New Standard Public School, Raebareli
First Unit Test-2017-18
Subject - Computer
Class- XI

Time: 1 Hr.   **M. M.:- 20**

Note:- Attempt all the questions.

Q.1-Give the answer any nine parts. Part (e) is compulsory.

(Each 1 Mark)

- (A) What is Information?
- (B) Write the full form of ABC.
- (C) What is Computer Software?
- (D) Who is known as the father of computer?
- (E) What is Loader?
- (F) Who had When invented 'C' Language?
- (G) In which year BASIC was developed?
- (H) Write the full name of ENIAC.
- (I) Define Super Computer.
- (J) Write the main component of third generation of computer.

Q.2- Give the answer any three parts:-   **(Each 2.5 Marks)**

- (A) Describe Characteristics of computer.
- (B) Describe the kinds of computer on the basis of its work.
- (C) Describe first generation computer.
- (D) Define Firmware and Humanware.

Q.3- Give the answer any one part:-   **(Each 3.5 Marks)**

- (A) Describe Low Level Language.
- (B) Describe FORTRAN and COBOL.

New Standard Public School, Raebareli
First Unit Test-2017-18
Subject - Physics
Class- XI

Time: 1 Hrs.   M. M.:- 20

Note:- Attempt All the questions.

Q.1- Answer any nine parts. Part (j) is compulsory.   (Each 1 Mark)

(a) Write law of conservation of energy.

(b) Name the indian scientist who won the noble prize for physics.

(c) Write full name of RADAR.

(d) Mass of an electron is 9.1×10^{-31}kg. Write order of magnitude of mass of the electron.

(e) A laser signal is recieved back on the earth after 6 sec. reflecting from a star. Calculate distance of the star from the earth. Speed of the light is 3×10^{8}m/s.

(f) Mass of a particle is 2.05×10^{12}kg. Write number of the significant figures in the mass of the particle.

(g) The side of a square is 4.0cm. Calculate the maximum percentage error in the measurement of area of the square.

(h) Give the names of two dimensionless quantities.

(i) If A + B = C. The dimensions of A and C are $[ML^{-1}T^{-2}]$. Write dimensional formula of B.

(j) You are given a meter scale. A thread and a pencil. How will you calculate the diameter of the thread?

Q.2- Answer any three parts.   (Each 2.5 Marks)

(a) A physical quantity P is related to four observations a,b,c and d as follows. $P = \dfrac{a^3 b^2}{c \, d}$ The percentage error in the measurements of a, b, c and d are 1%, 3%, 4% and 2% respectively. Calculate the maximum percentage error in the measurement of P.

(b) What do you mean by inertial mass and gravitational mass? Explain.

(c) Using dimensions convert 1 N force in dyne.

(d) Using dimensional method check the accuracy of $T = 2 \sqrt{\dfrac{l}{g}}$. Where all symbols are in their ususal meanings.

Q.3- Answer any one part.   (Each 3.5 Marks)

(a) The speed of sound v in a medium depends on the elasticity of the medium E and density d. Using dimensional method derive the formula for the speed of sound in the medium.

(b) What do you mean by the limit of accuracy of an instrument? The mass, radius of cross section and the length of a wire are (0.3 ± 0.003) g (0.5 ± 0.005) mm and (6 ± 0.06)cm. respectively. Calculate the maximum percentage error in the measurement the density of the material of the wire.

New Standard Public School, Raebareli
First Unit Test-2017-18
Subject - Chemistry
Class- XI

Time: 1 Hr.   M. M.:- 20

Note:- All the questions are compulsory.

Q.1- Write the answer of any nine sections. Section (j) is compulsory.   (Each 1 Mark)

(a) Define solid.

(b) What do you understand by compounds?

(c) Define metals.

(d) What do you understand by atomic mass?

(e) Define molecule.

(f) What do you understand by inorganic chemistry?

(g) Write law of conservation of mass.

(h) Define one mole.

(i) What is molecular formula?

(j) Cold drink filled in bottle is homogeneous mixture or heterogeneous?

Q.2- Write the answer of any three sections.   (Each 2.5 Marks)

(a) Explain law of gaseous volumes with example.

(b) At N.T.P., the mass of 1.12 litre of any gas is 20 gram. Calculate molecular mass of gas.

(c) Explain Dalton's atomic theory.

(d) Explain limiting reagent with example.

Q.3- Write the answer of any one section.   (Each 3.5 Marks)

(a) Explain law of multiple proportions with example.

(b) An Organic compound contains 31.9% carbon, 6.8% hydrogen, 18.5% nitrogen and rest oxygen. Calculate its empirical formula.

New Standard Public School, Raebareli
First Unit Test-2017-18
Subject - Maths
Class- XI

Time: 1 Hr.   M. M.:- 20

Note:- Attempt All the questions.

Q.1- Attempt any nine parts in which part (j) is compulsory:
(Each 1 Mark)

(a)   'The sum of 3 and 5 is 7'. It is a statement or not. Give reason.

(b)   Write the negation of the following statement:
'The sky is green.'

(c)   Find the component sentences of the following compound sentence and write the connecting word also:
'The roof is blue and the walls are white.'

(d)   If the slope of the line joining to the points (6, –3) and (x, 7) is 2, then find x.

(e)   Find the equation of the line which passes through (–2, 3) and whose slope is $\frac{3}{4}$

(f)   Find the length of intercept made by the line $2x + 7y = 14$ with the axes.

(g)   Find the length of intercept cuts off by the line along y-axis and for the following conditions the line makes angle with positive of x-axis: $3y = 3x + 7$.

(h)   Find the length of the perpendicular drawn from the point (4, 5) to the line $5x + 12y - 13 = 0$.

(i)   If the points (3, – 5) and (2, 4) lie on the line $y = mx + c$ then find the values of m and c.

(j)   Find the inclination of the line $x \cos \ + y \sin \ = p$ from positive x-axis.

Q.2- Attempt any three parts.   **(Each 2.5 Marks)**

(a)   Find the distance between the parallel lines $3x + 4y = 9$ and $3x + 4y + 10 = 0$.

(b)   Find the equation of the line which passes through the point (0,2) and divides the join of the points (8,9) and (–7, 4) in the ratio of 2 : 3 internally.

(c)   Prove that (a, 0), (0, b) and (3a, – 2b) are collinear.

(d)   If the angle between two lines is $\frac{}{4}$ and slope of a line is $\frac{1}{3}$ then find the slope of other line.

Q.3- Attempt any one part.   **(Each 3.5 Marks)**

(a)   Find the equation of the line which passes through the point (6, –4) and the sum of its intercepts on the axes is 7 units.

(b)   Prove the following statement by contradiction $\overline{3}$ is an irrational number.

New Standard Public School, Raebareli
First Unit Test-2017-18
Subject - Biology
Class- XI

Time: 1 Hr.   M. M.:- 20

Note:- All questions are compulsory. Draw a well labelled diagram wherever necessary.

Q.1- Answer any nine parts.   **(Each 1 Mark)**

(a)   Who used the Term species?

(b)   Write down the full form of HIV.

(c)   Who discovered viruses?

(d)   Write down the name of any two alkaloids obtained from plants.

(e)   Which cell organelle is known as kitchen of the cell?

(f)   What is Tonoplast?

(g)   What is the function of ribosomes in cell?

(h)   Who discovered lysosome?

(i)   What is the largest unit of classification?

(j)   Write down the full form of ICZN.

Q.2- Answer any three parts. Part (d) is compulsory

(Each 2.5 Marks)

(a)   What do you understand by binomial nomenclature? Explain it.

(b)   Write down living and non living characters of Viruses.

(c)   Write the differences between prokaryotic and eukaryotic cell.

(d)   What changes will you do to convert an animal cell into plant cell?

Q.3- Answer any one part.   **(Each 3.5 Marks)**

(a)   Explain the structure and function of mitochondria.

(b)   Describe the Whittaker's five kingdom system of classification.