Everwin Matric. Hr. Sec. School 28.11.19 **Comprehensive Revision Programme-2** Marks:40 Std:XII [A,B] FN Chemistry (Part-IV) Time:1.15mins 5x1 = 5I. Choose the correct answer: 1. Which is used as a substrate for manufacturing thermo softening plastic Perspex? a. Acetaldehyde b. Acetone c. Benzaldehyde d. Formic acid 2. Benzaldehyde + N1N dimethylani line  $\rightarrow$ a. Bromophenol blue b. Malachitegreen c. Ethidium bromide d. None of these 3. Urotrophine is \_\_\_\_. a. tetra methyclene tetramine b. Hexamethylenetetramine c. tetra methylene hexamine d. all of these 4. Fe(OH)<sub>3</sub>Sol appears as a. spherical shape b. disc shape c. rod shape d. oval shape 5. Natural honey is differentiated from Artificial by \_\_\_\_\_. a. ammonical AUNO<sub>3</sub> b. ammonical AgNO<sub>3</sub> d. None of these c. ammonical  $AlCl_3$ II. Answer any 5 of the following: 5x2=106. Addition of Alum purifies water. Why? 7. What is the difference between sol and a gel? 8. Define Adsorption isotherm. 9. Differentiate lyophilic and lyophobic colloids. 10. Write the IUPAC name of: (i)  $H_3C - \overline{\langle - \rangle} - CHO$ (ii) (CH<sub>3</sub>)<sub>2</sub>C=CHCOCH<sub>3</sub> 11. Write Stephen  $\overline{reaction}$ . 12. What are pinacols? 13. Write two uses of HCHO & C<sub>6</sub>H<sub>5</sub>CHO. III. Answer any 5 of the following: 5x3 = 1514. Write Aldol condensation. 15. What is Friedel-crafts acylation? 16. Write Ozonolysis of alkenes. 17. Differentiate clemmensen and wolf kishner reduction. 18. Give a account on zeolite catalysis. 19. Differentiate physisorption and chemisorptions. 20. What are emulsions? 21. Define Brownian movement. IV. Answer any 2 of the following: 2x5=1022. Explain the theories of adsorption. 23. Discuss in detail the preparation of colloids. 24. Write 3 Nucleophilic addition reaction of aldehyde. 25. Explain Cannizaro reaction.

Everwin Matric. Hr. Sec. School 28.11.19 Comprehensive Revision Programme-2 Marks:40 Physics (Part-IV) Std:XII [C-E] AN Time:1.15mins I. Choose the correct answer: 5x1 = 51. In a hydrogen atom, the electron revolving in the fourth orbit has angular momentum equal to \_\_\_\_\_. a) h b)  $\frac{h}{\pi}$  c)  $\frac{4h}{\pi}$  d)  $\frac{2h}{\pi}$ 2. The change of cathode rays is a) positive b) negative c) neutral d) not defined 3. If the nuclear radius of <sup>27</sup>Al is 3.6 fermi, the approximate nuclear radius of <sup>64</sup>Cu is \_\_\_\_\_. b) 1.2 c) 4.8 d) 3.6 a) 2.4 4. Suppose an alpha particle accelerated by a potential of V (volt) is allowed to collide with a nucleus whose atomic number is Z, then the distance of closest approach of alpha particle to the nucleus is \_\_\_\_\_. a)  $14.4 \frac{z}{v} \dot{A}$  b)  $14.4 \frac{v}{z} \dot{A}$  c)  $1.44 \frac{z}{v} \dot{A}$  d)  $1.44 \frac{v}{z} \dot{A}$ 5. The average binding energy per nucleon is about for mass number between A=40 and 120. a) 5.6 Mev b) 8.8 Mev c) 8.5 Mev d) 6.6 Mev II. Answer any 5 of the following: 5x2=106. Calculate the number of nuclei of carbon-14 undecayed after 22920 years if the initial number of carbon-14 atoms is 10,000. The half life of carbon-14 is 5730 years. 7. Define curie. 8. What is binding energy of a nucleus? 9. Define ionization energy and ionization potential. 10. Write down the drawbacks of Bohr atom model. 11. Define atomic mass unit u. III. Answer any 5 of the following: 5x3 = 1512. What are the properties of nuclear force. 13. Derive the expression for half-life period. 14. Discuss the alpha decay process with example. 15. Write all the postulates of Bohr atom model. 16. Explain the variation of average binding energy with the mass number by graph. IV. Answer any 2 in detail: 2x5 = 1017. Discuss the spectral series of hydrogen atom. 18. Obtain the law of radioactivity.

- 19. Discuss the Millikan's oil drop experiment to determine the charge of an electron.

## EVERWIN MATRIC HR SEC SCHOOL

28.11.19	Comprehensive Revision Programme-2	Time:1.15 hrs
STD: XII (A,B) AN	Biology	Marks: 20
	Bio-Botany	
I. Answer all the	e question:	3x1=3

- 1. First cell of Male gametophyte in angiosperm is \_\_\_\_\_.
  - a) Megaspore b) Microspore c) Nucleus
  - d) Primary Endosperm Nucleus

## 2. Pollen tube was discovered by \_\_\_\_\_.

- a) J.G.Kolreuter b) G.B.Amici c) E.Strasburger
- d) E.Hanning
- 3. Which of the given plant produces cardiac glycosides?
- a) Calotropis b) Acacia c) Nepenthes d) Utricularia
- II. Answer any 3 of the following: 3x2=6
- 4. What are the advantages of seed dispersal?
- 5. What is Rhytidome?
- 6. What are the significance of parthenocarpy?
- 7. Define Apomixis.
- III. Answer any 2 of the following: 2x3=6
- 8. List out the characteristics of ornithophilous flowers.
- 9. Differentiate Herkogamy and Heterostyly.
- 10. What is co-evolution?
- IV. Answer any 1 in detail:
- 11. What is vivipary?
  - i) Name a plant group which exhibits vivipary.
  - ii) Lichen is considered as a good example of obligate mutualism. Explain.

1x5=5

12. Differentiate the structure of Dicot and Monocot seed.

## **Bio-Zoology**

I Answer any one of the following:	1 = 1 = 1
1. Answer any one of the following.	1X1-1
1. What is the condition of chromosome set for a spe	rmatid?
a) haploid b) diploid	
2. Which hormone brings about Lactational amenor	hoea, which
hormone is inhibited?	
II. Answer any 4 of the following:	4x2=8
3. What is meant by strobilation?	
4. Write a note on conjugation.	
5. What is meant by Parthenogenesis?	
6. What is meant by Patau's syndrome?	
7. What is the role of IUD's?	
8. What is meant by Brater Hick's?	
9. What is meant by Weiners hypothesis?	
III. Answer any 2 of the following:	2x3=6
10. Differentiate vasectomy and tubectomy.	
11. Differentiate GIFT and ZIFT.	
12. What is meant by Erythroblastosis foetalis?	
13. What is meant by isogamy and anisogamy?	
IV. Answer any one of the following:	1x5=5
14. Explain Multiple Allelism and co-dominance in H	luman blood
group – ABO	
15. Write a note on one Bacterial std and one from fu	ungal and

protozoan STD.

Everw 28.11.19 Comprehe Std:XII [F-H] FN A I. Choose the correct ar	in Matric. Hr. Sec. So ensive Revision Progr Accountancy (Part-III) aswer:	chool camme-2 Marks:40 Time:1.15 hrs 10x1=10
1. Incomplete records a	re generally maintair	ned by .
a. Company	b. Governm	nent
c. Small sized so	le trader basing	
2. The excess of assets	over liabilities is	
a. loss	b. capital	c. curb
3. What is the amount of	of capital of the prop	rietor, if his assets are
Rs.85,000 and liabil	ities are 21000?	
a. 64,000	b. 85,000	c. 1,06,000
4. Receipts and paymer	nt a/c is a	
a. Nominal a/c	b. Real a/c	c. Personal a/c
5. Income and expendit	ure a/c is a	
a. Real a/c	b. Nominal a/c	c. Personal a/c
6. Donation received for	specific purpose is _	·
a. revenue receipt	b. capital receipt	c. capital expenditure
7. On what basis the re	ceipts and payment a	a/c is prepared
a. cash basis	b. credit basis	c. both
8. Capital fund also cal	led as	
a. accumulated fund	b. special fund	c. donation fund
9. Companies cannot k	eep books on single e	entry system because
of		
a. tax properties	b. legal provisions	s c. both a & b
10. A firm has asset wo	rth Rs.47500 and lia	bilities Rs.17,700.
Then capital is	·	
a. 29800	b. 65200	c. 17700

II. Answer any 4 of the following questions:

4x5=20

11. From the information given below, prepare receipts and payment a/c of Coimbatore cricket club for the year ends 31/3/19.

Particulars	Rs.	Rs.	Particulars	Rs.
Bank overdraft (1.4.18)		6000	Honorarium paid	2800
Cash in hand		1000	Electricity charges	700
Wages paid for ground				
maintenance		2000	Match expenses	2600
Subscription received:			Sports material	
			purchases	1900
Previous year	500		Match fund receipts	5200
Current year	9600		Legacies	2000
Subsequent year	400	10500	Cash balance 31.3.19	300
Wages yet to be paid		2200	Donation received	
Interest on loan paid		2000	pavilion	2000
12 State the difference h	l Detween	Recein	, and Payment a/c an	d

12. State the difference between Receipt and Payment a/c and Income and expenditure a/c.

13. Prepare Income and Expenditure a/c of Basket ball association for the year ended 31<sup>st</sup> March, 2018.

Receipt	Rs.	Rs.	Payment	Rs.	Rs.
To balance b/d			By salary		1500
cash in hand	3200		By rent		800
To subscriptions	22500		By electricity		3500
To entrance fees	1250		By taxes		1700
To donations	2500		By stationery		380
To rent of hall	750		By sundry expenses		920
To sale of Investment	3000		By book purchased		7500
			•		

	By Govt.bond purchases		10,000
	By fixed deposit		
	(on 31.3.14)		5000
	By balance c/d:		
	Cash in hand	400	
	Cash at bank	1500	1900
33200			33200

14. How the following items will appear in the final a/c of a club for year ending 31.3.19?

Receipts	Rs.	Rs.	Payments	Rs.	Rs.
To subscripted					
2017-2018	5000				
2018-2019	48000				
2019-2020		56000			

There are 300 members in the club each paying an annual subscription of Rs.200 per annum. Subscription still outstanding for the year 2017-2018 is 1000.

15. From the following particulars, calculate total sales.

Particulars	Rs.
Debtors 1.1.17	1,50,000
Bills receivable 1.4.17	40,000
Cash received from debtors	3,90,000
Cash received for Bills receivable	90,000
Bills receivable dishonoured	10,000
Sales return	40,000
Bills receivable on 31.3.18	30,000
Sundry debtors on 31.3.18	1,30,000
Cash sales	2,00,000

IV. Answer the following:	10x1=10
16. From the following particulars of Rakesh, Prepar	re Trading
and Profit and Loss a/c balance sheet for the year er	nded 31.3.19

Particulars	31	.3.18	31.3.19
Stock of goods	2,2	20,000	1,60,000
Debtors	5,3	30,000	6,40,000
Cash at Bank	6	50,000	10,000
Machinery	8	30,000	80,000
Creditors	3,7	70,000	4,20,000
Other details:		I	
Particulars	Rs.	Particulars	Rs.
Rent paid	1,20,000	Cash received	
		from debtors	1250000
Discount received	35000	Drawings	100000
Discount allowed	25000	Cash sales	20,000
Cash paid to creditors	11,00,000	Capital 4.4.18	5,20,000

## EVERWIN MATRIC. HR. SEC. SCHOOL

28.11.19Comprehensive Revision Programme-2Marks: 40Std: XII (A,B) ANComputer ScienceTime:1.15 hrsI. Choose the correct answer:5x1=5

1. \_\_\_\_\_ are functions that build the abstract data type.

a) Constructors b) Destructors c) Concrete data type d) None

\_\_\_\_\_ separation is necessary between tokens, identifiers or keywords.

a) Blankspace b) Whitespace c) Tab d) Spaces

3. Which of the following method is automatically executed when an object is created?

a) \_object\_() b) \_del\_() c) \_func\_() d) \_unit\_()

- 4. \_\_\_\_\_ is security from unauthorized users.
  - a) Data integrityb) Data consistency c) Redundancyd) Data abstraction
- 5. Which is a python package used for 2D graphics?
  - a) matplotlib.pyplot b) matplotlib.pipc) matplotlib.numpyd) matplotlib.pit
- II. Answer any 5 of the following in one or two lines: 5x2=10

Q.No.12 is compulsory

- 6. Define Data Visualization.
- 7. What are the advantages of DBMS?
- 8. What are the E.F Codd Rules?
- 9. What are self arguments?
- 10. What are literals? What are its types?
- 11. What are the different modes that can be used to test Python Program?
- 12. What is list and Tuple with example.

- III. Answer any 5 of the following in brief:Q.No.19 is compulsory
- 13. Identify which of the following are constructors and selectors:
  - a) N1=number()b) accetnum(n1)c) displaynum (n1)d) eval (a/b)

e) xy=makesslope(m), makeslope (n) f) display()

- 14. Define the following:
  - i) Data abstraction
  - ii) Example for rational numbers AN ADT
- 15. What are the types of comments in python?
- 16. Write short notes on Escape sequences with eg.
- 17. Write a class with two private class variables and print the sum using a method.
- 18. Define Database Structure.
- 19. Write any three uses of data visualization.
- IV. Answer any 2 of the following in detail: 2x5=10
- 20. Explain the various buttons in a matplotlib.window.
- 21. Explain the different operators in Relational algebra with suitable examples.
- 22. What is meant by Token? Name the types of token and explain the types of operators with example.
- 23. How will you access the multi item? Explain with example.

Everwin Matric. Hr. Sec. School Comprehensive Revision Programme-2 Marks:40 28.11.19 Std:XII-F,G (AN) Economics Time: 1.15 hrs I. Choose the correct answer: 5x1=51. Who wrote the book "The Road to Serfdom"? a) Friedrich Hayek b) H.R.Hicks c) David Ricardo d) Thomas Robert Malthus 2. Planning Commission was setup in the year \_\_\_\_\_. a) 1950 c) 1947 b) 1951 d) 1948 3. M.N.Roy was associated with . a) Congress plan b) People's plan c) Bombay plan d) None of the above 4. The term Uiin regression equation is \_\_\_\_\_ a) Residuals b) Standard error c) Stochastic error term d) none 5. Sources of secondary data are \_\_\_\_\_. b) Unpublished sources a) Published sources c) neither published nor unpublished sources d) Both (A) and (B) II. Answer any 5 of the following: 5x2=106. Define economic development. 7. What is GNP? 8. What are the social indicators of economic development? 9. What are the kinds of statistics? 10. Define Correlation. 11. Define Regression. III. Answer any 5 of the following: 5x3 = 1512. What are the non-economic factors determining development? 13. How would you break the vicious circle of poverty? 14. What are the functions of statistics? 15. State and explain the different kinds of correlation. 16. Mention the uses of Regression Analysis. 17. Discuss the important statistical organizations (offices) in India. IV. Answer any 2 of the following: 2x5=1018. Describe different types of planning. 19. Bring out the arguments against planning. 20. Calculate the Karl Pearson correlation co-efficient for the following data: X 45 48 50 55 65 70 75 72 80 85 Y 18 22 23 24 25 26 28 29 30 32

Everwin Matric. Hr. Sec. School
28.11.19 Comprehensive Revision Programme-2 Marks:40
Std:XII (I,J) FN Commerce Time: 1.15 hrs
I. Choose the correct answer: $5x1=5$
1. How many times a security can be sold in a secondary market?
a) only one time b) two times c) three times
d) multiple times
2. Risk in the money market is
a) high b) market risk c) low credit and market risk
d) medium risk
3. The poor quality of selection will mean extra cost on and
supervision.
a) Recruitment b) work quality c) training
d) all the above
4 According to "Entrepreneurship is essentially a
creative activity"
a) Schumpter Joseph b) Jean Batize c) A H Cole
d) Mary Coulter
5 ontronronour is inspired to take up ontronronourial activity
5entrepreneur is inspired to take up entrepreneurial activity.
a) Spontaneous b) Fabian c) Drone d) Induced
II. Answer any 5 of the following: $5x^2=10$
6. who are agricultural entrepreneur?
7. List the problems faced by women entrepreneurs.
8. What do you mean by test?
9. What are the instruments of money market?
10. What is Mutual Fund?
11. Write a note on OTCEI.
III. Answer any 5 of the following:5x3=15
12. How does a professional entrepreneur operate?
13. Distinguish between entrepreneur and manager.
14. List out the significance of placement.
15. What are the types of commercial bill?
17. Explain two functions of capital market
IV Answer any 2 of the following: $2x5=10$
18. Discuss the nature of functional entrepreneurs.
19. What are the characteristics of an entrepreneur?
20. Explain the important methods of interview.

Everwin Matric. Hr. Sec. School Comprehensive Revision Programme-2 Marks:40 28.11.19 Std:XII (H-J) AN **Business Mathematics** Time: 1.15 hrs I. Choose the correct answer: 10x1 = 101. If  $A=(1 \ 2 \ 3)$  then the rank of  $AA^{T}$  is \_\_\_\_\_. d)1 a) 0 b) 2 c) 3 2. The rank of the unit matrix of order 'n' is \_\_\_\_\_. c) n+1 d) n<sup>2</sup> b) n a) n-1 3. If  $|A| \neq 0$  then A is \_\_\_\_\_ matrix. a) Singular b) Non-singular c) Zero d) Diagonal 4. Rank of a null matrix is \_\_\_\_\_. b) -1 c) ∞ d) 1 a) 0 5. If (A)=  $\rho$ (AB) then the system is \_\_\_\_\_. a) Consistent b) Inconsistent c) Trivial d) Non-trivial 6. In an assignment problem the value of decision variable  $x_{ij}$  is \_\_\_\_\_. d) none of these a) 1 b) 0 c) 1 or 0 7. A type of decision-making environment is \_\_\_\_\_. a) Certainty b) Uncertainty c) Risk d) All the above 8. North-west corner refers to corner. a) Top left b) Top right c) Bottom right d) Bottom left 9. Solution for transportation problem using \_\_\_\_\_ method is nearer to an optimal solution. d) Row Minima a) NWCM b) LCM c) VAM 10. The penalty in VAM represents difference between the first \_\_\_\_\_. a) Two largest costs b) Largest and smallest costs c) Smallest two costs d) None of these II. Answer any 5 of the following: 5x3=15 11. Find the rank of  $\begin{pmatrix} 1 & -2 & 3 & 4 \\ -2 & 4 & -1 & -3 \\ -1 & 2 & 7 & 6 \end{pmatrix}$ 12. Find k, if the equations x+y+z=7, x+2y+3z=18, y+kz=6 are inconsistent.

- 13. Solve x+y+z=4, 2x-y+3z=1, 3x+2y-z=1 by Cramer's Rule.
- 14. Two types A and B soaps are in the market. Their present market shares are 15% for A and 85% for B. Of these who bought A the previous year, 65% continue to buy it again while 35% switch over to B. Of those who bought B the previous year 55% buy it again while 45% switch over to A. Find their market shares after two years.

15. Consider the following pay-off matrix

Alternative	Pay-offs			
	A1	A <sub>2</sub>	A <sub>3</sub>	A <sub>4</sub>
$E_1$	7	12	20	27
$E_2$	10	9	10	25
E <sub>3</sub>	23	20	14	23
E <sub>4</sub>	32	24	21	17

16. Find the optimal solution for the assignment problem with following cost matrix.

	Area				
	Р	Q	R		
А	120	100	80		
Salesman B	80	90	110		
С	110	140	120		
III. Answer any 3 of the following:					

3x5=15

17. Obtain an initial basic feasible solution to the transportation problem by North-West corner method.

-	D	Е	Р	С	Available
А	11	13	17	14	250
В	16	18	14	10	300
С	21	24	13	10	400
Required	200	225	275	250	

18. Consider the following transportation problem. Determine the feasible solution by VAM.

	$D_1$	$D_2$	$D_3$	D4	Availability
$O_1$	5	8	3	6	30
$O_2$	4	5	7	4	50
O <sub>3</sub>	6	2	4	6	20
Requirement	30	40	20	10	

- 19. Investigate for what values of 'a' and 'b' the equations x+y+z=6, x+2y+3z=10, x+2y+az=b have (i) No solution (ii) unique (iii) IMS
- 20. A total of ₹ 8500 was invested in three interest earning accounts. The interest rates were 2%, 3% and 6% if the total S.I for one year was ₹ 380 and the amount invested at 6% was equal to the sum of the amounts in the other two accounts then how much was invested in each account? (Use Cramer's Rule).

Everwin Matric. Hr. Sec. School28.11.19Comprehensive Revision Programme-2 Marks:40Std:XII (C-E) FNMathematicsTime: 1.15 hrsI. Choose the correct answer:10x1=101. Consider a game where the player tosses a six-sided fair die. If the<br/>face that comes up is 6, the player wins ₹36, otherwise he loses₹k², where k is the face that coms up k={1,2,3,4,5}. The expected<br/>amount to win at this game in ₹ is \_\_\_\_\_.

a)  $\frac{19}{6}$  b)  $-\frac{19}{6}$  c)  $\frac{3}{2}$  d)  $-\frac{3}{2}$ 

- 2. A random variable X has binomial distribution with n=25 and p=0.8 then standard deviation of X is \_\_\_\_\_.
  - a) 6 b) 4 c) 3 d) 2
- 3. If the function  $f(x) = \frac{1}{12}$  for a<x<b, represents a probability density function of a continuous random variable X, then which of the following cannot be the value of a and b?

a) 0 and 12 b) 5 and 17 c) 7 and 19 d) 16 and 24

4. Two coins are to be flipped. The first coin will land on heads with probability 0.6, the second with probability 0.5. Assume that the results of the flips are independent, and let X equal the total number of heads that result. The value of E[X] is \_\_\_\_\_.

a) 0.11 b) 1.1 c) 11 d) 1

5. On a multiple-choice exam with 3 possible destructives for each of the 5 questions, the probability that a student will get 4 or more correct answers just by guessing is \_\_\_\_\_.

a)  $\frac{11}{243}$  b)  $\frac{3}{8}$  c)  $\frac{1}{243}$  d)  $\frac{5}{243}$ 6. If P(X=0)=1-P(X-1). If E[X]=3VAr(X), then P(X=0) is \_\_\_\_\_. a)  $\frac{2}{2}$  b)  $\frac{2}{r}$  c)  $\frac{1}{r}$  d)  $\frac{1}{2}$ 

- 7. Suppose that X takes on one of the values 0, 1 and 2. If for some constant k, P(X=i)=kP(X=i-1) for i=1,2 and P(X=0)=<sup>1</sup>/<sub>7</sub>, then the value of k is \_\_\_\_\_\_.
  a) 1 b) 2 c) 3 d) 4
- 8. If  $f(x) = \begin{bmatrix} 2x & 0 \le x \le a \end{bmatrix}$ otherwise is a probability density function of a random variable, then the value of a is \_\_\_\_\_. b) 2 c) 3 a) 1 d) 4 9.For binomial random variable mean  $(\mu)$  is \_\_\_\_\_. c)  $np^2$  d) n+pa) npq b) np 10. The numberical values to the elements in sample space is called . a) Random variable b) Continuous variable c) Outcomes d) Inverse Image II. Answer any 3 of the following: 3x2=611. Suppose two coins are tossed once. If X denotes the number of tails write the sample space and find the inverse image of 1. 12. The probability of density function of x is given by  $f(x) = Kxe^{-2x}$  for x > 0 $\int 0$  for x<0 find the value of K. 13. Compute P(X=K) for the binomial distribution B(n,p) where n=9,  $p=\frac{1}{2}$ , K=7 14. Using binomial distribution find the mean and variance of X for a fair coin is tossed 100 times and x denote the number of heads. III. Answer any 3 of the following: 3x3=915. For the random variable x with the given probability mass
- function as below, find the mean and variance of  $f(x) = \begin{cases} 2(x-1) & 1 < x < 2 \\ 0 & 0 \end{cases}$

16. If x is the random variable with distribution function F(x) is

given by F(x)= $\begin{cases} 0, & 0 < 0 \\ x, & 0 \le x < 1 \\ 1, & 1 \le x \end{cases}$ 

- 17. The mean and variance of a binomial variate x are 2 and 1.5 Find  $P(x \ge 1)$
- A random variable x has the following probability mass
   Function

х	1	2	3	4	5
f(x)	$K^2$	$2K^2$	3K <sup>2</sup>	2K	3K
Find (i) the value of K (ii) $P(3 < x)$					

- 19. An urn contains 5 mangoes and 4 apples. Three fruits are taken at random. If the number of apples taken is a random variable then find the values of the random variable and number of points in its inverse images.
- IV. Answer any 3 of the following: 3x5=15
- 20. The cumulative distribution function of a discrete random variable is given by

$$F(x) = \begin{cases} 0 & -\infty < x < -1 \\ 0.15 & -1 \le x < 0 \\ 0.35 & 0 \le x < 1 \\ 0.60 & 1 \le x < 2 \\ 0.85 & 2 \le x < 3 \\ 1 & 3 \le x < \infty \end{cases}$$

Find (i) the probability mass function (ii) P(X<1) and (iii)  $P(X\ge 2)$ 

21. Suppose the amount of milk sold daily at a milk booth isdistributed with a minimum of 200 litres and a maximum of600 litres with probability density function

 $f(x) = \begin{cases} K & 200 \le x \le 600 \\ 0 & \text{otherwise} \end{cases}$ 

Find (i) the value of K (ii) the distribution function (iii) the probability that daily sales will fall between 300 litres and 500 litres?

- 22. On the average 20% of the products manufactured by ABC Company are found to be defective. If we select 6 of these products at random and X denotes the number of defective products find the probability that (i) two products are defective (ii) at most one product is defective.
- 23. A six sided die is marked '2' on one face, '3' on two of its faces and '4' on remaining three faces. The die is thrown twice. If x denotes the total score in two throws, find the values of the random variable and number of points in its inverse image.

Everwin Matric. Hr. Sec. School Comprehensive Revision Programme-2 Marks:40 28.11.19 Std:XII (H-J) AN Computer Application Time: 1.15 hrs I. Choose the correct answer: 5x1=5command is used to delete a database. 1. a) Delete database name b) Delete database database name c) drop database database name d) drop database\_name 2. Which of the below symbols is a newline character? a) \r c) / n d) /r b) \n 3. Match the following: (i) domain - 1. Progress that initiates translation - 2. Contains database of domain names (ii) zone (iii) name server -3. Single node (iv) resolver - 4. Contiguous nodes a) (i)-1 (ii)-4 (iii)-3 (iv)-2 b) (i)-3 (ii)-4 (iii)-2 (iv)-1 c) (i)-3 (ii)-2 (iii)-1 (iv)-4 d) (i)-3 (ii)-4 (iii)-1 (iv)-2 4. Secure Electronic Transaction (SET) was developed in . d) 1997 a) 1999 b) 1996 c) 1969 5. UNSM stands for . a) Universal Natural Standard message b) Universal Notations for simple message c) United Nations Standard message d) United Nations Service message II. Answer any 5 in short: (Q.no.8 is compulsory) 5x2=106. List few disadvantages of file processing system. 7. Define Client Server Architecture. 8. What is a resolver? 9. What is a domain? 10. Define non-repudiation. 11. Write a note on EDIFACT segment. III. Answer any 5 in brief: (Q.no.14 is compulsory) 5x3=15 12. Discuss on cardinality in DBMS. 13. Define Foreign key. 14. Write the purpose of web servers. 15. Differentiate Domain name and URL. 16. List some E-commerce security threats. 17. Write a note on PGP. 18. List the various layers of EDI. IV. Answer any 2 in detail: 2x5=1019. Write about the structure of EDIFACT. 20. Explain various types of E-commerce threats. 21. Explain how the DNS is working.