1st Term Exam-2018

Class: X F.M-80 Sub:-Biology Time: 2 hrs.

<u>Section A [40 Marks]</u> <u>Attempt all the question from this section</u>

Q1 a. Name the following;		[5]
i. The process by which root hair ab	sorbs water from soil.	
ii. The organ which produces urea.		
iii. Pigment providing colour to urin	ne.	
iv. The process causing undesirable	change in the environment.	
v. The common gibberellin is		
b. State the main function of the follow	ring:	[5]
i. Renal artery ii. Henele's loo	op	
iii. Lenticles iv. Abscisic ac	rid v. Xylem	
c. The statements given below are incom	rrect. Rewrite the correct statement by changing the und	erlined
words of the statements:		[5]
1. Free movement of solutes in and out	of the cell takes place across the <u>cell membrane</u> .	
2. Cytokinins stimulate growth by cell	elongation.	
3. Phototropism means movement of pl	lants towards <u>earth's gravity</u> .	
4. The pressure of the cell contents on t	the cell wall is called <u>wall pressure</u> .	
5. Guttation takes place through stomat		
d. State the exact location of the follow	ring structures:	[5]
1. Centromere 2. Kid	neys	
3. Proximal Convoluted tubule. 4. Cut	icle 5. Cell membrane	
e. Differentiate between members of ea	ach group on the basis of what is mentioned in the bracket	et: [5]
1. Auxins and ethylene.(Function)		
2. Afferent arteriole and efferent arterio	ole(Type of Blood it carries)	
3. Renal cortex and Renal medulla(Part	ts of the nephrons present)	
4. Respiration and Photosynthesis(Gas	released)	
5. Grass and Grass hopper (mode of nu	trition)	
f. Complete the following paragraph by	y filling in the blanks (i) to (v) with appropriate words:	[5]
The amount of urine output is under the	e regulation of the hormone called (i) Secreted b	y the
(ii) lobe of pituitary gland. If the	ne urine contains excess glucose it leads to a disease (iii)	
In a nephron the (iv) flows through	h the (v) under great pressure.	
g. Match the items given in column A	with the most appropriate ones in column B:	[5]
COLUMN A	COLUMN B	
i. Xylem	a. Semi Permeable	
ii. Phloem	b. Permeable	
iii. Cell membrane	c. Downward flow of a sap	
iv. Root pressure	d. Upward flow of water	

e. Guttation

v. Cell wall

onimal call

h. Given below is a diagram representing a stage during mitotic cell division in an animal cell. Examine it carefully and answer the questions that follow: [5]

- i. Identify the stage. Give one reason in support of your answer.
- ii. Name the parts labelled 1,2 and 3.
- iii. Name the cell organelle that forms the "asters".
- iv. Name the stage prior to this stage and draw a diagram to represent the same.

<u>Section-B (40 Marks)</u> Attempt any four questions from this section.

Q2a. Briefly explain the following terms:

[5]

- i. Osmosis ii. Bleeding
- iii. Plasmolysis iv. Mutation v. Alleles
- b. The diagram below shows the excretory system of a human being. Study the same and then answer the questions that follow:

 [5]

- i. Name the parts labelled 1,2,3 and 4.
- ii. Give the main functions of the part labelled 5, 6, 7 and 8.
- iii. Name the endocrine gland which could be added in the diagram and state its location.

Q3a. A homozygous plant having round(R) and yellow(Y) seeds is crossed with homozygous plant having wrinkled (r) and green (y) seeds: [5]

- i. Give the scientific name of the plant on which Mendel conducted the experiment.
- ii. Give the genotype of the F1 generation.
- iii. Name and explain the law which explains the dihybrid ratio.
- iv. Give the possible combinations of the gametes that can be obtained from F1 hybrid.
- v. Give the different phenotypic ratio and the phenotype of the offspring of F2 generation when two plants of the F1 generation are crossed.

h	Study	tha	diagram	aivon	halow	and	onessor	tha	quartions	that	follow.
D.	Stuav	tne	aiagram	given	below	ana	answer	tne	questions	tnat	IOHOW:

- i. Name the process being studied in the above experiment.
- ii. Explain the process mentioned in (i) above.
- iii. Why is oil placed over water?
- iv. What do we observe with regard to the level of water when this set up is placed in
 - (i) bright sunlight (ii) windy day (iii) Humid conditions

Q4a. Explain briefly the following statements:

[5]

- i. In summer season less quantity of urine is produced than in winter.
- ii. An uprooted plant dies.
- iii. Potato cubes when placed in water becomes firm and increase in size.
- iv. If you sprinkle some common salt on grass growing on a lawn, it is killed at that spot.
- It is better to transplant seedling in a flower bed in the evening and not in the afternoon.
- b. Draw neat and labelled diagram of:

[5]

- i. Malpighian capsule
- ii. one single open stomata

Q5a. The figure given below is a diagrammatic representation of a part of the cross section of the root in the root hair zone. Study the same and then answer the questions that follow: [5]

- i. Name the parts indicated by the guidelines 1 to 4.
- ii. Name the pressure that is responsible for the movements of water molecules in the direction indicated by the arrows.
- iii. Due to excess of this pressure sometimes water drops are found along the leaf margins. What is the phenomenon called?
- iv. Draw a neat labelled diagram of the root hair cell as it would appear if an excess of fertiliser is added to the soil closed to it.
- v. Name the process that enables the passage of water from the soil into the root hair.

[5]

- b. Choose the Odd one out and name the category to which the other belong:
- i. Bile, Urea, Uric acid, Ammonia
- ii. Sunken stomata, Thick cuticle, Temperature, Loss of stomata
- iii. Lenticles, cell membrane, Cuticle, Stomata
- iv. Atmospheric pressure, Narrow leaves, CO2, Wind velocity
- v. Nephron, Proximal convoluted tubule, Distal Convoluted tubule, Excretion.

Q6a. The diagram given below shows a section of a human kidney. Study the diagram carefully and answer the questions that follow. [5]

- i. Label the parts 1 to 4
- ii. Why does part "2" have striped appearance?
- iii. What is the fluid that passes down "4"? Name the main nitrogenous waste present in it.

emer

- iv. Mention the structural and functional unit of kidney.
- v. Name the two major steps in the formation of the fluid mentioned in (iii) above.

b. A candidate in order to study the process of osmosis has taken 3 potato cubes and put them in different beakers containing 3 different solutions. After 24 hrs. In the first beaker the potato cube increased in size, in the second cube potato cube decreased in size and in the third beaker there was no change in the size of the potato cube. The following diagram shows the result of the same experiment.[5]

- i. Give the technical term of the solutions used in beakers 1 2 and 3.
- ii. In beaker 3 the size of the potato cubes remains the same. Why?
- iii. Write the specific feature of the cell sap of root hairs which helps in absorption of water.
- iv. What is diffusion?
- v. How does a cell wall and a cell membrane differ in their permeability?



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XAVIER SCHOOL, GAMHARIA 1st Term Exam-2018

Class: X
Sub:-Chemistry
F.M-80
Time: 2 hrs.

Sub:	Section A [40 Marks] All Questions are Compulsory	1 ime: 2 nrs.
1. Nan	me the following	1x5=5
(a)	Name any one covalent compound containing Chlorine.	
(b	o) Name an acid used as an eye wash.	
(c)	e) Salt of zinc which is efflorescent	
(d	d) An example of tribasic acid.	
(e)	e) An element 'X' belong to Period 3 and group II of the Periodic table. Name th	e element.
2. Cho	oose the correct answer from the choices a,b, c and d.	1x5=5
a) W	Which of the elements Li, Na, Mg and Al has the lowest ionization potential?	
	(a) Li (b) Na (c) Mg (d) Al	
b) W	Which of the following statement is true ?	
	(i) Halogens are bad conductors of heat and electricity.	١.
	(ii) Atomic size of halogens decreases on moving down the group.	T
	(iii) Electronegativity of halogens increases on moving down the group.	
	(iv) Electron affinity increases on moving down as group.	
c) T	Tartaric acid is used	
	(i) In baking powder	
	(ii) As an eye wash	
	(iii) In cooking	
	(iv) To remove ink stains	
d) If	f some acid is added to an aqueous solution its PH will -	
	(i) Increase (ii) decrease (iii) remains the same (iv) first increase and	then decrease
e) W	Which of the following is net soluble in water?	
	(i) NaCl (ii) KBr (iii) CaCl ₂ (iv) CH ₃ Cl	
3. The	e elements of one short period of the periodic table are given below in order from	left to right.
	Li Be B C O F Ne	1x5=5
(a) T	To which period do these elements belong?	
(b) C	One element of this period is missing which is the missing element and where it s	hould be
place	ed.	
(c) W	Which one of the elements in this period shows catenation property.	
(d) P	Place three elements fluorine, beryllium and nitrogen in the order of increasing el	ectronegativity.

(e) Which one of the above element belong to Halogen series?

- 4. Give Reasons $1\frac{1}{2}x2=3$ (a) Electron affinity of halogens is comparatively high. (b) Carbon tetrachloride does not dissolve in water. 5. Name the gas in each of the following. 1x3 = 3(a) The gas evolved on reaction of aluminium with boiling concentrated caustic alkali solution. (b) The gas produced when copper reacts with concentrated nitric acid (c) The gas produced on reaction of dilute sulphuric acid with a metallic sulphide. 6. What happens to the crystals of washing soda when exposed to air? name the phenomenon exhibited. 1 7. Two acids A and B have PH values 1 and 5 respectively. Which is a stronger acid A or B? 1 8. Element X is a metal with a valency 2. Element y is a non-metal with a valency. 1x2 = 2(a) Write equations to show X and Y form ions. (b) If Y is a diatomic gas, write the equation for direct combination of X and Y to form a compound. 9. Complete and balance the following equations – 1x5=5(a) $Pb(NO_3)_2 +$ NaCl ----(b) $Zn(OH)_2 +$ KOH → SO_2 HNO₃ - \longrightarrow Cu(NO₃)₂ H₂O (d) MgCO₃ H₂SO₄ (e) AgNO₃ 10. (a) From the list of salts – 1x2 = 2AgCl, MgCl₂, NaHSO₄, PbCO₃, ZnCO₃, KNO₃, Ca(NO₃)₂ Choose the salt that most appropriate fits the description given below (i) A deliquescent salt (ii) An insoluble chloride (b) From – Na₂O, SO₂, Al₂O₃, MgO, CO, select an oxide which dissolved in water forming an acid. (c) Write balanced reactions for the following conversion (A, B, C, D) 2 1x4 = 4(d) Draw an electron dot diagram of the structure of hydronium ion. State the type of bonding 2 present in it. Section B [40 Marks] Attempt any 4 sets of questions 1. a) Draw the structural formula of Carbontetra chloride and state the type of bond present in it.
 - 2x5=10
 - b) The metals of Group II from top to bottom are Be, Mg, Ca, Sr and Ba. Which of these elements will form ions most readily and why?
 - c) How would you prepare Calcium Sulphate from calcium carbonate
 - d) Anion is larger than the parent atom. Give reason.

- e) Name the element which has -.
 - (i) Two shells, both of which are completely filled with electrons.
 - (ii) A total of three shells with five electrons in its valence shell.
- 2. a) An element X belong to 3rd Period and 17th group, State

2x5=10

- (i) No. of valence electrons in it.
- (ii) Name of the element.
- (iii) Name of the family to which it belongs
- (iv) Write the formula of the compounds formed when X reacts with $_{13}Y^{27}$.
- b) Ionization potential of the element increases across a period. Give reason?
- c) The electronic configuration of fluoride ion is the same as that of a neon atom. What is the difference between the two?
- d) What is the difference between the chemical nature of an aqueous solution of HCl and an aqueous
- e) How does tooth enamel get damaged. What should be done to prevent it?
- 3. a) Taking MgCl₂ as an electrovalent compound CCl₄ as a covalent compound, give four differences between electrovalent and covalent compounds.
- b) Is PbO₂ a base or not? Comment
- c) Anhydrous FeCl₃ cannot be prepared by heating hydrated Iron (III) chloride.
- d) What would you observe when red litmus paper is introduced in caustic soda solution?
- e) Distinguish between efflorescence and deliquescence?
- 4. a) State your observation when washing soda crystals are exposed to atmosphere.
- b) Anhydrous CaCl₂ is used in a desiccators.
- c) Define neutralization reaction with the help of an example.
- d) H₃PO₃ is not a tribasic acid. Explain.
- e) Give one example of each.
 - (i) Oxy acid (ii) Hydra acid (iii) Tribasic acid (iv) Dibasic acid
- 5. a) Give a balanced equation for the preparation of a non-volatile acid from a volatile acid. 2x5=10
- b) Dry HCl gas does not change the colour of dry litmus paper. Why?
- c) How would you obtain salt from another salt.
- d) Draw Lewis dot structure of methane.
- e) Arrange the following in order of increasing radii
 - (i) Mg^{2+} , Mg, Mg^{+}
 - (ii) N, O, P

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- 6. a) A Metal M forms a nitride having the formula MN. It belong to third Period. Write the name, atomic number, mass number and valency of the metal. 2x5=10
- b) Name two elements that you would expect to show chemical reactions similar to Calcium. What is the basis of your choice?
- c) Match the following -

Column A			Column B		
(i)	Acid Salt	(A)	Ferrous ammonium sulphate		
(ii)	Double salt	(B)	Contains only ions		
(iii)	NH ₄ OH solution	(C)	Odium hydrogen sulphate		
(iv)	Dil. HCl	(D)	Contains only molecules		
(v)	Carbon tetrachloride	(E)	Contains ions and molecules both		

d) Name a black coloured solid which on reaction with dil. Sulphuric acid forms a blue coloured solution.



1st Term Exam-2018

Class: X F.M-100 Sub:-Computer Time: 2 hrs.

General Instructions

- This question paper is divided into two sections.
- Attempt all questions from Section A and any four question from section B.
- The intended marks for questions or parts of questions are given in brackets [].

Section A (40 Marks) Attempt all questions.

Question 1 [5x2=10]

- (a) Define abstraction?
- (b) Give the difference between actual parameter and formal parameter.
- (c) Write two advantages of using functions in a program.
- (d) Write prototype of a function **DoSum** which takes string argument and a double argument and return integer value.
- (e) Differentiate between call by value and call by reference.

Question 2 [5x2=10]

- (a) Explain the concept of constructor overloading with an example?
 - (b) Give difference between a constructor and a method.
 - (c) What is a parameterized constructor? Explain with an example.
 - (d) Differentiate between pure function and impure function.
 - (e) Write the expression for given java code.

(ii)
$$y = \cos x + \sqrt{a^3 + b^4}$$
 (ii) $y = \frac{(a+\sqrt{3})^2}{\sqrt{3}}$

Question 3 [10x2=20]

(a) What will be the output of the following code?

double x = 2.9, y = 2.5;

System.out.println(Math.min(Math.floor(x), y));

System.out.println(Math.max(Math.ceil(x), y));

(b) Write the output for the following code snippet.

int
$$a = 5$$
, $b = 2$, c;

$$if(a > b || a !=b)$$

$$c = ++a + --b;$$

System.out.println(c +" "+a+" "+b);

(c) How many times will the following loop execute? What value will be returned?

(d) What is the value of z in given expression? also show the steps.

int
$$x = 20$$
, $y = 10$, z ; $z = ++x * (y--) % 5 - y$

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(e) Convert the following segment into an equivalent do while loop.

```
int x, c= 20;
for( x = 10; x <= c; x = x - 2)
System.out.println("hello");
```

(f) What is the final value of count when the iteration process given below, executes?

```
into count = 0;
for(int i = 1; i <= 3; i++)
for(int j =1; j <= 5; j+=2)
++count;
```

- (g) Explain the recursive function with an example?
- (i) Rewrite the following program segment without using if-else statement.

```
int amount = 1000;
double discount=0.0;
if (amount > 800)
discount = amount * .10;
else
discount = 0.0;
```

(j) Analyse the following program segment and determine how many times the loop will be executed and what will be the output of the program segment?

Section B (60 Marks)

Attempt any four questions from this section.

(The answer in this Section should consist of the Programs in either Blue J environment or any program environment with Java as the base. Each program should be written using Variable description/Mnemonic Codes so that the logic of the program is clearly depicted.

Flow-Charts and Algorithms are not required.)

Question 4 [15]

Write a program to accept a number and check whether the number is Twisted Prime or not. A number is said to be twisted prime if it is a prime number and reverse of the number is also a prime number.

Example- 97 is a prime number and its reverse 79 is also a prime number. So 97 is a Twisted prime number.

Question 5 [15]

Using the switch statement, write a menu driven program to:

(i) Generate and display the first 10 terms of the Fibonacci series 0,1,1,2,3,5....

The first two Fibonacci numbers are 0 and 1, and each subsequent number is the sum of the previous two.

(ii)Find the sum of the digits of an integer that is input.

Sample Input: 15390

Sample Output: Sum of the digits=18

For an incorrect choice, an appropriate error message should be displayed

Question 6 [15]

A class Compound is created to calculate the compound interest using:

 $CI = P (1 + r / 100)^{t} - P$

Where, P is the principal amount, r is the rate of interest and t is the time period in years.

Instance variables/data members:

double pamt, rate int time

Functions of the class:

- i) Compound (): constructor to assign default values to all the data members
- ii) Void input (): to input the principal, rate and time form the user.
- iii) Double find Interest (): to find and return compound interest using the given formula.
- iv) Void print Data (): to print the principal, rate, time and compound interest.

Write a main() function to input required data and data by invoking suitable functions print the entered data and compound interest.

Question 7 [15]

Design a class to overload a function volume () as follows:

- (a) void volume (int) to find the volume of a cube.
- (b) void volume (float) to find the volume of a sphere.
- (c) void volume (int, int, int) to find the volume of cuboid.

Formula: Volume of a cube (vc) =
$$s * s * s$$

Volume of a sphere (vs) =
$$\frac{4}{3} * \pi * r * r * r$$

Volume of a cuboid (vcd) = 1 * b * h

Shasha travels Pvt. Ltd. Gives the following discount to its customers as per the given tariff:

Ticket Amount	Discount
Above Rs. 70,000	18%
Rs. 55,001 to Rs. 70,000	16%
Rs. 35,001 to Rs. 55,000	12%
Rs. 25,001 to Rs. 35,000	10%
Less than Rs. 25,001	2%

Write a program to input the name and the amount of ticket for the customer. Calculate the discount and net amount to be paid. Display the output in the following format each customer:

		<u> </u>		
Sl. No	Name	Ticket Charge	Discount	Net Amount



Question 9 [15]

Define a class called ParkingLot with the following description:
Instance variable / data members:
String name – To store the name of the person int vno - To store the vehicle number int hour – To store the number of hours the vehicle is parked in the parking lot. double bill – To store the bill amount

Functions/Methods:

ParkingLot () – Parameterized constructor to initialize and store the name, vno and hours.(User Input will be taken in main function)

void calculate() – To compute the parking charge at the of 3 for the first hour or part thereof, and 1.50 for each additional hour or part thereof.

void display() – To display the detail bill.

Write a main method to create an object of the class and call the above methods.



1st Term Exam-2018

Class: X F.M-80

ENGLISH LANGUAGE ENGLISH Paper – 1

(Two hours)

Answers to this Paper must be written on the paper provided separately.

You will **not** be allowed to write during the first **15** minutes.

This time is to be spent in reading the question paper.

The time given at the head of this Paper is the time allowed for writing the answers.

Attempt all four questions.

The intended marks for questions or parts of questions are given in brackets []. You are advised to spend not more than 35 minutes in answering Question 1

and 20 minutes in answering Question 2.

Question 1

(Do not spend more than 35 minutes on this question.)

Write a composition (350 - 400 words) on any one of the following:

[25]

- (a) Write an original short story entitled 'The Gift'.
- (b) "Money is important for happiness." Express your views either for or against this statement.
- (c) Narrate an incident from your own experience when you helped to prepare a meal. Explain what you did and what you gained from the experience.
- (d) You had been waiting outside the examination hall. Describe what you saw and the sounds you heard when you arrived at the place. What were your feelings? Describe how the scene changed once you entered the hall and the examination started.

(e) Study the picture given below. Write a story or a description or an account of what it suggests to you. Your composition may be about the subject of the picture or you may take suggestions from it; however, there must be a clear connection between the picture and your composition.



Question 2 [10]

(Do not spend more than 20 minutes on this question.)

Select *any one* of the following:

- (a) Your uncle has offered to get you a pet for your birthday. Write a letter to him telling him what you would like, give reasons for your choice and tell him how you would take care of your pet.
- (b) The traffic outside your school is very heavy and chaotic.
 Write a letter to the Deputy Commissioner of Police (Traffic) pointing out the danger of such heavy and chaotic traffic in a school zone. Suggest possible solutions for the problem.

Question 3

Read the following passage carefully and answer the questions that follow:

Granny knew I'd been in the train for two nights, and she had a huge breakfast ready for me.

Later she told me there'd been a letter from Uncle Ken.

'He says he's the manager in Firpo's hotel in Simla,' she said. 'The salary is very good. It's a steady job and I hope he keeps it.'

Three days later Uncle Ken was on the veranda steps with his bedding roll and *battered* suitcase.

'Have you given up the hotel job?' asked Granny.

'No,' said Uncle Ken. 'They have closed down.'

'I hope it wasn't because of you.'

'No, Aunt Ellen. The bigger hotels in the hill stations are closing down.'

'Well, never mind. Come along and have your lunch.'

Over lunch, Uncle Ken talked very seriously about ways and means of earning a living.

'There is only one taxi in the whole of Dehra,' he *mused*. 'Surely there is business for another?'

'I'm sure there is,' said Granny. 'But where does it get you? In the first place, you don't have a taxi. And in the second place, you can't drive.'

'I can soon learn. There's a driving school in town. And I can use Uncle's old car.'

'I don't think it will run now,' said Granny.

'Of course, it will. It just needs some oiling and greasing and a spot of paint.'

'All right, learn to drive.'

10

20

3

So, Uncle Ken joined the driving school.

After a month Uncle Ken announced that he could drive and that he was taking the car out for a trial run.

'You haven't got your license yet,' said Granny.

'Oh, I won't take it far,' said Uncle Ken. 'Just down the road and back again.'

He spent all morning cleaning up the car. Granny gave him money for a can of petrol.

30

After tea, Uncle Ken said, 'Come along, Ruskin, hop in and I will give you a ride. Bring Mohan along too.' Mohan and I needed no urging. We got into the car beside Uncle Ken.

'Now don't go too fast, Ken,' said Granny anxiously. 'You are not used to the car as yet.'

Uncle Ken nodded and smiled and gave two sharp toots on the horn. He was feeling pleased with himself.

Driving through the gate, he nearly ran over a cat.

Miss Kellner, coming out for her evening rickshaw ride, saw Uncle Ken at the wheel of the car and ran indoors again.

40

Uncle Ken drove straight and fast, tootling the horn without a break.

At the end of the road there was a roundabout.

'We'll turn here,' said Uncle Ken, 'and then drive back again.'

He turned the steering wheel, we began going round the roundabout, but the steering wheel wouldn't turn all the way, not as much as Uncle Ken would have liked it to... So, instead he went on – and straight through the Maharaja of Jetpur's garden wall.

It was a single-brick wall, and the car knocked it down and *emerged* on the other side without any damage to the car or any of its occupants. Uncle Ken

	brought it to a halt in the middle of the Maharaja's lawn.	50
	Running across the grass came the Maharaja himself. When he saw that it was Uncle Ken at the wheel, the Maharaja beamed with pleasure.	
	'Delighted to see you, old chap!' he exclaimed. 'Jolly decent of you to drop in again. How about a game of tennis?'	
(a)Gi	ve the meaning of the following words as used in the passage:	[3]
	One word answers or short phrases will be accepted.	
	(i) battered (line 7)	
	(ii) mused (line 15)	
	(iii) emerged (line 48)	
(b)	Answer the following questions briefly in your own words.	
	(i) Why did Granny hope Uncle Ken would keep his job at Firpo's hotel?	[2]
	(ii) When Uncle Ken arrived with his luggage, Granny remarked that she hoped the hotel had not closed down because of him. What does this remark tell you about Uncle Ken?	[2]
	(iii) Why did Uncle Ken think that driving a taxi in Dehra would be profitable?	[2]
	(iv) Which sentence tells you that the narrator and his friend were waiting to be invited for a drive in a car?	[2]
	(v) Why did Miss Kellner run indoors when she saw Uncle Ken at the wheel of the car?	[2]
	(vi) What was Uncle Ken's intention at the roundabout?	[2]
(c)(i)	In not more than 60 words, describe what happened after the car went through the wall.	[8]
	(ii) Give a title to your summary in 3(c)(i). Give a reason to justify your choice of the title.	[2]

Question 4

(a)	Fill in each of the numbered blanks with the correct form of the word given in	[4]
	brackets. Do not copy the passage, but write in correct serial order the word	
	or phrase appropriate to the blank space.	
	Example:	
	(0) beginning	
	Alice was (0) (begin) to get very tired of (1) (sit)	
	by her sister on the bank and of having nothing to do: once or twice she had	
	(2) (peep) into the book her sister was reading, but it	
	(3) (have) no pictures or conversations in it, "and what is the	
	use of a book," (4) (think) Alice, "without pictures or	
	conversations?"	
	Alice wondered whether the pleasure of (5)(make) a daisy-chain would be worth the trouble of getting up and picking the daisies, when suddenly a White Rabbit with pink eyes (6) (run) close by her. Alice did not think this was very remarkable, until the Rabbit actually (7) (take) a watch out of its waistcoat-pocket, and (8) (look) at it, and then hurried on.	
(b)	Fill in each blank with an appropriate word:	[4]
	(i) The poet's mother was stung a scorpion.	
	(ii) "Please write what I tell you otherwise you will forget," the teacher said.	
	(iii) The dog was hiding the bed, barking at the stranger.	
	(iv) Sheila's grandmother found it difficult to climb the steep staircase.	
	(v) The soldier fought bravely his country.	
	(vi) There is no use crying spilt milk.	

((vii) I don't know what they were arguing but I could hear angry voices.	
((viii) The school playground is out bounds for the pupils of the primary school.	
(c)	Join the following sentences to make one complete sentence without using [4	.]
•	and, but or so:	
((i) They have to go to bed early every night. They are allowed to stay up late on Saturdays.	
((ii) The children were delighted. The exams had been cancelled.	
((iii) We are not allowed to play in the sun. We are not allowed to play in the rain.	
((iv) This is the place. The dog was rescued from its cruel owner.	
	Re-write the following sentences according to the instructions given after each. Make other changes that may be necessary, but do not change the meaning of each sentence.	.]
	(i) She laid the table after she had finished the cooking.	
	(Begin: When)	
	(ii) He is old but still he works hard.	
	(Begin: Despite)	
	(iii) The delivery boy was requested to bring the parcel the next day. (Rewrite using direct speech)	
	(iv) I prefer playing a game to watching television.	
	(Begin: I would rather)	
	(v) Every family has a black sheep. (Begin: There is no)	
	(vi) I have never worn a more ill-fitting suit.	
	(VI) I have never worn a more in-ritting suit. (End: ever worn.)	

(vii)Anil is too fast a runner not to come first in the
race. (Begin: Anil is so)
(viii) As soon as the sports meet ended, the children ran on the
field. (Begin: Hardly)



XAVIER SCHOOL, GAMHARIA 1st Term Exam-2018

Class: X
Sub:- English Literature
F.M-80
Time: 2 hrs.

Read the following extracts and answer the questions that follow:- $(16 \times 5 = 80)$

1. Portia: "But this reasoning is not in the fashion to

choose me a husband. O me, the word 'choose!' I may neither choose whom I would nor refuse whom I dislike; so is the will of a living daughter curbed by the will of a dead father. Is it not hard,

Nerissa, that I cannot choose one nor refuse none?"

- a) What test had Portia's father devised for her suitors? What oath did the suitors have to take before making their choice? (3)
- b) Who is Nerissa? What does she say to cheer up Portia? (3)
- c) Why does Portia disapprove of the County Palatine? Whom would she rather marry? (3)
- d) How, according to Portia can the Duke of Saxony's nephew be made to choose the wrong casket? What do these suitors ultimately decide? Why?(3)
- e) Whom does Portia ultimately marry? Who were the two other suitors who took the test? Why, in your opinion, is the person whom she marries worthy of her? (4)
- 2. Duke: What, is Antonio here?

Antonio: Ready, so please your grace.

DUKE I am sorry for thee: thou art come to answer

A stony adversary, an inhuman wretch uncapable of pity, void and empty

From any dram of mercy.

- a) What are the terms of the bond that Antorio has signed? (3)
- b) Why does the Duke called Shylock 'inhuman'? What does the Duke expect Shylock to do? (3)
- c) What reason does Shylock give for choosing rotten flesh over money? What are the things hated by some people? (3)
- d) State three examples Antonio gives to illustrate Shylock's stubborn attitude? (3)
- e) Who is Dr. Bellario? Who is Balthazar? What does the letter of Dr. Bellario contain? (4)
- 3. "Thus I entered, and thus I go! In triumphs, people have dropped down dead.

"Paid by the world, what dost thou owe

Me?"—God might question; now instead,

'Tis God shall repay: I am safer so."

- a) Where do you think the speaker enters? Where does he go after that? (3)
- b) Explain "In triumphs, people have dropped down dead". (3)
- c) The speaker says "I am safer so." Where does he feel safe? Why? (3)
- d) How does the poem depict the sudden rise and fall of glory of man? (7)

- Remove Watermark No
- 4. "You have only four teeth in your Jaws, but your craving is for big things. All right, get the stuff for the sauce, and I will prepare it for you. After all, next year you may not be alive to ask for anything. But first get me all the stuff, including a measure of rice or millet, and I will satisfy your unholy craving. Our store is empty today."
 - a) What was Muni craving for? Why? (3)
 - b) Why did his wife agree to supply him with what he was craving for? Under what condition would she oblige him? (3)
 - c) How did Muni attract the attention of the shopkeeper and win over his goodwill? (3)
 - d) How could Muni get some raw food items from the shop? (3)
 - e) What did the shop man say about Muni's age? How could he guess that? (4)

Any One

5. State, giving reasons, whether television could be completely disposed off as an idiot box that fills your mind with junk? (16)

Or

6. How has the author created an atmosphere befitting a super natural story? Quote specific statements to back your answes . (16)



1st Term Exam-2018

Class: X
Sub:- Geography
F.M-80
Time: 2 hrs.

Section: A (30 Marks) Answer all the questions from this part:

- ${f Q1}$. Study the extract of the Survey of India Map Sheet 45D/10 and answer the following questions: 20
 - a. Give six figure grid reference for : (2)
 - i. The highest point in this map extract.
 - ii. Surveyed tree north of Rampura Khera.
 - b. On which bank of Sukli nadi lies: (2)
 - i. Butri
- ii. Makawal
- c. Identify the drainage pattern shown in grid sq. (2)
 - i. 0803 ii. 0804
- d. State the compass direction for the followings: (2)
 - i. Makawal from Salotra
- ii. Dattani from Dhavli.
- e.i. what do you understand by the broken line in grid 0807. (1)
 - ii. 3r in 1130. (1)
- f. Grid 0502 and 0504 receives seasonal rainfall. Give reasons for your answer. (2)
- g. Calculate the distance in km between Palri Khera settlement and Dhavli. (2)
- h. Calculate the area covered by northing 01 to 03 and easting 04 to 07. (2)
- i. Identify the settlement pattern for:i. Dolpura ii. Butri. (2)
- j. Identify two sources of water supply in Makawal. (1)
- k. Name two natural vegetation for the given map. (1)
- Q2. On an outline map of India locate the followings: (10)
 - i. River Mahanadi
 - ii. Pirpanjal range
 - iii. Nathula Pass.
 - iv. Two regions for black soil.
 - v. Direction for S.W monsoon.
 - vi. Area receives rainfall more than 200 cm.
 - vii. Thar desert.
 - viii. Bhakra Nangal Dam.
 - ix. Chennai
 - x. Standard Meridian for India.

Section: B (50 Marks) Answer any five set of questions from this part.

- **O3**. i. What is Bhabar? (1)
 - ii. Mention two importance of river Damodar. (2)
 - iii.Mention three importance of river Ganga. (3)
 - iv. Why is Deccan Plateau also known as Deccan Trap. (2)
 - v. How do the Himalayas influence the economy of the country? (2)

Remove Watermark N

- Q4.i. Name the four seasons that prevail in India stating the months for each. (2)
 - ii. Why is Thar a desert? (2)
 - iii. How are "Kalbaisakhi" good for rice and mango cultivation? (2)
 - iv. Explain why Mangalore gets heavy rainfall than Bangalore. (2)
- v. Give two differences about the weather conditions in India during Hot season and Cold season.(2)
- **Q5**. i .What are western disturbance ? (1)
 - ii. How does the Northern wall of Himalayas affect the climate of India? (2)
 - iii. Mention the climatic conditions Chennai and Jaipur. (2)
 - iv. a. What is retreating monsoon? (1)
 - b. Name the state that gets rainfall from both advancing monsoon and retreating monsoon . (1)
 - v. a Name the state gets winter rainfall. (1)
 - b. Two characteristics of monsoon. (2)
- Q6. i. Define: Khadar and Bhangar. (2)
 - ii. Mention two advantages for Regur soil. (2)
 - iii. What are the types of soil erosion and their main causes? (2)
 - iv. Describe two main important methods of soil conservation. (2)
 - v. Mention two characteristic of red soil. (2)
- Q7. i. Mention four importance of forest? (2)
 - ii. a. Name the forests found in India. (1)
 - b. Name the valuable hard and fine grained tree used for making expensive furniture's. (1)
 - iii. What are deciduous trees? (1)
 - iv. Mention two special features for teak tree. (2)
 - v. i Mention two features of tidal forest. (2)
 - ii. Name two trees for fresh water swamp forests. (1)
- **Q8.** i. Give two merits and two demerits of cannal irrigation? (2)
 - ii. Give two reasons why irrigation is necessary in India. (2)
 - iii. What is the need of conservation of water ? Explain. (2)
 - iv. a. What is rainwater harvesting? (1)
 - b. What are the benefits of Rainwater harvesting. (1)
 - v. a. Mention two objectives of the multi-purpose projects. (1)
 - b. Why is the tank irrigation important in the Deccan peninsula. (1)

1st Term Exam-2018

Class: X
Sub:- Hindi
F.M-80
Time: 2 hrs.

Section -A (40 Marks) Attempt all questions

- Q1). दिए गए विषयों में से किसी एक विषय पर (250 शब्दों में) निबंध लिखें:- (15)
 - वृक्षारोपण क□ महत्व बतातो हुए वृक्षारोपण की आवश्यकत□ को स्पष्ट करें ।
 - II. भाउरतीय संस्कृति में पातिथि को देवता के समा बता प्राचिष्य गया है । वर्तमा परिस्थितियों में यह माउपता कहाँ तक सत्य के रूप में दिखाई दे रही है ? □ तिथि कब बोझ बन जाता है और किस प्रकार ?
- III. □ नपढ़ व्यक्ति समाज में एक तुच्छ प्राणी के समाज है | इस □ भिशाण को कैसे दूर किय□ ज□ सकत□ है? इस पर एक निबंध लिखिए |
- IV. 'जको रखे सङ्घाँ मद सके न कोय' उक्ति के आधद पर एक कहानी लिखें |
- v. दिए गए चित्र को ध्यामपूर्वक देखिए और चित्र को आधार बनाक्कर वर्णन कीजिए □ थव□ कहामी लिखें, जिसका सीध□ व स्पष्ट सम्बन्ध चित्र से होन□ चाहिए |



- Q2). निम्न में से किसी एक विषय पर लगभग 120 शब्दों में पत्र लिखें :- (7)
 - ा. विद्युत बोर्ड के महाप्रबंधक को बिजली की □ नियमितत□ के सम्बन्ध में शिकायती पत्र लिखिए ।
 - II. मित्र को उसकी बहन की शाद्धी पर बधाई देते हुए तथ□□पने शामिल न हो पाने की□समर्थत□बताने हुए पत्र लिखें।
- Q3). निम्न गद्यां को ध्यामपूर्वक पढ़िए तथा उसके नीचे लिखे सभी प्रश्नों के उत्तर लिखें | उत्तर यथा संभव आपके पिने शब्दों में ही होने चिहिए: (10) एक बार इंग्लैंड के एक नगर में विशाल समारोह का आयोजन किया गया | इस समारोह की पिर्धात करने के लिए एक भारतीय को आमंत्रित किया गया था | निश्चित दिन और निश्चित समय पर भारतीय विद्वान सभास्थल पर पहुँच गये | वहाँ उन्होंने देखा कि सभा में सम्मिलित होने के लिए

भाषावाद्यक संज्ञा बनाद्वए :-V. देव , चत्र

कोष्ठक में दिए गए निर्देश मुसार वाक्यों में परिवर्तन की जिए :-VI. (3) क) पढने –लिखने में वह बालक इतन□ तेज़ नहीं था (तेज़ के स्थाम पर मंद बुद्धि क□

प्रयोग करें

ख) □ ब बच्चे घर पहुँचे। (वचन बदलिए)

ग) कल आप कहंँ गय□ था (वाक्य शुद्ध कीजिए)

Section-B

Attempt four questions from this section. You must answer at least one questions from each of the two books you have Studied and any two other questions.

(गद्य-संकलन)

05). निम्न गद्यांश को ध्यामपूर्वक पढें तथा उसके नीचे लिखे सभी प्रश्नों के उत्तर लिखें :-फ इल कल्चरल डिपार्टमेंट के □ नेक विभागों से गुजरती हुई सा हित्य □ काद्ममी के पास पहुँची।

- क) फाइल किससे सम्बंधित थी ? वह इस विभाग से पूर्व किन □ न्य विभागों के चक्कर काइतीरही? (2)
- ख) सिक्तिय □क दिमी विभाग क □ सेक्रेटरी भागा □ भागा □ स□ किस उद्देश्य से किसके पास पहुँचा ७ (2)
- ग) इन दोनों व्यक्तियों के मध्य वर्जााला से क्य□ ज्ञाता हुआ? सेक्रेटरी को किस बाता को सुनकर आश्चर्य हुआ? (3)
- घ) समिहत्य □ काद्धमी विभाग के पास ही यह फाइल क्योँ भेजी गई? (3)
- Q6). "मैं फलों के मौसम में झोली भरकर ले जाता था | मेरे बच्चे इसकी जामुनें कितनी खुशी से खाते थे ।"
 - क) क्लर्क किस विभाग का था उसने रोनी सूरत बनाओं हुए यह क्योँ कहा ? (2)
 - ख) प्राताः काल माली ने क्या देखा ? सिद्ध कीजिए कि माली में मानवीयत का गुण था | (2)
 - ग) इस स्थाम पर कौन-कौन व्यक्ति एकत्रित हो गए? वे किस प्रकार की बामचीत कर रहे थे?
 - घ) कु□ क्लर्क पेड़ की समस्य□क□स्वयं हल करने को किस प्रकार तैयार थे ? उसमे क्य□ बाधा□उत्पन्न हुई ?

(पद्य संकलन)

- Q7). बस जरा सी उम्र में उसकी मौत से पहचा हो गई| मुझे □ चरज हुआ, पू□ □ "मर गया "

 क) यहाँ किसकी मौत की पहचा की बा हो रही है? वह कौन थ□ और क्योँ मर गय□ था (2)
 - ख) वकील सद्भव के नीचे उतरते हुए उनके स्वर में हलकी झुंझलाइट और लापपरवाही क्योँ थी? (2)
 - ग) लेखक के □ चरज क□ क्य□ कारण था वे उस बातक को कहाँ ले गये और क्योँ? (3)
 - घ) वकील साहब ने लड़के को नौकरी क्योँ नहीं दी ?पहाड़ी बालकों के सम्बन्ध में उनक□ क्य□ मत था (3)
- Q8). चŒ रहे जूठी पत्तल वे कभी सड़क पर खड़े हुए, और झपट लेने को उनसे कुत्ते भी हैं □ड़े हुए | ठहरो, □हो मेरे ह्रदय में है □मृत, मैं सींच दूँग□| □भिमन्यु – जैसे हो सकोगे तुम, तुम्हारे दुःख मैं □पने ह्रदय में खींच लूँग□|
 - क) भिक्षुक किवत क मुख्य विषय क्य है ? सड़क पर पड़ी जूठी पत्तल च टिने को कौन विवश हैं? (2)
 - ख) किस हृदय विदारक दृश्य को देखकर कवि □ंतर्व्यथ□ से भर उठत□ है ?वे इस समय क्य□ निश्चय करते हैं ? (2)
 - ग) भिक्षुक □भिमन्यु के समा कब हो सकते हैं? (3)
 - घ) 'तुम्हिते दुःख मैं □पने ह्रदय में खींच लूँगा पंक्ति के आधार पर कवि निराक्षा की निःस्वार्ध भाषान □ क □ परिचय दें | (3)
- Q9). मेघ आये बड़े बन-ठन के सँवर के | आगे-आगे नामती गामी बयार चली, दरवाफ़ो-खिड़िकयाँ खुलने लगें गली -गली, पाइन ज्यों आये हों , गाँम में शहर के | मेघ आए बड़े बन -ठन के सँवर के |

क) शहर से कौन ़ तिथि गाँख आय□ है? उसके लिए ·बन -ठन के · और ·सँवर वे	[,] शब्दों
क प्रयोग क्योँ किया गया है ?	(2)
ख) गाँख के दरवाफ़ो-खिड़की खुलने क□ क्य□ कारण है ?	(2)
ग) कवि ने हव□ को किस रूप में चित्रित किय□ है और किस प्रकार ?	(3)
घ) कवित□क□ मुख्य भाषा लिखें	(3)
Q10). प्रभु के दिए हुए सुख इतने हैं विकीर्ण धरती पर भोग सकें जो उन्हें जगत में, कहँ□ □ भी इतने नर ? सब हो सकते तुष्ट एक- स□ सब सुख प□ सकते हैं चाह्रें तो पल में धरती को स्वर्ग बन□ सकते हैं	
क) इस कथन में कौन व्यक्ति किसे और किस स्था पर उपदेश दे रह□ है?	(2)
ख) मामव जापित किस प्रकार प्रसन्न एवं संतुष्ट हो सकती है?	(2)
ग) पृथ्वी को स्वर्ग कौन और किस प्रक ा बन□ सकत□ है?	(3)
घ) इंस कवित□ से आपने क्य□ शिक्ष□ ग्रहण की?	(3)
<u>(एकांक्री संचय)</u>	
Q11). "मेरे मां प्रके में यह होता है (हा मटकाकर) □पने मां के के सामने तो वह कि कु□ गिनती ही नहीं हम तो उसके लिए मूर्ख, गँवार और □सभ्य हैं '' क) 'वह' सर्वनाम किसके लिए प्रयोग किया गया है ? उसके मां के का वा कैसा हैं ? ख) उसकी संसुराल के वाजा खरण में क्या □ंतर है ? उसे संसुराल की कौन- नामसंद हैं? ग) □ोटी बहू घर के लोगों के साथ कैसा व्यवहार करती है? घ) इस एकां की का उद्देश्य स्पष्ट करें	त ाखरण (2)
Q12). मैं तो सोचती हूँ, □विनाश की बहू को कु□ हो गय□तो शाखद □विनाश भी	·
क) ऐस□ कौन सोचत□ है और वह ऐस□ क्योँ सोचती है ?	(2)
ख) मंं के □नुसार □विनाश की बहू को कु□ हो गय□तो □विनाश क्योँ	जीवित
नहीं रह सकेगा	(2)
ग) माँ 🗆 विनाश के विषय में ऐसा क्योँ सोचती है?	(3)
घ) उक्त कथन से मंं□की किस प्रकार की मनोभावान□ पर प्रकाश पड़ता करें ।	
प्रात्र). यदि मैं कमल□ को लिए बिन□ लिए ही गय□ तो मँ क□ ह्रदय टूट जाएग□	(3)
क) वक्त□ कौन है और श्रोत□ कौन है? वक्त□ और श्रोत□ क□ कमल□ से क्य	□ सम्बन्ध
है?	(2)
ख) श्रोत□ कमल□ को माखके क्योँ नहीं भेजन□ चाइताः	(2)
ग) वक्त□ कमल□ को माखके क्योँ ले जाजा□ चाह्रता है?	(3)
घ) कमल□ के माखके न जाने पर किसक□ दिल टूट जाएगा और क्योँ?	(3)

XAVIER SCHOOL, GAMHARIA 1st Term Exam-2018

Class: X **F.M-80 Sub:- History & Civics** Time: 2 hrs.

Part 1 (Civics)	
Attempt all Questions	
Question 1	(1x10=10)
1) Name the two sets of government in a federal setup.	
2) In what way is the Supreme Court protector of Fundamental Rights?	
3) Give any one instance of the use of power of Judicial Review.	
4) What do you mean by 'Revisory Jurisdiction' of High Court?	
5) Mention two types of cases in which the High Court exercise Original Jurisc	liction.
6) What is the purpose of a Family court?	
7) Who appoints a District Judge? How?	
8) Mention one advantage of Lok Adalats.	
9) On what grounds can a judge of Supreme Court be removed?	
10) Name any two High Courts which have jurisdiction over more than one stat	e.
<u>History</u>	
Question 2	(2x10=20)
Each question carries TWO marks-	1T
Q1. State two political causes responsible for the First War Independence?	
Q2. Give two factors that gave rise to Nationalism in India in 19th century.	
Q3. Mention any two provisions of the Indian Independence Act of 1949.	
Q4. What led to the formation of Forward Bloc?	
Q5. Why did Sir Stafford Cripps come to India?	
Q6. What were the objectives of Non-cooperation movement?	
Q7. What was the main provisions of the Indian Arms Act of 1878?	
Q8.Name the act that transferred the government of India from the company to o	crown?
Q9. What is Nationalism?	
Q10. Name the Indian personality who was called as Grand Old Man .Mention h	nis contribution to
freedom struggle.	
Part-2 Section-A (Civics)	
Attempt any TWO questions	
Question -3	
The Supreme Court has an extensive jurisdiction. In the light of this statement at	nswer the
following –	
a) What are the qualifications of the judges of the Supreme Court?	3
b) How are the judges of the Supreme Court Appointed?	3
c) Why is the Supreme Court called as Court of Record?	4
Question -4	
The High court stands at the head of the Judiciary in the state. With reference to	this, explain-
a) Appointment of chief justice and other judges	3
b) Original jurisdiction	4

c) Judicial review

to

Question-5

Lok Adalats have opened a new vista for providing speedy justice to people. In this context, explain

a) What is meant by Lok Adalat?
b) Scope of Lok Adalat
c) Advantages of Lok Sabha
4

<u>Section – B (History)</u> <u>Attempt any three questions</u>

Question-6

Numerous causes gave rise to the First War of Independence and its results led to several changes in the British Government in India. In this context, answer the following

- a) Explain any three military causes of 1857.
- b) Immediate causes of the revolt.
- c) State any four changes in the administration of British Government as a consequence of the revolt.

Question-7

The Quit India Resolution in 1942 was one of the final calls given by the Gandhi for the British to leave India. In this context explain:-

- a) State two reasons for launching of the Quit Movement India. 4
- b) Give any three effects of the Quit India Movement of 1942 that was significant to the last phase of the National Movement.
- c) Three reasons for the failure of the movement.

Question-8

Explain the following proposals based on the Cabinet Mission Plan to bring about a political settlements for the speedy of transfer of power from British to India:-

- a) A federal union 3
- b) An Interim Government 3
- c) What was the reaction of Sikhs and Scheduled Castes towards the proposals? 4

Question9

Questions based on the picture:-

- a) Identify the picture.
 b) Name the political party and the Military Organisation that he formed.
 c) State three aims of the Political party he formed.
 2
- d) Mention any four objectives of the Military Organisation he formed. 4



1st Term Exam-2018

Class: X F.M-100
Sub:-Moral science Time: 1.30hrs.

Answer all questions

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V	•	J	L	•

a. Complete the sentence: "For me freedom is"

(20)

- b. You are denied some freedom by your teachers/parents, which you believe is legitimately yours. In such a situation would you consider
- i) a negative reaction? ii) a positive reaction?
- c. When does liberty become licence? Give two examples from your own experience.
- d. Discuss, giving examples: "Freedom is a gift to be earned before it becomes a right to be enjoyed."

 $\mathbf{Q.2.} \tag{20}$

- a. Have you ever found it difficult to forgive someone? What did you do? How did you feel?
- b. Is there someone in your life whom you are not able to forgive, or have you observed another person unable to forgive? How has this affected you or this person?
- c. "Pride is the great stumbling block to reconciliation." Comment on this statement.
- d. Complete the sentence: "For me, forgiveness is" Give reasons for your answer.

 $\mathbf{Q.3.} \tag{20}$

- a. What is 'concern'? Give three examples of behaviour or attitude that shows concern.
- b. You are hurrying to be in time for a movie and you see an old woman struggling along the street with a load of shopping. Would you stop to help the old lady? You could also ignore her and be in time for your movie. What will you do and why?
- c. What are the reasons for people not showing concern towards others?
- d. Concern is not for just for one's friends. It should also be for people in society, especially those who are treated unjustly. What is your opinion?

 $\mathbf{Q} \mathbf{4}$.

- a. Select two traditions which you feel are now out of date and explain why you think they should be set aside.
- b. What traditions do you feel are really useful and should be retained? Give reasons for your selection of any two.
- c. What criteria would you use to decide whether to follow a tradition or disregard it?

 Mention whether you expect opposition in disregarding a certain tradition and from whom.

 What do you think would cause such opposition?
- d. "People in India are generally believed to be tradition bound." Do you agree or disagree? Give reasons

Q.5. (20)

- a. Comment on the following quotation: "Self-control leads to true happiness, though in the beginning it is hard and bitter."
- b. Distinguish between 'pleasure' and 'happiness'
- c. Have you experienced satisfaction after you have controlled a need for the sake of another person? Describe one such situation.
- d. One of the messages propagated in society today is that it is bad to say 'No' to oneself. Describe one such situation where you can gain in the long term by sacrificing short –term pleasure.



1st Term Exam-2018

Class: X F.M-80 **Sub:- Mathematics** Time: 2 hrs.

Attempt all Ouestions from Section A and any Four Ouestions from Section B. All working including rough work must be clearly shown and done on the same sheet as the rest of the answer omission of essential working will result in less of marks.

The intended marks for questions or part of questions are given in brackets.

Section: A (40 Marks)

Attempt All Questions from this Section.

Question: 1.

(a) If b is the mean proportional between a and c, show that

$$\frac{a^4 + a^2b^2 + b^4}{b^4 + b^2c^2 + c^4} = \frac{a^2}{c^2}$$

(b) Solve the equation $4x^2 - 5x - 3 = 0$ and give your answer correct to two decimal places.

(c) If
$$A = \begin{bmatrix} 1 & 3 \\ 3 & 4 \end{bmatrix}$$
 and $B = \begin{bmatrix} -2 & 1 \\ -3 & 2 \end{bmatrix}$ and $A^2 - 5B^2 = 5C$, find matrix C, where C is a 2 by 2 matrix.

Question:2.

- (a) What must be subtracted from $16x^3 8x^2 + 4x + 7$, so that the resulting expression has 2x + 1 as a factor? (4)
- (b) Solve the following in equation and represent the solution set on the number line.

$$-3\frac{1}{2} < -\frac{1}{2} - 4x \le 7\frac{1}{2}, x \in \mathbb{R}.$$
 (3)

(c) Given matrix $B = \begin{bmatrix} 1 & 1 \\ 8 & 3 \end{bmatrix}$ find the matrix X .if $X = B^2 - 4B$. Hence solve a and b given $X \begin{bmatrix} a \\ b \end{bmatrix} = \begin{bmatrix} 5 \\ 50 \end{bmatrix}$. (3)

Question: 3

- (a) How much should a man invest in Rs. 50 shares selling at Rs. 60 to obtain an income of Rs. 450, if the rate of dividend declared is 10%. Also find his yield percent, to the nearest whole (3)
- (b) If $\frac{7m+2n}{7m-2n} = \frac{5}{3}$, use properties of proportion to find:-**(4)**
 - (i)
 - (ii)
- (c) The sum of the ages of vivek and his younger brother's amit is 47 years. The product of their ages in years is 550.find their ages. (3)

Question: 4.

(a) Using remainder theorem, find the value of K.if on dividing
$$2x^3 + 3x^2$$
-Kx + 5 by (x -2), leaves a remainder 7. (3)

Section: B Attempt any Four Questions.

Question: 5.

(a) If
$$(3a + 2b)$$
: $(5a + 3b) = 18$: 29, find a: b. (3)

- (b) An aeroplane at an attitude of 1500 meters finds that two ships are sailing towards it in the same direction. The angle of depression as observed from the aeroplane are 45° and 30° respectively. Find the distance between the two ships.(4)
- (c) If

$$\frac{x}{a} = \frac{y}{b} = \frac{z}{c}$$
, Show that $\frac{x^3}{a^3} + \frac{y^3}{b^3} + \frac{z^3}{c^3} = \frac{3xyz}{abc}$ (3)

Question: 6.

- (a) Samita has a recurring deposit account in a bank of Rs. 2,000 per month at the rate of 10% p.a.if she gets Rs.83100 at the time of maturity, find the total time for which the account was held. (4)
- (b) The sum of the first three terms of an A.P is 33.if the product of the first and the third terms exceeds the second term by 29, find the A.P. (3) A man bought 360 ten rupee shares paying 12% per annum. He sold them when the price rise to Rs. 21 and invested the proceeds in five rupee shares paying 4½ per annum at Rs. 3.5 per share. Find the annual change in his income. (3)

OR

(c) If $x \in w$, find the solution set of $\frac{3x}{5} - \frac{2x-1}{3} > 1$. Also graph the solution set on the number line, if possible.

Question: 7

(a) Solve the equation:

$$\frac{1}{x-3} - \frac{1}{x+5} = \frac{1}{6}.$$

The sum of the first n terms of an A.P is $4n - n^2$, what is the term (i.e,S₁)?what is sum of first two terms? What is the second term? Also find the third term, the 10^{th} term and the n^{th} term(3)

OR

- (b) Find the value of K, for which each of the following quadratic equation has equal roots:-
 - (i) $qx^2 + kx + 1 = 0$
 - (ii) $x^2 2kx + 7k 12 = 0$

Also find the roots for those values of k in each case. (4)

(c) By selling at Rs.77, some $2\frac{1}{4}$ % shares of face value of Rs. 100, and investing the proceeds in 6% shares of face value Rs. 100, selling at Rs. 110,a person increased his income by Rs. 117 per annum.how many shares did he sell? (3)

Question: 8.

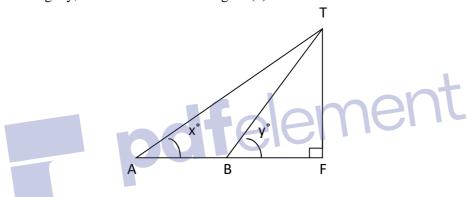
- (a) The hypotenuse of a grassy land in the shape of a right triangle is 1 metre more than twice the shortest side. If the third side is 7 metres more than the shortest side, find the sides of the grassy land.(3)
- (b) Show that (2x + 1) is a factor of $4x^3 + 12x^2 + 11x + 3$. Hence, factorise $4x^3 + 12x^2 + 11x + 3$.
- (c) In a business, A invests Rs. 50000 for 6 months; B Rs. 60000 for 4 months and C Rs. 80000 for 5 months. If they together earn Rs. 18800, find the share of each. (3)

Question:9.

(a) Solve:

$$\frac{1+x+x^2}{1-x+x^2} = \frac{62(1+x)}{63(1-x)}. (3)$$

- (b) If the figure, not drawn to scale, TF is a tower. The elevation of T from A is x° where $x = \frac{2}{5}$ and AF = 200m. The elevation of T from B, where AB = 80m, is y° . calculate:
 - (i) Height of the tower TF.
 - (ii) The angle y, correct to the nearest degree.(4)



(c) Using the remainder and factor theorem, factories the following polynomial $x^3 + 10x^2 - 37x + 26$ (3)

Question: 10.

- (a) Find two numbers such that the mean proportional between them is 28 and the third proportional to them is 224. (3)
- (b) Prove that:

$$\frac{1+\sin A}{\cos A} + \frac{\cos A}{1+\sin A} = 2\operatorname{Sec} A \tag{3}$$

(c) A pole of height 5m is fixed on the top of a tower. The angle of elevation of the top of the pole as observed from a point A on the ground is 60° and the angle of depression of the point A from the top of the tower is 45°. Find the height of the tower. (4)

OR

A thief, after committing theft, runs at a uniform speed of 50 m/minute. After 2 minutes, a policeman runs to catch him. He runs 60 m in the first minute and increases his speed by 5 m/minute every succeeding minute. After how many minutes, the policeman will catch the thief?



XAVIER SCHOOL, GAMHARIA 1st Term Exam-2018

Class: X **F.M-80 Sub:- Physics** Time: 2 hrs.

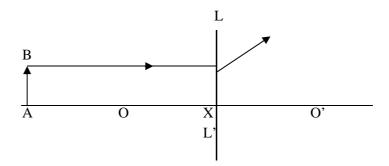
Attempt all Questions from Section A and any Four Questions from Section B. The intended marks for questions or part of questions are given in brackets.				
Section: A (40 Marks)				
Question: 1.				
(a) Define moment of couple. Write its S.I unit.(b) What do you understand by equilibrium of a body? State two conditions for a body to be equilibrium.(c)A uniform metre rule is pivoted at its mid-point. A weight of 50gf is suspended at one end of it.	(3) in (3)			
Where should a weight of 100 gf to be suspended to keep the rule horizontal?	(4)			
Question: 2.	()			
(a) A body is acted upon by a force. State two conditions when the work done is zero.(b) When a body is moves in a circular path. How much work is done by the body? Give reason.(3)	(3)			
 (c) A pump is used to lift 500 Kg of water from a depth of 80 m in 10s.calculate (I) The power at which the pump works and (II) The power rating of the pump if its efficiency is 40%.(Take g = 10 ms⁻²) 	(4)			
Question: 3.Give reasons:-	0)			
 (a) Mechanical advantage of class III lever is always less than 1. (b) The efficiency of a single movable pulley is not 100%. (c) The sun appears red at sunrise and sunset. (d) A connection wire should be thick. (e) A spanner has longer handle. 				
Question: 4. (2x5=10	0)			
 (a) For which colour of white light is the refractive index of a transparent medium (i) The least (ii) The most? (b) Name two factors on which the refractive index of a medium depends. (c) Define the term refractive index of a medium. Can it μ less than 1. (d) The refractive index of water with respect to air is aμw and of glass with respect to air aμg. Express the refractive index of glass with respect to water. (e) The speed of light in air is 3 × 10⁸ ms⁻¹.calculate the speed of light in glass. the refracting index of glass is 1.5. 	ir			
Section: B (40 Marks) Attempt any four Questions.				
Question: 5.				
(a) Study the diagram.				
(i) Name the lens LL'	(1)			
(ii) What are the points O, O' called?	(1)			
(iii) Complete the diagram.	(3)			

(3)

State three characteristics of the image.

(iv)





(b) The focal length of a convex lens is 25 cm. Express its power with sign. (2)

Question: 6.

(a) Complete the diagram to show the effect of prism. (2)

White light

Prism

Screen

- (b) If a slit is placed between a prism and screen to pass only the light of green colour, what will you then observe on the screen? (2)
- (c) What conclusion do you draw from the observation in part (b) above? (2)
- (d) A lens forms the image of an object placed at a distance 15 cm from it, at a distance 60 cm in front of it.

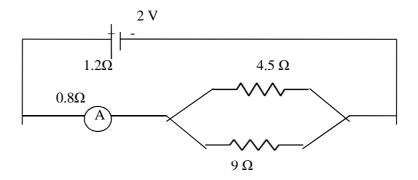
Find

- (i) The focal length.
- (ii) The magnification. and
- (iii) The nature of image. (4)

Question: 7.

- (a) What do you mean by superconductor? Give two examples. (2)
- (b) Three resistors R_1 , R_2 and R_3 are connected in parallel. Calculate equivalent resistance for these three resistors. (4)
- (c) In the figure calculate:-

- (i) The reading of ammeters
- (ii) The P.d across the terminals of the cell and
- (iii) The P.d across the 4.5Ω resistor. (4)



Question: 8.

- (a) State two differences between the e.m.f and terminal voltage of a cell. (2)
- (b) Explain why is the p.d across the terminals of a cell more in air open circuit and reduced in a closed circuit? (2)
- (c) A uniform wire with a resistance of 27 Ω is divided into three equal pieces and they are joined in parallel. Find the equivalent resistance of the parallel combination. (3)
- (d) An electric bulb is rated 220 V, 100 W.
 - (i) What is its resistance?
 - (ii) What safe current can be passed through it?

(3)

(2)

(4)

Question: 9.

- (a) Classify the following into levers as Class I, Class II or Class III.
 - (i) A door
 - (ii) A catapult
 - (iii) A wheel barrow
 - (iv) A fishing rod.
- (b) State 4 ways in which machine are useful to us.
- (c) A pulley system has V
- (d) .R 3 and efficiency 80 %.draw a labeled diagram of this pulley system. Calculate
 - (i) m.aof the system.
 - (ii) Effort required to raise a load of 300 N. (4)