# HOLIDAYS' HOME WORK-2018

# Class – XI ENGLISH

1. Read any English Newspaper of your choice daily.

2. Write a report on any two events/programmes/trips you participated in the summer vacation.

(Minimum 100 Words)

- 3. Write factual description of any two places (hill station/museum/malls etc) you visited during the vacation. (Minimum 100 words)
- 4. Draft posters on
  - (i) Save Girl Child
    - (ii) Organ Donation
    - (iii)Global Warming
    - (iv) Wild Life
    - (v)Road Safety
- 5. Referring to the newspaper paste any five reports on accidents/bomb scare/global warming/wild life conservation/heat wave etc in your own words. (Word limit 125 words)
- 6. Watch debates on TV like 'We The People' and 'The Big Fight' and write a debate on any one topic which impressed you the most.

### SUBJECT – ECONOMICS

### CLASS – XI

Q1.Following data relate to the construction of a house in Delhi. Present the information in the form of a pie diagram.

Items	% expenditure
Labour	60
Bricks	15
Cement	10
Steel	12
Timber	3
Total	100

Q2. Present the following data in the form of 'Less than' and ' more than' ogive.

Weekly	20 - 39	40 - 59	60 - 79	80 -99	100-119	120 - 139
wages (rs)						
No of	6	10	20	14	10	5
workers						

Q3. Present the data in the form of a multiple bar diagram.

Faculty	No of students				
	2011-12	2013-14	2015-16		
Arts	450	750	900		
Science	300	500	700		
commerce	200	350	500		

Q4.Following table shows estimates of cost of production of certain commodities. Present the data in the form of a sub-divided bar diagram.

Estimate of cost	Good A	Good B	Good C	Good D
Raw material	50	40	45	50
Wages	40	40	40	40
Fixed costs	10	12	15	15
Office expenses	10	8	10	5

Q5. Present the data in the form of a multiple/ sub-divided bar diagram.

Faculty	No of students				
	2004-05	2005-06	2006-07		
Arts	600	550	500		
Science	400	500	600		
commerce	200	250	300		

Q6. The percentage distribution of exports from India of engineering products by regions of destination for two years is given below. Present the data in the form of a sub-divided bar diagram.

REGION OF	2013—14	201516
DISTRIBUTION		
S.E. ASIA	42	23
WEST ASIA	19	22
AFRICA	16	28
OTHER REGIONS	23	27
TOTAL	100	100

Q7.Following data relate to the construction of a house in Delhi. Present the information in the form of a pie diagram.

|--|

Labour	30
Bricks	25
Cement	20
Steel	15
Timber	10
Total	100

Q8. Draw a Histogram from the following data.

Weekly	10-15	15-20	20-25	25-30	30-40	40-60	60-80
wages (rs)							
No of	4	10	25	15	12	12	8
workers							

Q9. Draw a Histogram AND Frequency polygon from the following data.

	0-5	5 - 10	10 – 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40
Marks								
Students	7	10	20	13	17	10	14	9

Q10. Prepare a pie diagram to represent the following.

Items of expenditure of a family	% of expenditure
Food	75
Housing	20
Fuel & others	5

# PHYSICAL EDUCATION-XI

### **Practice questions-**

Q1. Define physical education and explain its aim and explain its aim and objectives in detail.

Q2. What are the various career option in physical education? Discuss the teaching career in detail.

Q3. Write short notes on any two of the following:

- a) Career in book writing.
- b) Career in sports photography.
- c) Career in sports industry.

Q4. Write down a detailed note on the Sports Authority of India.

Q5. Elucidate the importance of physical fitness and wellness in brief.

- Q6. Define strength and discuss its types in brief.
- Q7. What is flexibility? Discuss the various types of flexibility in brief.
- Q8. Briefly discuss about coordinative abilities.
- Q9. Define wellness and explain the components of wellness in detail.

Q10. What do you mean by the term 'Lifestyle'? Elucidate the importance of positive/healthy lifestyle in detail.

- Q11. What do you mean by physical fitness? Elucidate any two components of physical fitness.
- Q12. Write a short note on the Olympic Flag.
- Q13. Briefly explain about International Olympic Committee.
- Q14. Briefly elucidate about the award of Ancient Olympic Games.
- Q15. Discuss about closing ceremony of Modern Olympic Games.
- Q16. Discuss about opening ceremony of Modern Olympic Games.
- Q17. Discuss about the symbol and motto of Modern Olympic Games.
- Q18. Discuss the objectives of Indian Olympic Association.
- Q19. Explain the origin of Modern Olympic Games.
- Q20. Elucidate about the development of values through Olympic movement.
- Q21. Write a short note in brief on the following:
  - a) Olympic Motto
  - b) Olympic Flag
  - c) Olympic Flame
  - d) Olympic Award
  - e) Olympic Oath

Q22. Write a detailed note on Indian Olympic Association.

- Q23. What are the soft skills required for different careers in physical Education?
- Q24. Describe in detail the various physical education courses available in India.
- Q25. Describe the changing trends and careers in physical education in detail.

# Subject-Geography Class-XI

Q 1 There can be no Geography without Physical Geography nor there can be one without Human Geography. Elaborate the statement.

Q 2 Is Pluto and 2003UB313 a planet? Justify your answer

Q 3 What is the basic difference in the arguments related to origin of planets as given by:

- 1. Chamberlain and Moulton
- 2. Otto Schmidt and Carl Weizascar

Q 4 Bring out the basic difference between Continental drift theory and Plate Tectonic theory.

Q 5 Make a list of important Earthquakes and Volcanoes of the world that have occurred in the recent past and mention the places where they have occurred.

Q 6 On the political map of World locate:

- 1. Important Volcanoes
- 2. Important Earthquakes

Q 7 Discuss the following natural disasters with respect to India:

- 1. Cyclones
- 2. Floods
- 3. Tsunami
- 4. Droughts
- 5. Landslides
- 6. Earthquakes

By focussing attention on their definition, areas prone, causes, consequences, and preventive measures.

• Revise the syllabus covered so far for upcoming exam

# Class XI Chemistry

Q1. Solve the following assignments in your assignment register:

- i. Unit 1 Some Basic Concepts of Chemistry
- ii. Unit 2 Structure of Atom

Q2. Prepare a project on the topic : Environmental Chemistry. Refer Ch-14 of your textbook.

# Class XI Chemistry

# Assignment – Ch-1 : Some Basic Concepts of Chemistry

Q1. If two elements can combine to form more than one compound, the masses of one element that combine with a fixed mass of the other element, are in whole number ratio.

- i. Is this statement true ?
- ii. If yes, according to which law?
- iii. Give one example related to this law.

Q2. 45.4 L of dinitrogen reacted with 22.7 L of dioxygen and 45.4 L nitrous oxide was formed. The reaction is given below :

 $2N_2(g) + O_2(g) \rightarrow 2N_2O(g)$ 

Which law is being obeyed in this experiment ? Write the statement of the law.

Q3. An organic substance containing carbon, hydrogen and oxygen gave the percentage composition as C=40.687%, H=5.085%. The vapour density of the compound is 59. Calculate the molecular formula of the compound.

Q4. Oxygen is prepared by the catalytic decomposition of potassium chlorate (KClO<sub>3</sub>). Decomposition of potassium chlorate gives potassium chloride (KCl) and oxygen (O<sub>2</sub>). If 2.4 moles of oxygen is needed for an experiment, how many grams of potassium chlorate must be decomposed ?

Q5. A solution contains 25% water, 25% ethanol and 50% acetic acid by mass. Calculate the mole fraction of each component.

Q6. Calculate the molality of a solution containing 20.7 g potassium carbonate dissolved in 500 mL of solution (assume density of solution = 1 g/mL).

Q7. In the combustion of methane of methane in air, what is the limiting reactant and why?

Q8. Volume of a solution changes with change in temperature, then, will the molality of the solution be affected by temperature ? Give reason for your answer.

Q9. The empirical formula and molecular mass of a compound are  $CH_2O$  and 180 g, respectively. What will be the molecular formula of the compound ?

Q10. The reactant which is entirely consumed in reaction is known as limiting reagent. In the reaction

 $2A + 4B \longrightarrow 3C + 4D$ , when 5 moles of A react with 6 moles of B. Then

- i. Which is the limiting reagent ?
- ii. Calculate the amount of C formed ?

Q11. Hydrogen gas is prepared in the laboratory by reacting dil HCl with granulated zinc. Following reaction takes place :

 $Zn + 2HC \rightarrow ZnCl_2 + H_2$ 

Calculate the volume of hydrogen gas liberated at STP when 32.65 g of zinc reacts with HCl. 1 mole of a gas occupies 22.7 L volume at STP; atomic mass of Zn=65.3 u.

Q12. A compound made up of two elements A and B has A=70 %, B=30 %. Their relative number of moles in the compound are 1.25 and 1.88. Calculate

- i. Atomic masses of the elements A and B.
- ii. Molecular formula of the compound, if its molecular mass is found to be 160.

Q13. Calculate the percentage by mass of chromium in each of the following oxides (atomic mass of Cr=52 u):

- i. CrO
- ii.  $Cr_2O_3$
- iii. CrO<sub>3</sub>

Q14. Napthalene (compound of C and H ) contains 93.71% carbon. If its molar mass is 128 gmol<sup>-1</sup>, calculate its molecular formula.

Q15. A bottle contains 500 mL of 2.4 M HCl solution. How much water should be added to dilute it to 1.6 M HCl solution ?

Q16. 0.63 g of oxalic acid (COOH)<sub>2</sub>.2 $H_2O$  are dissolved in 500 mL of solution. Calculate the molarity of the solution ?

Q17. Two bulbs A and B of equal capacity contain 10 g of oxygen  $(O_2)$  and ozone  $(O_3)$  respectively. Which bulb will have

- i. Larger number of molecules ?
- ii. Larger number of oxygen atoms?

Q18. Which aqueous solution has higher concentration : 1 molar or 1 molal solution of the same solute. Give reason.

Q19. Is the molar volume of NH<sub>3</sub> different from that of CO<sub>2</sub> ? Justify your answer.

Q20. Will the molarity of a solution at 50°C be same, less or more than molarity at 25°C?

### Class XI Chemistry

### Assignment – Ch-2 : Structure of Atom

Q1. Wavelength of different radiations are given below :  $\lambda(A)=300 \text{ nm}, \lambda(B)=300 \text{ }\mu\text{m}, \lambda(C)=3 \text{ nm}, \lambda(D)=30 \text{ }\dot{A}$ . Arrange these radiations in the increasing order of their energies.

Q2. Calculate the energy of one mole of photons of radiation whose frequency is  $5X10^{14}$  Hz.

Q3. Give the Einstein's equation for threshold frequency  $(v_0)$  and kinetic energy of photoelectrons and explain each symbols used.

Q4. Why are Bohr's orbits called stationary states ?

Q5. Chlorophyll present in green leaves of plants absorbs light at  $4.620 \times 10^{14}$  Hz. Calculate the wavelength of radiation in nanometer. Which part of the electromagnetic spectrum does it belong to ?

Q6. Which two discoveries put strong challenge to the Bohr Model ?

Q7. Out of the electron and proton which one will have a higher velocity to produce matter waves of the same wavelength ? Explain it.

Q8. What physical meaning is attributed to the square of the absolute value of wave function,  $|\psi|^2$ ?

Q9. In an atom, an electron is moving with a speed of 600 m/s with an accuracy of 0.005 %. Find the certainity with which the position of the electron can be located. [ $h=6.6X10^{-34}$  Kgm<sup>2</sup>s<sup>-1</sup>, mass of electron m<sub>e</sub>=9.1x10<sup>-31</sup> Kg ].

Q10. Calculate the kinetic energy of the ejected electron ultra-violet radiation of frequency  $1.6 \times 10^{15} \text{ s}^{-1}$  strikes the surface of potassium metal. Threshold frequency of potassium is  $5 \times 10^{14} \text{ Hz}$ . [h= $6.63 \times 10^{-34} \text{ Js}$ ]

Q11. In the Rydberg equation, a spectral line corresponds to  $n_1=3$  and  $n_2=5$ .

i. Calculate the wavelength and frequency of this spectral line.

ii. To which spectral series does this line belong?

iii. In which region of the electromagnetic spectrum, will this line fall ?

Q12. Calculate the wavenumber for the shortest wavelength transition in the Balmer series of atomic hydrogen.

Q13. The electronic energy of H-atom is

 $E_{n=}$  (1.312X10<sup>6</sup>) / n<sup>2</sup> J mol<sup>-1</sup>

Calculate

i. First excitation energy of the electron in the hydrogen atom.

ii. Ionization energy of the hydrogen atom.

Q14. If the energy of an electron in the second Bohr orbit of H-atom is -E, what is the energy of the electron in the Bohr's first orbit ?

Q15. An electron is moving with a kinetic energy of  $2.275 \times 10^{-25}$  J. Calculate its de-Broglie wavelength. [Mass of electron= $9.1 \times 10^{-31}$  Kg, h= $6.6 \times 10^{-34}$  Js ]

Q16. A molecule of  $O_2$  and  $O_3$  travel with the same velocity. What is the rates of their wavelength ?

Q17. The 4f subshell of an atom contains 12 electrons. What is the maximum number of electrons having same spin in it ?

Q18. Nickel atom can lose two electrons to form to form Ni<sup>2+</sup> ion. The atomic number of nickel is 28. From which orbital will nickel lose two electrons ?

Q19. How many electrons in an atom may have the following quantum number ?

i. n=4, m<sub>s</sub>= +  $\frac{1}{2}$ ii. n=3, 1=0 Q20. Can we apply uncertainity principle to a stationary electron ?

Q21. What is the distance of separation between second and third orbits of H-atom ?

Q22. Why in the building of the atom, the filling of 4s-orbital takes place before 3d-orbital ?

Q23. Describe the orbital with the following quantum numbers :

i. n=1, l=0 ii. n=2, l=1, m=0 iii. n=3, l=2 iv. n=4, l=1 v. n=3, l=0, m=0 vi. n=3, l=1

Q24. How will you differentiate between an orbit and an orbital ?

Q25. The wavelength of a beam of light is 25.0 µm. What is

- i. Its wavelength in cm
- ii. Its frequency
- iii. Its wavenumber
- iv. Its energy of one its photons ?

#### CLASS-XI PHYSICS

Q1. Define Astronomical Unit.

Q2. How many kg are there in 1 a.m.u?

Q3. Given: Wavelength=6000 Å. Express it in nm.

Q4. The density of a material is  $0.8 \text{ g/cm}^3$ , express it in kg/m<sup>3</sup>.

Q5. What is the difference between mN, Nm, nm?

Q6. How many parsecs are there in 1 Light Year?

Q7. How many Astronomical units are there in 1 m?

Q8. A dust particle weighs 6.7 x 10<sup>-10</sup> kg. How many such dust particles would weigh 6.7 kg?

# SIGNIFICANT FIGURES AND ERROR ANALYSIS

Q1. Find the number of significant figures in the following:

i) 9.11 x 10 <sup>-31</sup> kg	iv) 7.0030 cc	vii) 123.7 m
ii) 6371 km	v) 80.0 s	viii) 0.23 x 10 <sup>-3</sup>
iii) 0.53 Å	vi) 0.00427 g	ix) 80.0

Q2. Round of the following to three significant figures:

i) 20.968 m	iii) 2.914 m/s
ii) 0.003156 kg	iv) 411.27 m <sup>2</sup>

Q3. State the rules for significant figures followed in the mathematical operations of:

i) Multiplication or Division

ii) Addition or Subtraction

Q4. Find the value of the following upto appropriate significant figures:

i) 3.27+33.5472	iii) 53.312-53.3
ii) 2.02 x 23	iv) 3.908 x 5.5

Q5. A cubic millimeter of blood sample on microscopic examination is found to have  $5 \times 10^6$  corpuscles. If an adult person contains 2.5 litres of blood, find the order of total number of red corpuscles in it.

Q6. The diameter of a sphere is 2.34 cm. Calculate its surface area and the volume with due regard significant figures given that  $\pi = 3.14$ .

Q7. A bus covered a distance of 182 km from Delhi to Roorkee in 5.5 hours. What is the average speed? Express it in appropriate number of significant figures.

Q8. What is the difference in writing a length as 3.2 cm and 3.200 cm?

Q9. In an experiment, Refractive Index of glass was observed to be 1.45, 1.56, 1.54, 1.44, 1.54, 1.53. Calculate:

i) Mean Value of Refractive Index, ii) Absolute Error, iii) Fractional Error, iv) Percentage Error.

Q10. A physical quantity 'q' is given by ,  $Q = A^2B^2 / C\sqrt{D}$ The Percentage Error in A, B, C, D are in 1%, 2%, 4%, 2% respectively. Find the Percentage Error in Q.

Q11. The radius of curvature of a Concave Mirror, measured by Spherometer is given by R. The values of '1' and 'h' are 4 cm and 0.65 cm respectively. Compute the error in measurement of radius of curvature. Where  $R = (1^2 / 6h) + (h / 2)$ 

Q12. If two resistances of values  $R_1 = (2.0 \pm 0.1)\Omega$  and  $R_2 = (12.3 \pm 0.2)\Omega$  are put in, (i) parallel and ii) series. Find the error in equivalent resistance. Use,  $R_3 = R_1 + R_2$ ,  $1/RP = 1/R_1 + 1/R_2$  and DRP/R2 = DR<sub>1</sub>/R<sub>2</sub> + DR<sub>2</sub>/R<sub>2</sub>

Q13. The following observations were actually made during an experiment to find the value of 'g' using a Simple Pendulum:

Length of Pendulum = 100 cm

Time for 20 Oscillations = 40 s

Calculate the maximum possible error if the length was measured by a meter scale having least count 0.1 cm and time was measured by a stopwatch having least count 0.1 s.

Q14. A capacitor of capacitance c=(100+.2) uf  $v=(2.0 \pm 0.1)$  Volt. What will be the charge 'Q' on the capacitor? Use Q = CV.

Q15. Which of the following readings is the most accurate i)7000 m ii) 7 x 10  $^{2}$ m iii) 7 x 10  $^{3}$ m

Q16. If  $f = x^2$ , then what is the relative error in f?

#### **DIMENSIONS**

Q1. Time period of an oscillation of drop of radius 'r', density ' $\delta$ ' and surface tension 's' is  $t = k \frac{\delta r^3}{s}$ 

Check the correctness of the equation.

Q2. Check the accuracy of the equation  $\lambda = \frac{h}{mv^2}$ . Where letters have their usual meanings.

Q3. Find the dimensions of  $\frac{\alpha}{\beta}$  in the equation  $p = \frac{\alpha - t^2}{\beta x}$ where 'p' is the pressure, ''x' is the distance and 't' is the time.

Q4. In the equation  $F = \frac{\alpha}{\beta + d}$ , find the dimensions of  $\alpha$  and  $\beta$ , where 'F' is force and 'd' is density.

Q5. If the velocity of light 'c', the constant of gravitation 'g' and planck's constant 'h' be chosen as the fundamental units, find the dimensions of mass, length and time in the new system.

Q6. Show dimensionally that the frequency 'n' of a transverse waves in a string of length 'l' and mass per unit length 'm' and under tension 'T' is given by  $n = \frac{k}{l} \frac{T}{m}$ .

Q7. The coefficient of viscosity (n) of a gas depends on the mass 'm', the effective diameter 'd' and mean speed ' $\nu$ ' of the gas molecules. Use dimensional analysis to find n.

# METHODS OF MEASUREMENT

Q1. What is the value of one i) 1° ii) 1' and iii) 1" in radian?

Q2. Angular diameter of sun, as observed by a scientist from the surface of earth is 32'. What is the diameter of Sun? Given that mean distance of earth from the sun is 1 AU having a value of  $1.5 \times 10^{11}$  m.

Q3. A Laser signal is beamed towards the planet Venus from Earth and it's echo is received 8.2 minutes later. Calculate the distance of Venus from the Earth at that time.

Q4. When the planet Jupiter is at a distance of 824.7 million km from the Earth, the angular diameter is measured to be 35.72" of arc. Calculate the diameter of the Jupiter.

Q5. Light from the Sun takes 8 minutes and 20 seconds to reach the Earth. Calculate the radius of Earth's orbit round the sun in light years.

Q6. The angle subtended by moon at a point on Earth is  $0^{\circ}31'$ . If the distance of moon from Earth is  $3.84 \times 10^8$  m, find the diameter of the moon.

Q7. When the observations are taken at an intervals of 6 months, the angle of parallax for a star is 0.4". Find the distance of the star in Parsec.

### **DIMENSIONAL ANALYSIS**

Q1. Find the dimensional formulae of, i) Kinetic Energy, ii) Pressure Q2. Find the dimensions of constants 'a' and 'b' occurring in the Vander-Wall's equation,  $(P + a/v^2) (v - b) = RT$ , where P is pressure, v is volume, T is temperature and R is gas constant.

Q3. The Rotational Kinetic Energy of a body is given by  $E = (1/2) I W^2$ , where 'W' is the angular velocity of the body. Use the equation to obtain dimensional formulae for moment of inertia I. Also write it's SI Unit.

Q4. Find the value of 60 W on a system having 100 g, 20 cm and 1 min as the Fundamental Units.

Q5. By the method of dimensions, find the value of acceleration of 8  $m/s^2$  into  $km/h^2$ .

Q6. Assuming that escape velocity  $v_e$  from a planet depends upon Gravitational Constant 'G', Radius 'R' of the planet and also it's density ' $\delta$ ', establish a relation for escape velocity.

#### CLASS XI SUBJECT-MATHEMATICS

Q1)IF n(A-B)=30 and n(B-A)=50 and n(A  $\cap$  B)=20,then find n(AUB).

Q2)Write down the power set of {1,{1}}.

Q3)If R is set of real numbers and Q is set of rational numbers then find R-Q.

Q4)Write the set in set-builder form {1,8,27,64,125}.

Q5)In a survey of 55 students, it was found that 25 had taken maths,22 had taken physics and 21 had taken chemistry,12 had taken maths and physics,10 had taken maths and chemistry 8 had taken physics and chemistry. If 12 had taken none of the three subjects, Find the number of students who had taken all the three subjects. Also find the number of students who had taken only maths, only physics and only chemistry.

Q6) What is the total number of proper subsets of a set containing n elements.

Q7)In a survey it was found that 21 persons liked product A,26 liked product B and 29 liked product C. If 14 liked product A and B,12 liked products C and A,13 liked product B and C and 8 liked all the three products. Find the number of persons who liked product C only .Also find number of persons who like product A and B but not C.

Q8)Two finite sets have m and n elements. The total number of subsets of the first set is 56 more than the total number of subsets of second set. Find the values of m and n.

Q9)A survey shows that 63% of Americans like cheese and 76% like apples. If x% of Americans like both cheese and apples, Find value of x.

Q10)If A ={1,3,5,7,9,11,13,15,17} and B={2,4,6,8,10,12,14,16,18} and N the set of natural numbers is universal set then,  $A^{c}U$  {(AUB)  $\cap B^{c}$ } will be?

Q11) In a town of 840 people ,450 read hindi and 300 read English and 200 eat both. Then find the number of persons who read neither hindi nor English?

Q12)IF A={a,b,c}, then find the number of relations that can be defined on A to A.

Q13)Let f={(0,-5),(1,-2),(2,1)(3,4)(4,7) be a linear function from Z to Z .Find f.

Q14) If  $f(x) = \frac{1}{1-x}$ , then show that  $f{f(f(x))} = x$ .

Q15)Find the domain of  $f(x)=\sqrt{x-x-2}$  and  $f(x)=\frac{1}{\sqrt{2-x-x}}$ .

Q16)If f(X)=ax+b, where a and b are integers, f(-1)=-5 and f(3)=3, then find values of a and b.

Q17)Which of following functions are even or odd functions:  $f(x)=x^3+x$ ,  $g(x)=x^3+x^2$ .

Q18)Draw the graph of the function  $f(x)=\{3-x; x \mid 1 \}$ 

Q19)Find domain and range of Function  $f(x) = \frac{1}{2-sin3x}$ .

Q20)Let  $A=\{10,11,12,14,26\}$  and f:A N such that f(n)=highest prime factor of n.find the range.

Q21)Find the domain and range of  $f(x) = \sqrt{x - 16}$ .

Q22) Prove that : Cos20 cos 40 cos 60 cos 80 =  $\frac{1}{16}$ 

Q23)If sinx +sin y= $\sqrt{3}$  (cosy-cos x),Prove that sin3x+ sin3y =0

Q24) Prove that 
$$:\frac{sec8x-1}{sec4x-1} = \frac{Tan8x}{Tan2x}$$

Q25) $\sqrt{3}$  cosec20 –sec 20=4.

Q26)If Tanx + cotx =2,Then find the value of  $tan^{100}x + cot^{100}x$ ?

Q27)If sinx = n sin (x+2y), Show that  $tan(x+y) = \frac{1+n}{1-n}$  Tany.

#### **BIOLOGY**

- 1. Collect news items related to the field of biology & paste clippings in a file.
- 2. Complete record file.
- 3. Learn the chapters studied in class & come prepared for class test.

## **Class XI**

# **Computer Science**

## **C++ FUNDAMENTALS**

- 1. What are data types. Explain various data types?
- 2. Define a variable.
- 3. Differentiate between declaration, definition and initialization of a variable.
- 4. what are logical, relational and arithmetic operator?
- 5. Give examples of integer and float.
- 6. Can integer value be stored in float variables and vice versa?
- 7. Can char be stored in int variables and vice versa?
- 8. What is #include called and why?
- 9. What is the difference between = and = = ?
- 10. What is the difference between keyword and identifier?

Revise all the C+ programs containing conditional operator, increment and decrement operator.

#### **INFORMATICS PRACTICES**

# Class XI

Q.I Design a working /non working model on any topic related to computers.(eg. Block diagram of functional units of a computer, firewall, Networking of computers etc.)

#### Q.II

- a) Ex plain the functioning of computer with the help of a block diagram
- b) Define the following and explain any three examples of each
  - Input Devices
  - Output Devices
  - Secondary storage Devices
- c) Explain all the parts of CPU.

- d) Explain the different units of memory.
- e) Explain USB port.

# Q.III Design GUI desktop applications for following:-

Q1 Accept name and display it with 'Enjoy your holidays' message in a dialog box.

Q2 Accept firstname and lastname from different text fields and concatenate them to display full name

Q3 Accept marks in three different subjects out of 50 and display total, average and percentage in different text fields.

Q4 Accept age and display whether the person has right to vote or not.

Q5 Convert temperature (C to F and F to C) depending on radio button selected.

Q6 Accept marks and display grade according to given conditions:

M>90	А
90 to 80	В
80 to 70	C
<70	D

Q7 Accept a number and print whether it is even or odd.

Q8 Accept cost price and selling price from the user and then calculate the profit or loss incurred.

Q9 Design a calculator to accept two numbers perform add, sub, multiply, division depending on button clicked

(\*Note: Q II and III is to be done in the Practical Register)

Q IV Create MS Word document on "Open Source Software". Try to apply maximum formatting features to make the page informative and attractive.

QV Create a PowerPoint Presentation (minimum 15 slides) on "CYBER CRIME AND CYBER SECURITY" (refer chapter-3).

Q VI Create the spreadsheet given on pg.39 Q3 .Perform calculations such as total, average, percentage, maximum marks obtained etc. using formulas. Create different types of charts .

Q VII Make a Poster (A4) size on NetBeans or MySql or Internet ethics

\* Revise the syllabus covered.

Note :-Bring softcopy of Ques.IV to VI in a CD.

# **BUSINESS STUDIES**

# CLASS XI

Develop project on the following topics:

- 1. Visit to a mall.
- 2. Visit to a departmental store.
- 3. Visit to a bank.

# class 11 Subject Political Science

Answer the following questions

- Q1 Define constitution.
- Q2 Why should there be minimal coordination and assurance among member of a society?
- Q3 Describe functions of a constitution.
- Q4 What do you understand by the fundamental identity of people? How is it acquired?
- Q5 What is bill of rights?
- Q6 Explain Right to Equality as granted under the Indian constitution.

Q7 What is preventive detention?

Q8 Explain the relationship between fundamental rights and directive principle of State Policy.

Q9 Describe the composition and functions of the Election Commission

Q10 How the independence of election commission has been maintained?

# CLASS XI

# ACCOUNTANCY

- (1) Prepare Accounting Equation from the given transactions. Also prepare Balance sheet on the basis of the final equation.
- (2) Analyse the following transactions. State the nature of account. Also mention which account is to be debited and which is to be credited.
- (3) Write up the following transactions in the journal of Ashok and post them to the ledger.

2018

April 1 Commenced business with cash Rs.40,000 and furniture worth Rs. 60,000.

- April 2 Deposited into bank Rs.30,000.
- April 5 Bought goods for cash Rs.5,000.
- April 7 Sold goods to Amit Rs.2,500.
- April 9 Bought goods from Satya Rs.5,100.
- April 12 Received cash from Amit Rs.1,950 and discount allowed Rs.50
- April 14 Received cash for goods sold Rs.2,750
- April 15 Bought goods from Dinesh Rs.3,350.
- April 16 Withdrew cash for private expenses Rs. 2,000.
- April 17 Received cash from Amit and deposited into bank Rs.1,500.
- April 20 Paid sundry trade expenses Rs.500.
- April 25 Paid Rent Rs.450
- April 28 Paid cash to Dinesh Rs.3,300 Discount Received Rs.50.
- April 29 Goods sold to Rohit Rs.4,050
- April 30 Paid for carriage Rs.500.
- April 30 Interest due but not paid Rs. 600.

ग्रीस्मावकार्श गृहकार्य \_ 2018 — 19 anz11 - 11 हिन्दी अपनी रुचि के किन्हीं दस विषयों पर निर्वधा लिनिवरू परिगर संग किसी स्थल का भ्रमण कर उरपने अनुभवों को याजा वत्तांत के रूप में TARAP अपनी पार्य-पुस्तक में निहित किन्हीं पाँच साहित्यकारें का परिचय — (जीवन, रचनाएँ, भाषा – श्रीली) तैयार की जिए । प्रति सप्ताह कम से कम राक दिन की अविस्मरणीय पाटना को डायरी रूप में लिरिव मई माह तक पढ़ाए गए सभी पाठों की समझकर याद की जिए । ने हो प — सभी लिखित कार्य अपनी हिन्दी क गृहकार्य की पी में ही की जिए ।