

Model Question Paper of Accountancy for Class XII
Topic-Financial Statements of not-for-profit organisation

Time: 3 Hours
80

Maximum Marks:

General Instructions:

- 1. All questions are Compulsory.**
- 2. All Parts of the Questions should be attempted at one place.**

1. State the meaning of Not-for-profit organisation. 1
2. How is 'Sale of old newspapers and magazines' treated in Not-for-profit organisation?
1
3. What is meant by Fund Based Accounting? 1
4. During the year 2017 a club received ₹1,00,000 as entrance fees. According to accounting policy for the club 40% of the entrance fees is to be capitalised. How will you deal with entrance fees received by Not-for-profit organisation? 1
5. Write any one limitation of receipts and payments account? 1
6. What is Endowment fund? 1
7. Give two main sources of income of a Not- for-profit organization. 1
8. Name two items which do not appear in receipts and payments account. 1
9. Define Subscription, Donation and Legacy. 3
10. A club has 500 members each paying annual subscription of ₹ 100 received in advance for the current year ₹ 10,000. Subscription received during the year ₹ 30,000. Calculate the amount of outstanding subscription. 3
11. State any three features of income and expenditure account. 3
12. Write any three differences between Receipt & Payment account and Income & Expenditure account. 3
13. From the given information, find out the amount of stationery to be debited to Income & Expenditure a/c for the year ended 31.12.2017. 4

Particulars	2016(₹)	2017(₹)
Payment to Creditors during the year		6,500
Stock of stationery	1,500	1,200
Creditors outstanding for stationery	4,800	6,500
Advance to Creditors	600	800

14. Match Fund ₹ 14,000; Match Expenses ₹ 25,000; Donation for Match Fund ₹ 5,000; Sale of Match Tickets ₹4,000. How this information will be treated in the books of 'not-for-profit organisation'?
4
15. Explain the meaning and treatment of Life membership fees and Honorarium. 4
16. How will you deal with the following items while preparing income & expenditure account of club for the year ending 31st Dec. 2017: 4

Particulars	2016	2017

Locker's Rent outstanding	400	500
Advance Locker's Rent	600	300

Locker's rent received during the year ₹ 9,500.

17. What is receipts and payments account? State its features.

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18. From the following Receipts and Payment Account of Pioneer Cricket Club and from the information supplied, prepare Income and Expenditure Account for the year ended 31st March, 2016.

RECEIPTS AND PAYMENTS ACCOUNT
For the year ended 31st March, 2016

Receipts	₹	Payments	₹
To Balance b/d		By Salaries	11,000
Cash 3,520		By Match Expenses	13,240
Bank 27,380		By Maintenance	6,820
6% Fixed Deposit 30,000	60,900	By Crockery	2,650
To Subscriptions	40,000	By Conveyance	820
(including ₹ 6,000 for 2014-15)		By upkeep of Lawns	4,240
To Entrance fees	2,750	By Postage and Stationery	1,050
To Donation	5,010	By Cricket Goods	9,720
To Interest on fixed deposits	900	By Sundry Expenses	2,000
To Tournament fund	20,000	By Investment	5,700
To Sale of crockery (Book value ₹ 1,200)	2,000	By Tournament Expenses	18,800
		By Balance C/d	
		Cash 2,200	
		Bank 23,320	
		6% Fixed Deposit 30,000	55,520
	1,31,560		1,31,560

Additional Information:

- Salary outstanding is ₹ 1,000
- Opening balance of stock of postage and stationery and cricket goods is ₹ 750 and ₹ 3,210 respectively. Closing stock of the same is ₹ 900 and ₹ 2,800 respectively.
- Outstanding subscriptions for 2014-15 and 2015-16 are ₹ 6,600 and ₹ 8,000 respectively.

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19. From the following Receipts and Payments Account and information given below, you are required to prepare Income and Expenditure Account for the year ending 31st March 2016:-

6

Receipts	Amount	Payments	Amount
To balance b/d	19,550	By General Expenses	6,200
To Subscriptions:		By Match Expenses	850
2015 1,200		By 10%, Fixed Deposits	12,000
2016 26,500		By Books	4,000
2017 500		By Salaries	3,600
-----	28,200	By Rent	5,500
To Sale of Old Newspapers	250	By 8%, Investments	8,000

To Sale of Furniture (Book value Rs. 5, 000)	3, 700	By Legal Charges	850
To Donation	850	By Furniture	14, 000
To Donation for Building	13, 000	By balance c/d	15, 000
To Interest on Fixed Deposit	450		
To Entrance Fee	2, 000		
To Legacy	2, 000		
	70,000		70,000

Additional Information: -

- 25% of Entrance Fee was to be capitalised.
- Depreciate Furniture by 20%.
- Outstanding Salaries were ₹ 400, Prepaid Rent was ₹ 1, 500.

20. Prepare an Income and Expenditure Account for the year ended 31st March 2017 from the following particulars of Arts club which organises art competitions for disabled people during the year:

Receipts and Payments account (for the year ended 31.03.2017)

Receipt	₹	Payment	₹
To balance b/d	32,500	By Salaries	31,500
To Subscriptions	70,300	By Postage	1,250
To Donation (Billiards Table)	90,000	By Rent	9,000
To Entrance fees	1,100	By Printing & stationery	14,000
To Sale of old magazines	450	By Sports material	11,500
		By Miscellaneous expenses	3,100
		By Furniture	20,000
		By 10% Investments (on 1.7.16)	70,000
		By Balance c/d	34,000
	1,94,350		1,94,350

Additional information:

- ₹ 4,700 is still in arrears for the year 2016-17 for subscription.
- Value of sports material at the beginning and the end of the year was ₹ 3, 000 and ₹ 4,500 respectively.
- Depreciation to be provided @10% p.a. on furniture.

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21. Differentiate between :

- Receipts & payments account and Cash book
- Income & Expenditure Account and Profit & loss account (3+3=6)

22. From the following Receipts and payments Account of Cosmo Club, from the information supplied, prepare the Income and Expenditure account for the year ended December 31st, 2017 and balance sheet as at that date:

Receipt and Payment account

for the year ended 31st December, 2017

Receipts		₹	Payments		₹
To balance b/d		250	By Salaries		1,200
To Subscriptions:			By General Expenses		300
2016	250		By Electricity Charges		200
2017	1000		By Books		100
2018	200	1,450	By Newspapers		400
To Sale of old furniture (costing ₹100)		60	By Postage		50
To Rent received for use of hall		740	By furniture		250
To profit from entertainment		400			
To sale of old Newspapers		100	By Balance c/d		500
		3000			3000

Additional Information:

- a) The club has 50 members each paying an annual subscription of ₹25. Subscriptions Outstanding on 31st December, 2016 were to value of ₹3,00.
- b) On the 31st December, 2017, Salaries outstanding amounted to ₹100. Salaries paid included ₹100 for the year 2016.
- c) On January 1, 2017 the club owned land and buildings valued at ₹10,000, Furniture worth ₹600 and Books ₹500

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23. Following are the particulars of cash transactions of Geeta Pustakalaya Allahabad for the year ended 31st December 2017.

Receipts	Amt.	Payments	Amt.
To balance b/f	1319	By rent and rates	168
To entrance fees	255	By wages	245
To subscriptions	1600	By lighting	72
To donation	165	By lecturers fee	435
To life membership fee	250	By books	213
To interest	14	By office expenses	450
To profit on entertainment	42	By 3% fixed deposits (1.7.2017)	800
		By bank balance	242
		By cash in hand	1020
	3,645		3,645

Library has books worth ₹ 2,000 and furniture worth ₹ 850 in the beginning of year. Outstanding subscription was ₹ 35 in the beginning of year and ₹ 45 at the end of year. Outstanding rent was ₹ 60 in the beginning as well as at the end of year. Charge depreciation ₹ 50 on Furniture and ₹ 113 on Books.

You are required to prepare Income and Expenditure Account and Balance Sheet of Pustakalaya as on 31st December 2017. 8

KENDRIYA VIDYALAYA IIT GUWAHATI CHAPTER-1 NATURE AND SIGNIFICANCE OF MANAGEMENT

Max. Marks: 80

Time:3 hours

- Q1. Success of Business is not by chance but a result of deliberate process'. Name the process. 1
- Q2. Sarika Garments always reserve three positions in their office for physically challenged or lesser or abled individuals. State the business objectives Sarika Garments achieves through this. 1
- Q3. Explain how management is a process. 1
- Q 4. Name the process which synchronises the activities of different departments. 1
- Q 5. Is management a group activity ? Give reasons. 1
- Q 6. State three dimensions of management. 1
- Q 7. Supervisors belong to which level of management ? 1
- Q 8. Presence of management cannot be seen but felt. Identify that characteristic of management. 1
- Q 9. Delhi CM Mr. Arvind Kejriwal launched Odd Even rule for cars in Delhi to cut pollution by restricting the number of cars running on city road. Identify and explain the objective of Management highlighted by our Chief Minister in the above case. 3
- Q10. Shiv Nadar, chairman and CEO of HCL attributes the success of the group to its management team and their entrepreneurial spirit which together have enabled it to handle rapid changes in the environment and technologies. At HCL management believes that happy, satisfied and self motivated employees help in reducing costs and increase productivity. It also has a strong sense of social responsibility and has set up educational institutions in the field of management, engineering, computers etc.
- Identify and explain the significance of understanding management by quoting relevant lines from the case study. 3
- Q 11. Mr. Nitin Singhania's father has a good business of iron and steel. He wants to go to the USA for his MBA but his father thinks that he should join the business. On the basis of emerging trends, do you think that Mr. Singhania should send his son to the USA? Give any three reasons in support of your answer. 3
- Q 12. Geetika is working in a private sector bank. One day of her key function relates to the formulation of the overall organisational goals and strategies of the bank. Identify the level of management at which she is working? State any three other functions that she has to perform at this level. 3

Q 13. “ A successful enterprise has to achieve its goals effectively and efficiently “. Explain. 3

Q 14. Ashutosh Goenka was working in ‘Axe Ltd.’, a company manufacturing air purifiers. He found that the profits has started declining from the last six months. Profit has an implication for the survival of the firm, so he analysed the business environment to find out the reasons for this decline.

1. Identify the level of management at which Ashutosh Goenka was working.
2. State three other functions being performed by Ashutosh Goenka 4.

Q15. Raman agreed to be an employee of a company on the condition that he will be given a project offering competitive salary, career advancement opportunity, promotion and recognition. Mr. John, (general manager) puts Raman in a project in which promotion is not possible. Raman gets disheartened and feels frustrated all the time. Such frustration also reflected in his work and he could not bring desired results.

- (a) Which objective of management Raman could not achieve? Explain.
- (b) Identify the other two objectives.
- (c) What should Mr. John do to avoid such problem? (Hints a) Personal objectives) Mr. John should try to bring balance between personal and economic objectives. 4

Q16. Vineet joined a company after completing graduation in management from a reputed business school. During his induction training, he was informed that he would be working in production department. The company wanted to achieve 30% increase in output in the next quarter. His general manager, a man with decades of experience, also said that management is a complex activity. He expected Vineet to make production plans, identify incentive schemes for workers to make their strengths effective and ensure that there is no disruption due to technical glitch. Vineet realised very quickly that his job is a series of continuous tasks. After one month, he was informed by the general manager that due to increase in international demand, production targets have been raised.

He called an urgent meeting of his supervisors and senior workers. He offered them an opportunity to realise their potential and earn more by working overtime and in multiple shifts. He was delighted that at the end of the quarter, he was able to meet the targets, workers were happy and there was no chaos.

Identify and explain any four characteristics of management referred in above case.4

Q 17. Ayushi works as a soft skill trainer in a corporate house is begins a new section every time acquainting the trainees with a process which is vital for achieving the goals of the organisations efficiently and effectively. She also makes them understand the various primary activities involved in carrying out this process. She emphasis upon the fact that in the absence of this process it will be difficult for the employees to attain their personal goal moreover the development of the society will be hampered as the welfare of people is also likely to be overlooked by the organisation.

In the context of the above case:

- (a) Identify and explain the process being referred to in the above lines.
- (b) List the primary activities contained in this process.
- (c) How does this process help in achieving personal objectives of the employees. 4

Q 18. Mr. Nitin Singhania’s father has a good business of iron and steel. He wants to go to the USA for his MBA but his father thinks that he should join the business. On the basis of emerging- trends, do you think that Mr. Singhania should send his son to the USA? Give any three reasons in support of your answer. 4

Q19. Swiss tele-system is a successful company manufacturing webcams and accessories. Since last two months the profits of the company are declining. The production department blames marketing department blames production department for not manufacturing quality products. The finance department blames both production and marketing departments for declining profitability of the company.

On the basis of the given information about Swiss tele-systems, answer the following questions:

- (a) Identify the aspects of management which is lacking in above situation?
- (b) State three features of the aspects of management identified in question(a) ? 4

Q 20. Ajay and Sanjay are childhood friends. Sanjay had lost his right hand in an accident in Childhood. They meet after a long time in a restaurant. On being asked, Sanjay tells Ajay that He feels very discontented in managing his family business after the death of his father as it Doesn't match with his area of interest. Ajay knows that Sanjay possesses extraordinary skills in Management although he hasn't acquired any professional degree in management. Therefore He asks Sanjay to wind up his business in India and join him in his hotel business in Dubai as an Assistant Manager in sales and Marketing Division.

In context of the above case:

(a) Can Sanjay be deployed at the post of Assistant Manager in Sales and Marketing Division though he hasn't acquired any professional degree in management? Explain by giving suitable justifications in support of your answer.

(b) List any two values that are reflected in this act of Ajay. 5

Q 21. A Firm plans well in advance and a sound organisation structure with supervisory staff and control system. On several occasions it finds that plans are not adhered to. It leads to confusions and duplication of work. Advice remedy. . 5

Q 22. " Art is concerned with personal application of knowledge. " In the light of this statement compare all the features of art with management and prove that it is an art. 5

Q 23. The directors of Wadhwa Ltd. Has a firm belief in team work where the members of the company should work towards fulfilling the common organisational goals. He gives more emphasis on team work and integration of efforts of all individuals, departments and specialists. He gives importance to reconciliation of individuals as well as departmental differences and creating a work environment which enables all its members to grow and develop to their maximum capacity.

(a) Identify the concept of management discussed above.

(b) Explain any three features of the concepts identified in (a) above. 6

(c) Identify and explain the characteristics of management which is reflected in the given case.

Q 24. A company wants to modify its existing product in the market due to decreasing sale. You can imagine any product about which you are familiar. What decisions/ steps should each level of management take to give effect to this decision? 6

Q 25. Coordination is the essence of management . Do you agree ? Give reasons. 6

KENDRIYA VIDYALAYA IIT GUWAHATI

Principles of management (80 marks)

- Q.1 What does scientific management mean? (1)
- Q.2 What did Taylor want to communicate through mental revolution? (1)
- Q.3 In a company there are four departments for finance, marketing, production and human resources development. Identify the principle of management used in the company. (1)
- Q.4 Which technique Taylor insists in paying higher wages to efficient employees? (1)
- Q.5 The management of company promises the workers to pay extra wages if they work overtime, but later on management refuses to pay extra wages. Which principle is violated here? (1)
- Q.6 In one of the principles of scientific management, Taylor emphasizes that there should be equal division of work and responsibility between workers and management and management should work almost side by side with workers helping them. Identify the principle. (1)
- Q.7 Name the two companies who have successfully applied standardization and simplification of work. (1)
- Q.8 She/He keeps the machines, materials, tools, etc., ready for operations by different workers. Whose work is described by this sentence under functional foremanship? (1)
- (A) Repair Boss. (B) Gang Boss (C) Route clerk (D) Instruction card Clerk
- Q.9 The production manager of Bharat Ltd. instructs a salesman to go slow in selling the product whereas the marketing manager is insisting on fast selling to achieve the target?**

(a) Which principle of management is being violated in this case?

(b) What will be the consequence of violation of this principle? (3)

Q.10 Hina and Harish are typist in a company having the same educational qualifications. Hina gets Rs. 3000 per month and harish gets Rs. 4000 per month as salaries for the same working hours. Which principle of management is being violated in this case? Name and explain the principle. (3)

Q.11 which principle of management is violated in the following situation:

- (A) When worker receives order from more than one boss?
- (B) when worker is wasting time in search of tool box in the organization?
- (C) When worker is given responsibility to achieve target of production of 500 units with no authority to access over raw materials?

Q.12 In your school, you observe that books are kept in the office, chalks in the library and administrative files in the staff room:

- (A) Which principle of Fayol is violated here.
- (B) As a manager what steps will you take to rectify the situation? (3)

Q.13 Give any three difference between unity of command and unity of direction. (3)

Q.14 Explain following features of principles of management: (4)

- (I) Contingent
- (II) Flexible
- (III) Behavioral in nature
- (IV) Based on cause and effect relationship

Q.15 Difference between management principles and pure science principles? (4)

Q.16 Nutan Tiffin Box service was started in Mumbai by Mumbai Dabbawalas. The Dabbawalas who are the soul of entire Mumbai aim to provide prompt and efficient services by providing tasty homemade tiffin to all office goers at right time and place. The service is uninterrupted even on the days of bad weather, political unrest and social disturbances. Recently they have started online booking system through their website 'mydabbawala.com'. Owing to their tremendous popularity amongst the happy and satisfied customers and members, the dabbawalas were invited as guest lecturers by top business schools. The Dabbawalas operate in a group of 25-30 people along with a group leader. Each group teams up with other groups in order to deliver the tiffin on time. They are not transferred on frequent basis as they have to remember the addresses of their customers. They follow certain rules while doing trade- No alcohol during working hours; No leave without permission; Wearing of white cap & carrying ID cards during business hours.

Recently on the suggestion of a few self motivated fellow men, the dabbawalas thought out and executed a plan of providing food left in tiffins by customers to slum children. They have instructed their customers to place red sticker if food is left in the tiffin, to be fed to poor children later.

- a) State any one principle of management given by Fayol & one characteristic of management mentioned in the above case.
- b) Give any two values which the Dabbawalas want to communicate to the society. (4)

Q.17 State any four difference between Fayol and Taylor Principles. (4)

Q.18 Mr. Rajiv the owner of 'Lamxi Dairy.' He is producing various milk products. He always tests various ways of producing different products and chooses the best and most economical way of production. He is also very particular about fixing a place for everything and he makes sure that all the employees are given a fixed place so that there is no wastage of time and delay in production.

1. which technique of scientific management is applied by Mr. Rajiv?
2. which principle of Henry Fayol followed by him? (4)

Q.19 Explain any four points which highlights the importance of management. (4)

Q.20 Enumerate following principle of management:-

- (1) Spirit De Corps.
- (2) Stability of Tenure
- (3) Discipline
- (4) Equity
- (5) Remuneration

Q.21 Explain any five features of principles of management. (5)

Q.22 Identify the techniques of scientific management highlighted in the following statement:

- (I) To determine standard time taken to perform a well-defined job.
- (II) To find out Best way to do a particular job.
- (III) when many specialist supervise each worker
- (IV) Giving variable wages to workers based on their performance.
- (V) Change in the attitude of workers and management towards one another from completion to cooperation. (5)

Q.23 Briefly explain work study techniques that help in developing standards to be followed throughout the organization.

Q.24 Explain Following points:-

- (I) Gang Boss
- (II) Speed Boss
- (III) Repair Boss
- (IV) Route clerk
- (V) Inspector
- (VI) Time and Cost Clerk

Q.25 Principle of Taylor and Fayol are mutually complementary . One believed that the management should scientifically select the person and the work assigned should suit his/her physical and intellectual capabilities, while the other suggested that can be performed more efficiently if dividend into specialized tasks.

Identify and explain the principle of Fayol and Taylor referred to in the above para . (6)

KENDRIYA VIDYALAYA IIT GUWAHATI

BUSINESS ENVIRONMENT

[Maximum marks : 80]Time allowed : 3 hours

General Instructions

Answer to questions carrying 1 mark may be from one word to one sentence.

Answer to questions carrying 3 marks may be from 50-75 words.

Answer to questions carrying 4-5 marks may be about 150 words.

Answer to questions carrying 6 marks may be about 200 words.

Attempt all parts of a question together.

Q N	Particulars	M
1	'It is common now to see CD-ROM's, computerized information kiosks, and Internet/Word Wide Web multimedia pages highlighting the virtues of products'. Name the dimension of the business environment highlighted by this statement.	1
2	Which component of business environment requires that advertisements of baby food must necessarily inform the potential buyers that mother's milk is the best?	1
3	It is the process by which government control over the industry is being loosened. Give the term to which this statement is trying to indicate.	1
4	Due to entry of foreign firms, competition for Indian firms has increased, especially in service industries. Name such service industries.	1
5	Explain the concept of Demonetisation.	1
6	State the factors of Macro Environment.	1
7	Which process aims at giving greater role to the private sector role to the public sector?	1
8	State the characteristics of Business Environment(any one).	1
9	State the difference between general and specific environment with example.	3
10	What is Business Environment? Explain any two features of Business Environment?	3
11	Identify ,What has been the cause of the following changes out of liberalization, privatisation and globalization: a) Delhi Vidyut Board now becomes NDPL and BSES. b) Easy and smooth flow of goods and services between various nations. c) Quick and easy movement of information and technology across the globe.	3
12	Discuss the features of Demonetisation.	3
13	Give differences between legal and political environment on the basis of its meaning.	3
14	Mr. Ajay after completing MBA from USA comes to India to start a new business under the banner Ecom Creations Ltd. He launches a new product in a e-learning for senior Secondary School students in Commerce stream, which already has n established market in UK and USA but not in India. His business starts flourishing in India. Now more Indian companies entered	4

- into the market with other subjects also. Identify and quote the lines from above para which highlight the significance of understanding business environment
- 15 Explain any five positive effects of liberalization and globalization on business and industry 4
- 16 Write the impact of changes in government policy on business and industries. 4
- 17 Identify dimension of business environment related to the following situation: 4
- a) Internet advertising has become very prevalent now. Most products are being promoted through use of electronic media.
- b) Demand to reserve jobs for minorities and women.
- c) The health and fitness trends have been a boom for health clubs and health food industries.
- d) High inflation rates make it expensive for businesses to carry on their operations at the old rates.
- 18 Explain any five negative effects of liberalization and globalization on business and industry in India. 4
- 19 1. The court passed an order that all schools must have water purifier for the school children as:
2. Society in general is more concerned about quality of life.
3. Innovative techniques are being developed to manufacture water purifier at competitive rates.
4. Incomes are rising and children at home are also drinking purified water.
5. The government is also showing positive attitude towards the water purifier business.
Identify the different dimensions of business environment by quoting from the above details. 4
- 20 Explain by giving any five reasons why understanding of business environment is important for managers 5
- 21 Just after declaration of Lok Sabha Elections 2014 results, the Bombay stock exchange's price index (Sensex) rose by 1000 points in a day. Identify the environmental factor which led to this rise giving reason. Also explain any two other dimensions of business environment. 5
- 22 The Court passed an order to ban polythene bags as 5
1. The bags are creating many environmental problems which affect the life of people in general.
2. 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 different dimensions of Business Environment by quoting the lines from the above particulars.
- 23 Q. 12. Over the years, e-business in our country has witnessed tremendous growth due to several reasons. There is significant improvement in the Information Technology infrastructure over the last decade as the Government has taken important steps in high-speed Internet connectivity. As a result, the broadband networks have not only become better but also more affordable. Additionally, Government is trying to make rural India connected through broadband – a great possibility for e-business to expand the retail market by reaching out to the most remote rural customer. Another catalyst strengthening the e-business segment is the country's favourable demography. It has more than 50% of its population below the age of 25 and more than 65% below the age of 35. It is expected that, in the year 2020, the average age of an Indian will be 29 years, compared to 37 for China and 48 for Japan, this promises for phenomenal increase in e-business. Moreover, the penetration of the smartphone in a large section of the population has aptly addressed the problem of compute illiteracy. Not withstanding the fact that consumers also prefer e-business due to multiple factors like convenience, time etc. Identify and explain the various dimensions of business environment being referred to in the above case. 6

- 24 After the announcement of demonetisation of Rs 500 and Rs 1000 currency notes by the government of India, there has been a sharp increase in the number of downloads for mobile applications like: Paytm, Pay pal, e- wallet etc. Usage of digital currency and online payment systems driven by UPI, wallets and cards is on the rise as customers are increasingly opting for e- commerce platforms. There have been very strong reactions from general public on platforms like Facebook, Twitter, Instagram etc. where some groups are supporting the decision while many others groups are opposing it. 6

On the basis of the above information:

- a) Identify the two dimensions of business environment by quoting the lines.
- b) Enumerate the various impacts of Demonetisation.

- 25 Zero Defect Zero Effect” (ZED) is a slogan coined by the Prime Minister of India, Narendra Modi with reference to the Make in India initiative launched by the government. The slogan reflects the efficiency of production processes, i.e. the products have no defects and the process through which the product is made has zero adverse environmental and ecological effects. The Zed model aims to make India the manufacturing hub of the world and prevent the products developed in India from being rejected by the global market. Moreover, before the initiative was launched, the limits of foreign direct investment in various sectors had been relaxed. The application for licences was made available online and the validity of licences was increased to three years. Various other norms and procedures were also relaxed by the government. 6

In the light of the above paragraph, identify and explain the major component of New Economic Policy of 1991 that are being referred to by quoting lines from the paragraph

KV IIT GUWAHATI
SUMMER VACATION HOMEWORK
CHEMISTRY
CLASS XII

1. Calculate the freezing point of an aqueous solution containing 10.5g of MgBr_2 in 200g of water. (Molar mass of MgBr_2 is 184g/mol, K_f for water is 1.86K Kg/mol, MgBr_2 is 80% dissociated)
2. An aqueous solution containing 12.48g of barium chloride in 1Kg of water boils at 373.0832K. Calculate the degree of dissociation of barium chloride. (K_b for H_2O is 0.52K Kg/mol, Molar mass of BaCl_2 is 208.34g)
3. A solution prepared from 1.25g of oil of wintergreen (methyl salicylate) in 90g of benzene has a boiling point of 80.31°C. Determine the molar mass of this compound. (Boiling point of pure benzene is 80.10°C), K_b for benzene is 2.53°C Kg/mol)
4. Non-ideal solution exhibit either positive or negative deviation from Raoult's Law. What are these deviations and why are they caused. Explain with example of each type.
5. The partial pressure of ethane over a saturated solution containing 6.56×10^{-2} g of ethane is 1 bar. If the solution contains 5×10^{-2} g of ethane, then what will be the partial pressure of the gas?
6. Define Azeotropes. Explain its types with example.
7. A solution of glucose in water is labelled as 10% by mass. What would be the molality, molarity and mole fraction of the solution? Density of solution is 1.2g/ml.
8. Define conductivity and molar conductivity for the solution of an electrolyte. Discuss their variation with concentration.

9. The resistance of a conductivity cell when filled with 0.05M solution of an electrolyte X is 100ohm at 40°C. The same conductivity cell filled with 0.01M solution of electrolyte Y has resistance of 50 ohm. The conductivity of 0.05M solution of electrolyte X is $1.0 \times 10^{-4} \text{ S cm}^{-1}$. Calculate : i) Cell constant, ii) Conductivity and Molar Conductivity of 0.01M Y solution.
10. What are fuel cells. Explain the electrode reactions involved in the working of H₂-O₂ fuel cell. Write its advantages over ordinary cell.
11. Conductivity of 0.00241M acetic acid solution is $7.896 \times 10^{-5} \text{ Scm}^{-1}$. Calculate its molar conductivity in this solution. If limiting molar conductivity for acetic acid is $390.5 \text{ Scm}^2 \text{ mol}^{-1}$, what would be its dissociation constant?
12. Three electrolytic cells A,B and C containing solutions of zinc sulphate, silver nitrate and copper sulphate respectively, are connected in series. A steady current of 1.5A was passed through them until 1.45g of Ag were deposited at the cathode of cell B. How long did the current flow? What mass of Cu and Zn were deposited in their respective cells? (Atomic mass of Ag=108, Zn=65.4, Cu=63.5).
13. A copper-silver cell is set up. The copper ion concentration is 0.10M. The concentration of silver ion is not known. The cell potential when measured was 0.422V. Determine the concentration of silver ions in the cell. (Given, $E^\circ_{\text{Ag}^+/\text{Ag}} = +0.8\text{V}$, $E^\circ_{\text{Cu}^{2+}/\text{Cu}} = +0.34\text{V}$)
14. A voltaic cell is set up at 25°C with the following half-cells:
 $\text{Al}/\text{Al}^{3+}(0.001\text{M})$ and $\text{Ni}/\text{Ni}^{2+}(0.50\text{M})$
 Write an equation for the reaction that occurs when the cell generates an electric current and determine the cell potential. Also determine the values of equilibrium constant K_c and ΔG°
 $E^\circ_{\text{Ni}^{2+}/\text{Ni}} = -0.25\text{V}$ and $E^\circ_{\text{Al}^{3+}/\text{Al}} = -1.66\text{V}$
15. Silver is uniformly electrodeposited on the metallic vessel of surface area of 900cm² by passing a current of 0.5 Ampere for 2 hours. Calculate thickness of silver deposited. Density of silver is 10.5gcm⁻³, Atomic mass of silver=108amu.
16. A solution of Ni(NO₃)₂ is electrolysed between platinum electrodes using a current of 5.0 A for 20 min. What mass of nickel will be deposited at the cathode? Atomic mass of Ni = 58.7g/mol
17. Write cathodic and anodic reactions involved during charging of lead storage battery.
18. State Kohlrausch's law of independent migration of ions. The limiting molar conductivity of Al₂(SO₄)₃ is $858 \text{ Scm}^2 \text{ mol}^{-1}$, limiting ionic conductivity of SO₄²⁻ is $160 \text{ Scm}^2 \text{ mol}^{-1}$. Calculate the limiting ionic conductivity of Al³⁺.
19. State Faraday's law of Electrolysis. How much charge is required for the reduction of Cr₂O₇²⁻ to Cr³⁺.
20. Predict the products of electrolysis in each of the following :
- An aqueous solution of AgNO₃ with platinum electrodes.
 - An aqueous solution of H₂SO₄ with platinum electrodes.
 - Molten NaCl
 - An aqueous solution of AgNO₃ with silver electrodes.

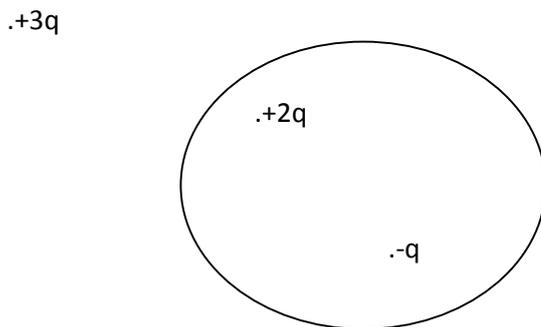
KENDRIYA VIDYALAYA IIT GUWAHATI
CLASS-XII HOLIDAY HOME WORK

1. Mention the unique flowering phenomenon exhibited by *Strobilanthus kunthiana*.
2. How are Cucurbita plants different from Papaya plants with reference to the flower they bear.
3. Name the type of cell division that takes place in the zygote of an organism exhibiting haplontic life cycle.
4. All Papaya plants bear flowers but fruits are seen only in some. Why?
5. What is parthenogenesis?
6. Why is offspring formed by asexual reproduction referred to as clone?
7. What is external fertilisation? What is its disadvantage?
8. Offsprings formed due to sexual reproduction have better chances of survival. Why?
9. What is the mode of asexual reproduction in each of the following?
 - a. Yeast
 - b. Amoeba
 - c. Hydra
 - d. Sponges
10. How do homogametes differ from heterogametes?
11. What do the following parts of a flower develop into, after fertilisation?
 - a. Ovary
 - b. Zygote
 - c. Ovary wall
 - d. Ovules
12. Differentiate between ovipary and vivipary?
13. Identify each part in a flowering plant and write whether it is haploid(n) or diploid(2n):
 - a. Ovary
 - b. Egg
 - c. Anther
 - d. Pollen.
 - e. Male gamete.
 - f. Zygote
14. Show only by diagrams binary fission in amoeba.
15. What are the wall layers around microsporangium?
16. Describe microsporogenesis.
17. Why are pollen grains easily preserved as fossils?
18. What are the adaptations seen in entomophilous flowers?
19. Draw a labelled diagram of a fully developed male gametophyte.
20. Describe the process of embryo sac formation from functional megaspore onwards.
21. What is double fertilisation and triple fusion?
22. What is endosperm? How is it developed in angiosperms?
23. Describe embryogenesis in angiosperms.
24. What is scutellum?
25. Draw a labelled diagram of a maize seed.

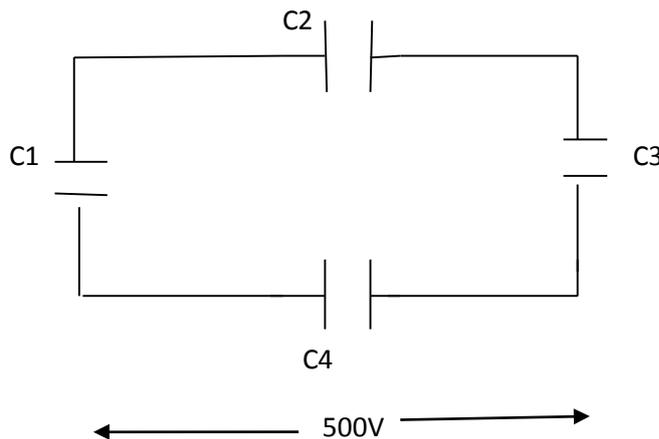
PHYSICS HOLIDAY HOMEWORK
CLASS XII

Answer the following questions:

1. Does the charge given to a metallic sphere depend on whether it is hollow or solid? Give reasons.
2. Two equal balls having equal positive charge are suspended by two insulating strings of equal length. What would be the effect of the force when a plastic sheet is inserted between the two?
3. Why should electrostatic field be zero inside a conductor?
4. A concave lens of refractive index 1.5 is immersed in a medium of refractive index 1.65. What is the nature of the lens?
5. Does the magnifying power of the microscope depend on the colour of the light used. Justify.
6. The given figure shows three point charges $+2q$, $-q$ and $+3q$. What is the electric flux due to the surface?



7. Find the ratio of the potential differences that must be applied across the parallel and series combination of two capacitors C_1 and C_2 with capacitances in the ratio 1:2 so that the energy stored in the two cases becomes the same.
8. The focal length of the objective and eyepiece of a microscope are 1.25 cm and 5 cm respectively. Find the position of the object relative to the objective in order to obtain an angular magnification of 30 in normal adjustment.
9. A network of four capacitors each of $12\mu\text{F}$ capacitance is connected to a 500V supply as shown in the figure. Determine equivalent capacitance of the combination and charge on each capacitor C_1 , C_2 , C_3 and C_4 .



10. Two parallel plate capacitors X and Y, have the same area and same separation between them. X has air between the plates and Y has dielectric medium of $K=4$.
 - i) Calculate capacitance of each capacitor if equivalent capacitance of the combination is $4\mu\text{F}$.
 - ii) Calculate the potential difference between plate X and Y.
 - iii) Estimate the ratio of electrostatic energy stored in X and Y.

कक्षा : बारहवीं

1. संपूर्ण पाठ्यक्रम को एकबार ध्यानपूर्वक पढ़ें ।
2. जनसंचार माध्यम और लेखन विषय से सम्बंधित 50 प्रश्नों का संग्रह करें ।
3. अपने क्षेत्र में कानून व्यवस्था की बिगड़ती स्थिति पर चिंता प्रकट करते हुए जिले के पुलिस अधीक्षक को एक पत्र लिखिए ।
4. निम्नलिखित विषयों पर आलेख लिखिए: फूटपाथ पर सोते लोग , बिन पटाखे दिवाली का आनंद
5. निम्नलिखित विषयों पर निबंध लिखिए(लगभग ३०० शब्द) : देश के नवनिर्माण में युवाओं का योगदान ,
इन्टरनेट - लाभ व हानिया

Kendriya Vidyalaya, IIT Guwahati

Summer Vacation Holiday Home Work

Computer Science & IP

Class-XII

Chapter (Society Law and Ethics)

Q.1: Explain the following with Example.

- a) Intellectual Property right b) Plagiarism c) Digital Property d) Free software
e) Open source software.

Q.2: What are privacy, cybercrime, Phishing, Scams?

Q.3: Explain Computer Forensic, Identity Theft, E-Waste Management, GNU, and GPL, free software, open source software, licensing.

Q.4: What is IT ACT 2000? Explain

Q.5: Explain E-Waste disposal process.