ₹15,000 as her share of goodwill.
- (c) Half of the goodwill is withdrawn by the old partners.
- (d) A provision of 5% is to be maintained for doubtful debts.
- (e) An item of ₹500 included in sundry creditors is not likely to arise

(f) A provision of ₹800 was to be made for damages against the firm. After making the above adjustments the capital accounts of B and C to be adjusted on the basis of D's capital brought in the firm. Actual cash to be brought in or paid in cash. Prepare Revaluation Account and Partners Capital Account

APPLIED MATHEMATICS (241)

Numbers, Quantification and Numerical Applications, Numerical Inequality, Matrices

- Q1.** Find $7^6 \pmod{3}$.
- Q2.** If $x \pmod{9} = 2$, find all the possible values of x ; where $0 < x < 47$.
- Q3.** Verify that the relation $\varphi(p) + \tau(p) = \sigma(p)$ holds true for $p = 24$.
- Q4.** The average salary per head of the entire staff of a small factory including the supervisor and labours is Rs.5750. The average salary per head of the supervisor is Rs.20,000 and that of the labours is 5000. Find the number of labours in the factory if there are 4 supervisors.
- Q5.** A container has 50 l of juice in it. 5 l of juice is taken out and is replaced by 5 l of water. This process is repeated 4 more times. What is the amount of juice in the container after final replacement?
- Q6.** A boat goes 8 km upstream and then returns. Total time taken is 4 hours 16 minutes. If the speed of current is 1 km/hr, find the actual speed of the boat.
- Q7.** A man can row $7\frac{1}{2}$ km/h in still water. If in a river running at 1.5 km an hour, it takes him 50 minutes to row to a place and back, how far off is the place?
- Q8.** A cistern can be filled in 8 hours but due to a leakage in its bottom, it takes 2 hours more to fill the tank. If the cistern is full, how much time will the leakage take to empty it?
- Q9.** Two pipes A and B can fill a tank in 24 minutes and 32 minutes respectively. If both the pipes are opened simultaneously, after how much time B should be closed so that the tank is full in 18 minutes?
- Q10.** In a 1000 metres race, A can give a start of 100 metres to B and a start of 280 metres to C. In the same race, how much start can B give to C?
- Q11.** A team played 40 games in a season and lost in 16 of them. What percent of games played did the team win?
- Q12.** Show that the numbers 16 and 4, satisfy the numerical inequality $AM \geq GM$.
- Q13.** Prove that the following inequality holds true: $\sqrt{5} + \sqrt{3} > \sqrt{6} + \sqrt{2}$.
- Q14.** Satyarth and Swarit are brothers, Satyarth owns a house which is worth Rs.3 crore and Swarit owns a farmhouse which is worth Rs.2.75 crores. But Satyarth has a debt of Rs.55 lakhs, if they both sell their properties then which of the following statement(s) holds true to represent the above data mathematically:
a) Satyarth's net worth is more than Swarit's net worth.
b) Swarit's net worth is more than Satyarth's net worth.
c) $2.55 < 2.75$
- Q15.** Insert the appropriate sign of inequality: $\sqrt{3}(\sqrt{50} - \sqrt{\sqrt{32}})$ _____ $3\sqrt{54} + 2\sqrt{24}$.
- Q16.** Construct matrix $A = [a_{ij}]$ of order 2×3 where $a_{ij} = \frac{(i+j)^2}{2}$
- Q17.** A matrix has 14 elements. How many matrices of different orders are possible?
- Q18.** How many distinct 2×2 matrices can be formed by using numbers 5, 7 and -1? Justify your answer.
- Q19.** A matrix has 14 elements. How many matrices of different orders are possible?
- Q20.** Identify the type of matrices given below and write the order of each matrix: $A = \begin{bmatrix} 2 & 3 \end{bmatrix}$

INFORMATICS PRACTICES (065)

- Q1.** The Doc_name Column of a table Hospital is given below: **(Board-2011)**

Docname
Avinash
Hariharan
Vinayak
Deepak
Sanjeev

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

- (i) Select doc_name from Hospital where doc_name like "%v";
(ii) Select doc_name from Hospital where doc_name like ":%e%";

- Q2.** Sarthak, a student of class XII, created a table “Class”. Grade is one of the columns of this table. To find the details of students whose Grades have not been entered, he wrote the following MySQL query, which did not give the desired result. **(Board-2011)**

SELECT * FROM Class WHERE Grade="Null";

Help Sarthak to run the query by removing the errors from the query and write the correct Query.

- Q3.** In a database there are two tables “ITEM” and “CUSTOMER” as shown below:

Table: Employee

EmpId	Name	Sal	Deptno
T001	Vishakha	34000	10
T001	Mridul	32000	50
T001	Manish	45000	20

Table: Dept

Deptno	DName	LocationId
10	Lights	HH02
20	Dance	FF02
30	Production	AB01

Write the command in SQL queries for the following:

- (i) To display the details of Items whose Price is in the range of 40 and 95 (Both values included)
 (ii) To display the CustomerName, City from table Customer and ItemName and Price from table Item, with their corresponding matching ID.

To increase the price of all the products by 50.

- Q4.** Mr. Sanghi created two tables with CITY as Primary key in Table1 and Foreign Key in Table2. While inserting a row in Table2, Mr. Sanghi is not able to enter a value in the column CITY. What could be the possible reason for it? **(Board-2012)**

- Q5.** Write a SQL command to view the constraints of EMP table. **Board-2012**

- Q6.** What is the difference between CURDATE () and DATE () functions? **Board-2013**

- Q7.** Mrs. Kumar is using table STUDENTS with the following columns: **(Board-2014)**

RNO, ADMNO, NAME, AGGREGATE

She wants to display all information of students in descending order of name and within ascending order of aggregate. She wrote the following SQL query and she did not get the desired output:

SELECT * FROM STUDENTS ORDER BY NAME, AGGREGATE DESC;

- Q8.** A numeric column MONEY contains 34567.7896. Write a command to truncate MONEY. **(Board-2014)**

- (i) Up to 2 decimal places. (i.e. expected result 34567.78)
 (ii) Up to -3 places (i.e. expected result 34000)

- Q9.** While using SQL pattern matching, what is the difference between ‘_’ (underscore) and ‘%’ wildcard symbols? **(Board-2015)**

- Q10.** (i) Name 2 Group (Aggregate) functions of SQL. **(Board-2016)**

(ii) Consider the table:

Table: Company

CompanyCode	Donations
C101	13000
C102	NULL
C104	7000
C105	4000

What output will be displayed by the following SQL statement:

SELECT AVG(Donations) FROM Company;

- Q11.** How is HAVING clause similar to WHERE clause? How is HAVING clause different from WHERE clause? Explain with the help of examples of each. **(Board-2017)**

- Q12.** Consider the table EXAM given below. Write commands in MySQL for (i) to (iv) and output for (v) to (vii)

No	Name	Stipend	Subject	Average	Division
1	Karan	400	English	68	FIRST
2	Aman	680	Mathematics	72	FIRST

3	Javed	500	Accounts	67	FIRST
4	Bishakh	200	Informatics	55	SECOND
5	Sugandha	400	History	35	THIRD
6	Suparna	550	Geography	45	THIRD

- To list the names of those students, who have obtained Division as FIRST in the ascending order of NAME?
- To display a report listing NAME, SUBJECT and Annual stipend received assuming that the stipend column has monthly stipend.
- To count the number of students, who have either accounts or informatics as subject?
- To insert a new row in the table EXAM: 6,"Mohan",500,"English",73,"Second"
- SELECT AVG(Stipend) FROM EXAM WHERE DIVISION="THIRD"
- SELECT COUNT(DISTINCT Subject) FROM EXAM;
SELECT MIN(Average) FROM EXAM WHERE Subject="English";

Q13. A table STUDENT has 4 rows and 2 columns and another table TEACHER has 3 row and 4 columns. How many rows and columns will be there if we obtain the Cartesian product of these two tables?

(Board-2012)

Q14. In the Database –SAMS and VENDOR are two tables with the following information. Write MySQL queries for (i) to (iii), based on the tables SAMS and VENDORS.

(Board-2014)

Table: SAMS

Icode	IName	Price	Colour	VCode
S001	Refrigerator	20000	Blue	P01
S002	Mobile Phone	45000	Black	P02
S003	LCD	60000	Silver	P03
S004	Washing Machine	12500	Smoke	P01
S005	Air Conditioner	16000	White	P03

Table: VENDOR

VCode	VName
P01	Satish
P02	Manoj
P03	Subodh
P04	Jacob

- To display ICode, IName and VName of all the Vendors, who manufacture "Refrigerator"
- To display IName, ICode, VName and Price of all the products whose price is more than 20000.
To display vendor names and names of all items manufactured by vendor whose code is "P03"

Q15. In a database company, there are two tables given below:

(Board-2015)

Table: SALES

SALESMANID	NAME	SALES	LOCATIONID
S1	ANITA SINGH ARORA	250000	102
S2	Y.P.SINGH	1300000	101
S3	TINA JAISWAL	1400000	103
S4	GURDEEP SINGH	1250000	102
S5	SIMI FAIZAL	1450000	103

Table: Vacation

LOCATIONID	LOCATIONNAME
101	Delhi
102	Mumbai
103	Kolkata
104	Chennai

Write SQL queries for the following:

- To display SalesmanID, names of salesmen, LocationID with corresponding locationnames.
- To display names of salesmen, sales and corresponding location names who have achieved Sales more than 1300000.

- (iii) To display names of those salesmen who have 'SINGH' in their names.
- (iv) Identify Primary key in the table SALES. Give reason for your choice.
- (v) Write SQL command to change the LocationID to 104 of the Salesman with ID as S3 in the table 'SALES'.

PHYSICAL EDUCATION (048)

VERY SHORT TYPE OF QUESTION:-

- Q1. How many rounds will be played according to knock out basis if the number of teams are 33?
- Q2. How many teams are kept in first quarters if the total number of teams are 29?
- Q3. How many teams are kept in first and third quarters if the total number of teams are 30?
- Q4. How many types of Amenorrhea are there?
- Q5. In which triad female athlete tries to lose their body weight?
- Q6. How many types of Eating disorder are there?

DESCRIPTIVE TYPE OF QUESTION:-

- Q1. How many functions are there of sporting events, explain it briefly.
- Q2. Describe a role of any five committees to organize a sports events.
- Q3. Draw a fixture of 23 teams on the basis of knock out method.
- Q4. Draw a fixture of 12 teams on the basis of knock out method.
- Q5. Draw a fixture of 26 teams on the basis of knock out method.
- Q6. Draw a fixture of 20 teams on the basis of knock out method and 4 teams are to be kept as a special seeded teams.
- Q7. Draw a fixture of 24 teams on the basis of knock out method and 4 teams are to be kept as a special seeded teams.
- Q8. Draw a fixture of 28 teams on the basis of knock out method and 2 teams are to be kept as a seeded teams.
- Q9. Draw a fixture of 14 teams on the basis of knock out method and 2 teams are to be kept as a seeded teams.
- Q10. Draw a fixture of 8 teams on the basis of cyclic method.
- Q11. Draw a fixture of 11 teams on the basis of staircase method.
- Q12. Write causes, precautions and any four remedies of Kyphosis.
- Q13. Write causes, precautions and any four remedies of Scoliosis.
- Q14. Write causes, precautions and any four remedies of Knock knee.
- Q15. Write causes, precautions and any four remedies of Bow leg.
- Q16. Write causes, precautions and any four remedies of Round shoulder.
- Q17. Define Kyphosis and Lordosis.
- Q18. Define Scoliosis and Flat foot.
- Q19. Define Bow leg and Knock knee.
- Q20. Define Menarche and Menstrual dysfunction.
- Q21. Define Osteoporosis and Amenorrhea.
- Q22. Describe the factors of Amenorrhea.
- Q23. Explain the types of eating disorder.
- Q24. Explain the factors of Osteoporosis.

Yuval Noah Harari on what the year 2050 has in store for humankind

"As the pace of change increases, the very meaning of being human is likely to mutate and physical and cognitive structures will melt"

Forget programming - the best skill to teach children is reinvention. In this exclusive extract from his new book, the author of *Sapiens* reveals what 2050 has in store for humankind.

Part one: Change is the only constant

Humankind is facing unprecedented revolutions, all our old stories are crumbling and no new story has so far emerged to replace them. How can we prepare ourselves and our children for a world of such unprecedented transformations and radical uncertainties? A baby born today will be thirty-something in 2050. If all goes well, that baby will still be around in 2100, and might even be an active citizen of the 22nd century. What should we teach that baby that will help him or her survive and flourish in the world of 2050 or of the 22nd century? What kind of skills will he or she need in order to get a job, understand what is happening around them and navigate the maze of life?

Unfortunately, since nobody knows how the world will look in 2050 – not to mention 2100 – we don't know the answer to these questions. Of course, humans have never been able to predict the future with accuracy. But today it is more difficult than ever before, because once technology enables us to engineer bodies, brains and minds, we can no longer be certain about anything – including things that previously seemed fixed and eternal.

A thousand years ago, in 1018, there were many things people didn't know about the future, but they were nevertheless convinced that the basic features of human society were not going to change. If you lived in China in 1018, you knew that by 1050 the Song Empire might collapse, the Khitans might invade from the north, and plagues might kill millions. However, it was clear to you that even in 1050 most people would still work as farmers and weavers, rulers would still rely on humans to staff their armies and bureaucracies, men would still dominate women, life expectancy would still be about 40, and the human body would be exactly the same. Hence in 1018, poor Chinese parents taught their children how to plant rice or weave silk, and wealthier parents taught their boys how to read the Confucian classics, write calligraphy or fight on horseback – and taught their girls to be modest and obedient housewives. It was obvious these skills would still be needed in 1050.

Read the rest of the article at: <https://www.wired.co.uk/article/yuval-noah-harari-extract-21-lessons-for-the-21st-century>