A   **Answer the following questions in 30-40 words each.**

1   What did the narrator recall about her first meeting with Mrs. Dorling?

2   What according to the poem "*Childhood*", is involved in the process of growing up?

3   Describe Albert's meeting with Ernst Weil.

4   The grandmother was a kind-hearted woman. Give examples in support of your answer.

5   The three stanzas of the poem "*A Photograph*" depict three different phases. What are they?

6   Why did the narrator not want to remember the address?

B   **Answer the following questions in 100-120 words.**

7   The grandmother herself was not formally educated but was serious about the author's education. How does the text support this?

8   Why did Albert feel the 'certificate burning a hole in his pocket'?

C   **Writing**

9   You are an animal lover and want to educate people on the need to be kind to animals. Make an appeal to the people through a poster (50 words) to be displayed in a public place.

10   As a member of the Residents' Welfare Association of your colony you are to deliver a speech in the General Body Meeting on noise pollution in the colony. Write the speech in about 120-150 words. You are Harish / Harshita.

A   Answer the following questions in 30-40 words each.

1   Why was Joe Morgan waiting for Andrew?

2   What did the narrator notice about the 'drokbas'?

3   How did the writer arrange a meeting between Ratna and Ranga?

4   What generated the interest of the world in King Tut?

5   What was the treatment given to the child?

6   How has the viewpoint of archeologists changed with the passage of time?

B   Answer the following questions in 100-120 words.

7   Andrew's visit to the Morgans gave him pleasure and satisfaction that he had not achieved earlier. Justify.

8   Describe in detail the narrator's miserable night in Darchen.

C   Writing

9   Your school is holding a summer camp in training students in hockey and basketball. Write a notice for the school notice-board of Anand Prakash Vidyalaya, Allahabad. You are Anand, the Sports Secretary of the school. (50 words)

10   Write a letter to the Commissioner of Chennai Corporation complaining about the poor sanitary conditions and mosquito menace in your locality. You are Amit / Ankita of New Colony, M.G. Road, Chennai.

Question:

1. Subtract 10000 from 10111 and check the result by converting them to decimal system.

2. If 10th June 1948 was Thursday, what will be the day on 16 November 1969?

3. At what time do the hands of the clock meet between 4:00 and 5:00

4. A can do a piece of work in 40 days. he works at it for 8 days and then B finishes the remaining work in 16 days how long will they take to complete the work if they do it together?

5. Two persons start from the same place riding in the same direction at 20 km per hour and 15 km per hour respectively after how many hours will they be 30 km apart.

6. A hollow square shaped tube open at both ends, is made of iron. The internal square is of 5 cm side and the length of the tube is 8 cm. There are 192 cm^3 of iron in this tube . find its thickness.

7. In a group of students there are 3 boys and 3 girls. four students are to be selected at random from the group. find the probability that either three boys and one girl or three girls and one boy are selected.

8. Find the inclination of a line whose slope is -1.

9. Prove that the straight line whose intercepts on the axes are 2 and -3 respectively passes through the point (4 ,3).

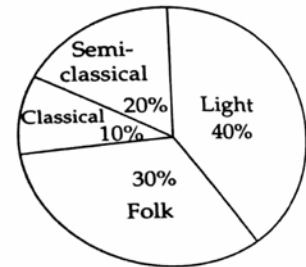10. One end of a diameter of the circle is $x^2+y^2-3x+5y-4=0$ is (2,1), find the coordinates of the other end.

QUESTIONS:

1. Multiply 1100 by 111 and check the result by converting them to decimal system.

2. How many numbers greater than 100000 can be formed by using the digit 2,4,2 ,3,0,2 taken altogether?

3. A survey was made to find the type of music that a certain group of young people like in a city adjoining pie chart shows the finding of the survey from this pie chart answer the following

  (i) if 20 people liked classical music, how many young people were surveyed?

  (ii) which type of music is liked by the maximum number of people?

  (iii) If a company were to make 1000 CDS how many of each type would

    they make?

4. Find the mean and the variance of first 10 multiples of 3.

5. Calculate the amount and the compound interest on Rs 17000 in 3 years when the rate of interest for successive years is 10%, 10% and 14% respectively.

6. Find the amount of an annuity of Rs1500 payable at the end of every 3 months for one year, if money is worth 12% per annum compounded quarterly.

7. The price of a bicycle is Rs 3136 inclusive of Tax (under GST) at the rate of 12% on its listed price. A buyer asks for a discount on the listed price so that after charging GST, the selling price becomes equal to the listed price. Find the amount of discount which the seller has to allow for the deal.

8. In financial year 2019-20 Karan's (age 38 years) gross salary was Rs 728000 (inclusive of HRA).He deposited Rs 8000 per month in NPS and paid Rs21825 as premium of LIC. He deposited rupees 5000 in his PPF account and paid rupees 40000 as the tuition fee of his two children. calculate the income tax paid by him at the end of the financial year.

9. A man borrows Rs 5000 at 12% per annum compound interest. He repays Rs 1800 at the end of every six months. Calculate the amount outstanding at the end of the third payment. Give your answer to the nearest rupee.

10. Find the nominal rate compounded semi annually equivalent to 4.2 % effective rate.

BURNPUR RIVERSIDE SCHOOL, BURNPUR
ASSIGNMENT – 1
SESSION – 2020 - 2021
MATHEMATICS
CLASS – XI

1. Exhibit graphically the solution set of the linear inequations $x + y \cdot 5$, $4x+y \cdot 4$, $x+5y \cdot 5$, $x \cdot 4$, $y \cdot 3$.

2. Show that the sum of $(m+n)^{nth}$ and $(m - n)^{th}$ terms of an A.P is equal to twice the mth term.

3. Find the sum of the following series: $0.5 + 0.55 + 0.555 +$ ……. To n terms.

4. Find the equation of the line parallel to y – axis and drawn through the point of intersection of the lines $x - 7y + 5 = 0$ and $3x + y = 0$.

5. Find the equation of the circle passing through the origin and the points where the lines $3x + 4y = 12$ meets the axes of coordinates.

6. Find the coordinates of points on the parabola $y^2 = 8x$ whose focal distance is 4.

7. Find the equation of the ellipse whose axes are along the coordinate axes, vertices are $(\pm 5, 0)$ and foci at $(\pm 4, 0)$

8. The foci of a hyperbola coincide the foci of the ellipse $\dfrac{x^2}{25} + \dfrac{y^2}{9} = 1$. Find the equation of the hyperbola, if its eccentricity is 2.

9. Calculate the mean and standard deviation of first n natural numbers.

10. Find the ratio in which the line segment joining the points $(2, -1, 3)$ and $(-1, 2, 1)$ is divided by the plane $x + y + z = 5$.

BURNPUR RIVERSIDE SCHOOL, BURNPUR
ASSIGNMENT – 2
SESSION – 2020 - 2021
MATHEMATICS
CLASS – XI

1. Exhibit graphically the solution set of the linear inequations
   $x - y \bullet 1$, $x + 2y \bullet 8$, $2x + y \bullet 2$, $x \bullet 0$, $y \bullet 0$.

2. The ratio of the sum of n terms of two A.P's is $(7n + 1) : (4n + 27)$. Find the ratio of their m^{th} terms.

3. If a and b are the roots of $x^2 – 3x + p = 0$ and c, d are the roots of $x^2 – 12x + q = 0$, where a, b, c, d form a G.P. Prove that $(q + p) : (q – p) = 17 : 15$

4. Find the equation of the line through (2, 3) so that the segment of the lines intercepted between the axes is bisected at this point.

5. Find the equation of the circle which passes through the points (3, 7), (5, 5) and has its centre on the line $x – 4y = 1$.

6. Find the equations of the lines joining the vertex of the parabola $y^2 = 6x$ to the point on it which has abscissa 24.

7. Find the equation of the ellipse whose axes are along the coordinate axes, vertices are $(0, \pm10)$ and eccentricity e = 4/5.

8. Find the equation of the hyperbola, the length of whose latus rectum is 8 and eccentricity is $3/\sqrt{5}$

9. The mean and variance of 7 observations are 8 and 16 respectively. If 5 of the observations are 2, 4, 10, 12, 14, find the remaining two observations.

10. A (1, 2, 3), B (0, 4, 1), C (-1, -1, -3) are the vertices of a triangle ABC. Find the point in which the bisector of the $\angle BAC$ meets BC.

		BURNPUR RIVERSIDE SCHOOL, BURNPUR **ACCOUNTANCYASSIGNMENT - I** **Class – XI COM**	
	1	Transactions are posted into Ledger from (a) Vouchers (b) Bank Statements (c) Journal Book (d) none of these	
	2	The nature of capital is a/an (a) asset (b) liability (c) income (d) expense	
	3	Omission of paise and showing the round figures in financial statements is based on (a) Consistency concept(b) Conservatism Convention (c) Materiality Convention(d) none of these	
	4	Journalise the following transactions. (a) Purchased a building of Rs.10, 00,000 and paid commission to a broker Rs.15,000 and registration charges Rs.75,000. (b) Paid Rs.4,000 as wages for installation of a new machinery (c) Purchased furniture for Rs. 20,000 plus CGST and SGST @6% each (d) Bricks and Cement worth Rs.2, 40,000 purchased for construction of cycle shed in a building. CGST and SGST paid @6% each.	
	5	Trial Balance of John did not agree. He put the difference to Suspense Account and discovered the following errors. (a)Materials Rs.10000 and wages Rs.3000 were used for construction of building. No adjustment was made in the books. (b) Depreciation provided on furniture Rs.800 was not recorded. (c) Bills Receivable for Rs.1600 from Noor was dishonoured and posted to debit of Allowances Account. (d)Goods returned to Ram Rs.1000 were recorded in Sales Book. (e) Credit sales to Mohan Rs.5000 were recorded in Purchases Book. (f)Wages paid for installation of Machinery Rs.500 was posted to Wages A/c as Rs.50.	

6	Enter the following transactions in a Cash Book with Cash and Bank column:	
	2018 Rs.	

6. Enter the following transactions in a Cash Book with Cash and Bank column:

2018	Rs.
Jan. 1 Bank overdraft	12,000
Cash in hand	2,300
7 Cheque received from Ram	4,000
Discount Allowed	200
9 Cheque received from Ram deposited into bank	
12 Cheque paid to Radha	2,500
and discount received	50
15 Ram's cheque dishonoured	
20 Amount withdrawn from bank for office use	3,400
23 Fees of children paid by cheque	75
25 Cheque received from Hira and endorsed it to Sunita on 27th Jan.	4,500
27 Bank charges	20
31 Paid into bank the entire balance after retaining Rs 700 in office	

7. Prepare Bank Reconciliation Statement of Mohan as on 31.03.2018.

(a)On 31.03.2018 Bank Pass Book of Mohan showed a balance of Rs.15,000 to his credit.

(b)Before that date, he had issued cheques amounting to Rs.8000, of which cheques amounting to Rs.3200 have so far been presented for payment.

(c)A cheque of Rs.2200 paid by him into the bank on 26.03.2018 is not yet credited in the Pass Book.

(d) He had received a cheque for Rs.500 which although entered by him in the bank column of the cash book, was omitted to be paid into bank.

(e) On 30.03.2018 a cheque of Rs. 1570 received by him was paid into bank but the same was omitted to be entered in the cash book.

(f) There was a credit of Rs. 150 for interest on current account and a debit of Rs.25 for bank charges.

8. Prove that Accounting equation is satisfied in all the following transactions of Sameer Goel

(a)Started business with Cash Rs. 1,00,000

(b)Paid rent in advance Rs.3,000

(c) Purchased goods for cash Rs.50,000 and on credit Rs.20,000

(d)Sold goods for cash Rs.80000 costing Rs.40,000

(e)Paid salary in cash Rs.4,500 and salary outstanding Rs.1,000

(f) Bought motor cycle for personal use Rs.30,000

9. Laxmi Limited purchased machinery for Rs.40,000 on 01.07.2015.. Depreciation is charged @ 10% pa on Diminishing Balance Method. On 01.10.2017 one fourth of the machinery was found unsuitable and disposed off for Rs.6,000. On the same date a

		new machinery at a cost of Rs. 15,000 was purchased. Write up the machinery A/c for the years from 2015 to 2018. The accounts are closed 31st December each year.	
	10	On 2nd February 2019, Amit purchased goods from Manish for Rs.35000. Amit paid Rs.5000 immediately and for the balance, accepted a bill payable after 60 days. Manish immediately endorsed the bill in favour of his creditor Kapil. On the due date, Kapil presented the bill to Amit which the later dishonoured and Kapil paid Rs. 100 as noting charges. On the same date, Kapil informed Manish about the dishonor of the bill. Manish settled his debt to Kapil by cheque for Rs.31,000 which includes noting charges and interest. Amit settled Manish's claim by cheque for the same amount. Record the necessary journal entries in the books Manish.	

BURNPUR RIVERSIDE SCHOOL, BURNPUR
ACCOUNTANCYASSIGNMENT -- II
Class – XI COM

1	Bills Receivable discounted but not due till the date of final accounts is shown in: (a) P & L A/c (b) Assets in Balance Sheet (c) Liabilities in Balance Sheet (d) Foot notes
2	Generally accounts under single entry system are maintained by (a) Sole Trader (b) Company (c) Society (d) Government
3	Which of the following two digits are used in Binary System (a) 0, 1 (b) 1, 2 (c) 0, 2 (d) 0, 3
4	Differentiate between Balance Sheet and Trial Balance on the basis of (a) Objective (b) Types of accounts and (c) Compulsion.
5	Aman started a business on 1st January,2018 with a capital of Rs. 4,50,000. During the year he withdrew Rs.80,000 for household expenses and introduced Rs.14000 as fresh capital. His position of assets and liabilities as at 31.12.2018 stood as follows. Rs. Rs. Cash in hand 37,000 Stock 40,000 Bills Receivable 50,000 Debtors 800,000 Creditors 3,00,000 Bills Payable 6,000 You are required to prepare statement of Profit or Loss for the year ended 31.12.2018
6	Explain any six features of a computer system.
7	State whether the following transactions are capital expenditure or revenue expenditure or deferred revenue expenditure. Give reasons. (a) Rs.30,000 spent towards additions to the machinery. (b) Cost of annual white washing of building Rs.42,000

(c) Payment of annual taxes Rs.12,000

(d) Advertisement expenditure in special advertisement drive.

(e) Compensation paid to a retrenched employee for the loss of employment (f) Legal expenses incurred on purchase of land.

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8 | Given below is the Trial Balance of Gopi Chand Brothers as at 31.03.2020. You are required to prepare Trading and Profit and Loss A/c for the year ended 31.3.2020 and Balance Sheet as at that date.

Debit Balances	Rs.	Credit Balances	Rs.
Opening Stock	45,000	Capital	200,000
Purchases	120,000	Returns outward	2,500
Returns inward	3,200	Sales	350,000
Carriage Inward	2,400	Discount Received	2,000
Carriage Outward	1,500	Loan from Bank	24,000
Office Furniture	8,000	Sundry Creditors	22,100
Sundry Debtors	68,000	Commission	1,600
Dock Charges	5,000		
Electric Power	10,000		
Fuel, Gas, Water	12,000		
Bad Debts	1,100		
Advertisement	25,000		
Salaries	36,000		
Cash in hand	8,100		
Cash at Bank	30,000		
Motor Vehicles	58,000		
Motor Repairs	3,000		
Interest on Bank Loan	2,400		
Rent and Insurance	24,500		
Business Premises	106,000		
Household Expenses	33,000		0
	602,200		602,200

Stock at the end of the year is Rs.75,000

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9 | B. Constructuation Ltd. purchased a machine on October 1, 2017 for Rs.6,55,000. On 01.03.2018 it purchased another machine for Rs. 2,40,000. On 01.07.2019 it sold off the first machine purchased in 2017 for Rs.5,24,000. Accumulated depreciation account is maintained charging depreciation @ 10%pa on straight line method. Accounts are closed each year on 31st March.
Prepare machinery A/c, Accumulated Depreciation A/c and Machinery Disposal A/c

for the year ended on March 31, 2018, 2019 and 2020.

10 | The following is the Trial Balance of Amrit Raj as on 31.12.2018

Debit Balances	Rs.	Credit Balances	Rs.
Building	30,000	Capital	25,000
Furniture	2,640	Returns outward	1,600
Scooter	4,000	Sales	56,040
Returns inward	2,300	Bad Debt Provisions	700
Stock as on 01.01.2018	8,000	Bank Loan	5,000
Purchases	33,800	Commission	900
Bad Debts	300	Creditors	8,000
Carriage Inward	700		
General expenses	1,200		
Interest on Bank Loan	300		
Insurance and Taxes	2,000		
Scooter Expenses	2,600		
Salaries	4,400		
Cash in hand	2,000		
Debtors	3,000		0
	97,240		97,240

You are required to prepare the final accounts for the year ended on 31.12.2018 after taking into account the following adjustments.

(a)Closing stock on 31.12.2018 was valued at Rs.4,340
(b) Commission include Rs.300 being commission received in advance.
(c) Salaries have been paid for 11 months.
(d) Bank Loan has been taken at 10% p.a. interest.
(e) Depreciate Building by 5% and scooter by 15%.
(f) Write off Rs.200 as further bad debt and maintain bad-debt provisions at 5% on debtors.

All questions are compulsory:

1. Write an algorithm to perform Bubble Sort in a Linear List.
2. When and why would you choose insertion sort over bubble sort?
3. Predict the output
    (i)tuple_a = 'a', 'b'
    tuple_b = ('a', 'b')
    print(tuple_a ==tuple_b)
    (ii) tuple1 = ('Python')*3
    print(type(tuple1))
4. What is the output produced by above code:
    D1 = {5:[6,7,8], "a": (1,2,3)}
    print(d1.keys( ))
    print(d1.values( ))
5. Why can't List can be used as keys in a Dictionary?
6. How are lists different from strings when both are sequences?
7. Write the most appropriate list method to perform the following tasks.
    (i)Delete a given element from the list.
    (ii)Add an element in the end of the list.
    (iii)Delete 3rd element from the list.
8. What do you mean by Debugging?
9. What is Semantic Errors?
10. What is an Exception?

All questions are compulsory:
1. Define Cyber Crime, Cyber Trolls and Cyber Bullying.
2. What do you mean by Digital FootPrints?
3. What do you mean by Digital certificate and Digital Signature?
4. Mention some Active Protection and Preventive Measures of Viruses, Adware and Spyware.
5. Define Throughput.
6. Mention the various states of a process.
7. What is cloud computing?
8. What is Firewall? What are the two forms of Firewall?
9. What do you mean by Cookies?
10. What is Malware? Name some common threats the average computer user faces every day.

BURNPUR RIVERSIDE SCHOOL, BURNPUR
ASSIGNMENT-[2020-2021]
INFORMATION TECHNOLOGY
CLASS-XI
SET-1
===

1. What are the elements of communication?

2. Name any two types of Non-verbal communication.

3. What do you understand by 'Background' regarding self-management skills?

4. Differentiate between Copy-Paste operation and Cut-Paste operation in LibreOffice Writer.

5. There are three ways most entrepreneurs think when they are trying to solve a problem. Name the three ways.

6. What is sustainable development? Give an example.

7. What do you understand by Header and Footer?

8. Explain the different types of cell referencing in OpenOffice Calc.

9. What do you understand by Custom Animation and Slide Transition?

10. "The slides in a presentation can be viewed in different views."

Name them.

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BURNPUR RIVERSIDE SCHOOL, BURNPUR
ASSIGNMENT-[2020-2021]
INFORMATION TECHNOLOGY
CLASS-XI
SET-2
===

1. What are the components of a one-way simple communication system?

2. Differentiate between Guided and Unguided media.

3. Differentiate between Input and Output.

4. 'Diligence is one of the main characteristics of a computer'.

   Explain Diligence.

5. What do you understand by:

   i.   Star Topology

   ii. Mesh Topology

6. What are the different layers of TCP/IP model?

7. What are the three data models used for database management?

8. What do you understand by Hierarchical model in a database system?

9. Write a program in Java to calculate the sum and product of two numbers.

10. Write a program in Java to check whether a number is even or odd.

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BURNPUR RIVERSIDE SCHOOL, BURNPUR
ASSIGNMENT - I
BIOLOGY
CLASS-XI

1. Cell is the basic unit of life. Discuss.
2. Differentiate between mitosis and meiosis.
3. By looking at which internal structure of a plant can you tell whether a plant is C_3 or C_4? Explain.
4. What is the significance of step-wise release of energy in respiration?
5. The role of ethylene and abscisic acid is both positive and negetive. Justify the statement.
6. What are the major transport mechanisms for CO_2?
7. Define a cardiac cycle and the cardiac output.
8. Explain why haemodialysis unit is called artificial kidney?
9. Briefly explain the disorders of the excretory system.
10. Draw the diagram of a sarcomere of skeletal muscle showing different regions.

BURNPUR RIVERSIDE SCHOOL, BURNPUR
ASSIGNMENT - II
BIOLOGY
CLASS-XI

1. Explain the mechanism of breathing with neat labelled diagram.
2. Differentiate between blood and lymph.
3. What is the significance of juxtaglomerular apparatus (JGA) in kidney function?
4. Aquatic animals generally are ammonotelic in nature, whereas terrestrial forms are not. Comment.
5. What are the differences between actin and myosin.
6. Explain the process of conduction of a nerve impulse along a nerve fibre.
7. List the hormones secreted by – pituitary, thyroid, adrenal, pancreas and ovary.
8. Why are living organisms classified?
9. Describe the important characteristics of gymnosperms.
10. What are the modifications that are observed in birds that help them fly?

- **NOTE:-[LONG ANSWER TYPE QUESTIONS]**

1. Enlist the five national and international competition in the following sports…a) Athletic   b) Badminton c) Cricket and d) Hockey
2. How to choose a career in the field of physical education and sports science? Discuss.
3. Write about the International Olympic committee and explain its role in present scenario.
4. What are the differences between Muscular Strength and Muscular Endurance? Explain in detail.
5. Discuss the role of speech therapist, occupational therapist and special educator for students with special needs in details.
6. What role may yoga play in physical education and sports?
7. Discuss the role of a leader in the field of physical education.
8. What are the importance of test, measurement and evaluation in physical education and sports?
9. Draw and label the structure of circulatory system?
10.   Give detail about the problems of adolescent and the management.

END

BURNPUR RIVERSIDE SCHOOL,BURNPUR

ASSIGNMENT- 2

SESSION -2020-2021

CLASS- XI

SUBJECT- PHYSICAL EDUCATION

NOTE-[LONG ANSWER TYPE QUESTION]

1. Enlist the principles of sports training. Write about any three principles.
2. Explain types of warming-up in any sports activity.
   What do you know about physiological aspects of warming-up in sports?
3. Explain how skills, technique and style in sports activity improve the performance of the trainee.
4. What do you know about physiological aspects of warming-up in sports?
5. What is alcohol and its side effect in sports performance?
6. Mention the prohibited substances and methods, along with their side effects.
7. Why warming-up and cooling down is necessary before and after the sports training?
8. Mention the effects of doing on a sports person's performance.
9. How can load be increased in sports. Give one suitable example.
10. Define different types of skills required in sports.

END

BURNPUR RIVERSIDE SCHOOL, BURNPUR

ASSIGNMENT 2

CLASS XI

SUBJECT: BUSINESS STUDIES

1. A manufacturing enterprise having capital investment in plant and machinery upto Rs. 25 lakhs is called:
   (a) Micro enterprise
   (b) Small enterprise
   (c) Medium enterprise
   (d) Large enterprise
2. There is centralised purchase as well as centralised sale in:
   (a) Departmental store
   (b) Chain store
   (c) Both (a) and (b)
   (d) None of the above
3. Give any two problems faced by SSI.
4. The Government of India launched a program on May, 1978, with special stress on the development of small tiny and cottage and village industries by providing integrated administrative support in the area. To achieve this objective an agency was set up at district level.
   (a) Write down the name of that agency.
   (b) Discuss the functions of the agency highlighted in the statement.
5. Discuss the following intellectual properties with examples, if possible:
   (a) Copyright
   (b) Patents and
   (c) Trademarks
6. Identify the type of Internal Trade in the following statements:
   (a) A businessman buying and selling goods in small quantities.
   (b) A businessman buying large quantities from manufacturers.
   (c) A businessman dealing with large variety of goods under one roof.
7. Briefly discuss the role of small business in rural India.
8. State the main features of Departmental stores.
9. Discuss briefly the services of wholesalers to manufacturers.
10. Discuss any six points of difference between International Business and Domestic Business.

1. Name the reward which Businessmen get to bear the risk:
   (a) Market standing
   (b) Goodwill
   (c) Profit
   (d) More Business
2. Which clause of the memorandum defines powers and limitations of a company?
   (a) Name Clause
   (b) Objective Clause
   (c) Liability Clause
   (d) Domicile Clause
3. Which instrument saves tax?
   (a) Equity shares
   (b) Debentures
   (c) Retained earnings
   (d) Preference shares
4. Enjoy Entertainment is a popular film entertainment company. Keeping in view the growing culture of multiplex, its owners have decided to make some changes in the interiors like creating a lounge area, installing more effective sound system etc. the company wants to raise fund for a period of more than one year but less than five years.
   In context of the above case:
   (a) Identify and explain the types of funds company seek to raise on the basis of time period.
   (b) Give any two features of that source.
5. State six hindrances removed by commerce.
6. Discuss the types of Partnership on the basis of duration.
7. Distinguish between Goods and Services on the basis of:
   (a) Nature
   (b) Inconsistency
   (c) Inventory and
   (d) Involvement
8. Identify the source of finance in the following cases:

   (a) It is a source of finance which converts the value of purchases into trade payables.

   (b) Shareholders agree to provide capital by way of accepting lower returns out of profits.

   (c) Owners of capital with preferential rights.

   (d) It provides the long term funds without diluting control of funds but may have control over usage of fixed assets.

9. Discuss any six merits of cooperative societies.

10. Discuss briefly any three merits and three limitations of Equity Shares as a source of finance.

1   What is the mass of carbon dioxide which contains the same number of molecules as are contained in 40 g of oxygen?(At mass of C=12u, O=16u)

2   What is the concentration of sugar $(C_{12}H_{22}O_{11})$ in mol L^{-1} if its 20 g are dissolved in enough water to make final volume up to 2 L?(At mass of C=12u, H=1u, O=16u)

3   Calculate the energy of one mole of photons of radiation whose frequency is 5 x 10^{14} Hz.

4   Out of O and S, which has higher negative electron gain enthalpy and why?

5   Write the molecular orbital configuration of N_2. Calculate its bond order and predict its magnetic behaviour.

6   Calculate the volume occupied by 8.8 g of CO2 at 31.10C and 1 bar pressure.(R=0.083 bar L K-1 mol-1)

7   What do you understand by the following?
     (i) Dissociation constant of an acid
     (ii) Buffer solution
     (iii) solubility product

8   Define with example:
     (i) Positional isomerism (ii) functional isomerism (iii) Metamerism

9   Balance the following equation in basic medium by ion-electron method.
     $P_4(s) + OH^-(aq)$----$\rightarrow PH_3(g) + H_2PO_2^-(aq)$

10   How can you explain higher stability of BCl_3 as compared to $TlCl_3$?

Please note: Students must copy all the questions. They must write down the assignment in a separate copy subject wise.

1   Write the IUPAC name of the following compounds:
    (i) $CH_3CH=C(CH_3)_2$ (ii) $CH_2=CH-C \bullet C-CH_3$

2   An alkene 'A' on ozonolysis gives a mixture of ethanol and pentan-3-one. Write structure and IUPAC name of 'A'.

3   What are the necessary conditions for any compound to show aromaticity?

4   Why is benzene extra ordinarily stable though it contains three double bonds?

5   Why Wurtz reaction is carried out in dry ether?

6   How will you convert:
    (i) Propyne into Propanone?   (ii) Secondary butyl bromide into but-2-ene?

7   What happens when 1, 2-Dibromo ethane reacts with excess of alc.KOH?

8   Give a chemical test to distinguish between ethane and ethyne.

9   Give a brief account for the following statements:
    (a) n-Pentane has greater boiling point than isopentane.
    (b) CH_4 cannot be synthesized by Wurtz reaction.

10 Write chemical reaction of
    (i) Kolbe's electrolytic method (ii) $\bullet$-Elimination reaction
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BURNPUR RIVERSIDE SCHOOL
SESSION 2020-2021
CLASS-XI
SUBJECT-CHEMISTRY
ASSIGNMENT-2

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2 An alkene 'A' on ozonolysis gives a mixture of ethanol and pentan-3-one. Write structure and IUPAC name of 'A'.

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1. Why do economic problems arise?
2. Define explicit cost.
3. Price elasticity of supply of a good is 0.8. Is the supply 'elastic' or 'inelastic' and why?
4. Define secondary data.
5. What is an exclusive series?
6. Explain the law of Diminishing Marginal Utility using TU schedule.
7. Represent the following data with the help of multiple bar diagram.

Year	Exports(Rs)	Imports(Rs)
2009	56	60
2010	80	72
2011	85	75
2012	80	85
2013	90	100

8. Quantity demanded of a commodity rises by 6 units when its price falls by Rs 1 per unit. Its price elasticity of demand is (-) 1. If the price before change was Rs 20 per unit, calculate quantity demanded at this price.
9. Find out arithmetic mean of the following data by direct, short-cut and step-deviation method.

Daily Wages(Rs)	100-120	120-140	140-160	160-180	180-200
No. of workers	10	20	30	15	5

10. Calculate Karl Pearson's coefficient of correlation between marks in Economics and marks in Mathematics (Use short-cut and step-deviation method).

Marks in Economics	60	70	80	90	100
Marks in Mathematics	120	110	90	70	60

BURNPUR RIVERSIDE SCHOOL, BURNPUR

SESSION 2020-21

SUBJECT- ECONOMICS

ASSIGNMENT- 2

CLASS XI

1. Find the value of mode if median of a series is 139.69 and its arithmetic mean is 139.52.
2. What is the basic difference between frequency polygon and frequency curve?
3. What is a questionnaire?
4. Give meaning of 'returns to a factor'.
5. Why do black markets exist?
6. Why does a firm under perfect competition called a 'Price Taker' not a 'Price Maker'?
7. Present the distribution of Indian population by their working status, using the data given below in pie diagram:

Status	Marginal Worker	Main worker	Non-worker
Population(crore)	9	31	62

8. Explain the relationship between Marginal Cost and Average Variable Cost with the help of a diagram.
9. Compute index numbers by (i) Laspeyre's method (ii) Paasche's method (iii) Fisher's Method.

Commodities	A	B	C
Base year Price(Rs)	100	150	200
Base year Quantity(units)	10	20	10
Current year Price(Rs)	150	200	300
Current year	20	10	20

Quantity(units)			

10.a. Price of a good falls from Rs 15 to Rs 10 and the supply decreases from 100 unit to 50 units. Calculate E_s.

10.b. Explain the meaning and need for maximum price ceiling.

1   What do you know about mega-diversity centres?
2   Why is conversation of Biodiversity important?
3   What is Genetic diversity?
4   What is denitrification?
5   Name the three types of precipitation.
6   Why does the amount of water vapour decreases rapidly with altitude?
7   What do you understand by "exotic species"?
8   What are the causes of soil erosion?
9   How do you know that a particular type of soil is fertile or not?
10 What is the difference between forest area and forest cover?

1   In the Himalayas how does natural vegetation change with altitude?

2   Enlist the wetland of India.

3   What are the two main objectives of wildlife act of 1972?

4   What is soil erosion?

5   What is the difference between khadar and bhangar?

6   Mention the factors affecting the formation of soil.

7   Name the types of clouds.

8   What are the ways in which nitrogen is fixed?

9   Define the term "ecology"?

10   What leads to loss of biodiversity?

1.   Derive the expression for work done in adiabatic process of an ideal gas.

2.   A wire of cross section A is stretched horizontally between two clamps located 2l meter apart from each other. A weight W is suspended from the midpoint. If the vertical distance through which the midpoint of the wire moves down is x<l , then find:

(i)   Strain produced in the wire.

(ii) Stress in the area

(iii) If Y is the Young's modulus of the wire then find the value of x.

3.   A sphere is dropped under gravity through a fluid of viscosity η. Taking the average acceleration as half of the initial acceleration, prove that the time taken to attain the terminal velocity is independent of the fluid density

4.   A gaseous mixture enclosed in a vessel contains 1 gram mole of monoatomic gas A and another diatomic gas B at temperature T. the gas A and B do not react with each other and assumed to be ideal. Find the number of gram moles of B if γ of the mixture is 19/13.

5. (i)   What is the specific heat of a gas in adiabatic process.

   (ii) Prove that the slope of an adiabatic curve at a point is γ times the slope of an isothermal curve at the corresponding point.

   (iii) Calculate the fall in temperature of helium initially at 15^0C , when it is suddenly expanded to 8 times its volume.

6.   5 moles of oxygen are heated at constant volume from 10^0C to 20^0C. what will be the change in internal energy of the gas? The gram molecular specific heat of oxygen at constant pressure is 8 cal mole^{-1} $^0C^{-1}$.

7.   A uniform heavy rod of weight W cross section area A and length l is hanging from a fixed support. Young's modulus of the material of the rod is Y. Neglecting the lateral contraction find the elongation produced in the rod

8. (i)   If the volume of a block of metal changes by 0.12% when

heated through 20^0C what is the coefficient of linear expansion of metal?

(ii) Steam at 100^0C is passed into a copper cylinder 10mm thick and 200cm^2 area. Water at 100^0C collects at the rate of 150g/min. find the temperature of the outer surface if the conductivity of the copper is 0.8 cal s^{-1}cm^{-1} ^{0}C^{-1} and the latent heat of steam is 540 cal /g.

9. State and prove Bernoulli's principle for the flow of an ideal fluid.

10. Derive the expression for terminal velocity of a small spherical body falling through a viscous medium.
Also justify :
Rain drops fall down in air whereas air bubbles rises up in water.

1. A particle undergo S.H.M. between x = -A and x = +A. The time taken for it to go from 0 to A/2 is T_1 and to go from A/2 to A is T_2. Then how T_1 and T_2 are related?

2. A whistle of frequency 540 Hz rotates in a circle of radius 2 m at angular speed of 15rad/s. What is the lowest and highest frequency heard by the listener a long distance away at rest w.r.t. the center of the circle? Can the apparent frequency be ever equal to the actual frequency? Take v = 330m/s.

3. Write Newton's formula for speed of sound in a gas. Why and what correction was applied by Laplace in this formula?

4. A cylindrical piece of cork of base area A and height h floats in a liquid of density ρ_1. The cork is depressed slightly and then released. Show that the cork oscillates up and down with a period
$T = 2\pi(h\rho/\rho_1 g)^{1/2}$, where ρ is the density of cork.(ignore damping due to viscosity of liquid)

5. Show for a particle in linear S.H.M, the average kinetic energy over a period of oscillation is equal to average potential energy over the same period.

6. An organ pipe emits a fundamental note of frequency 128 Hz. On blowing into it more strongly it produces the first overtone of frequency 384Hz. What is the type of pipe – open or closed?

7. Using Doppler effect obtain an expression for the apparent frequency of sound when the source is moving towards the stationary observer with uniform velocity.

8. A pipe 30cm long is opened at both the ends. Which harmonic mode of the pipe is resonantly excited by 1.1kHz source? Will resonance with the same source be observed if the end of the pipe is closed? Take speed of sound in air as 330ms^{-1}.

9. Determine the possible harmonics in the longitudinal vibration of a rod clamped in the middle.

10 Two sitar strings A and B playing the note "Ga" are slightly out of tune and produce beats of frequency 6Hz. The tension in

string A is slightly reduecd and the beat frequency is found to reduce yo 3 Hz. If the original frequency of A is 324 Hz, what is the frequency of B?