SAMPLE QUESTIONS

English

Question 1:

Choose the correct verb to fill the gap.

By the end of the year, she _____ with a degree in business.

1. already graduates
2. already graduated
3. will have already graduated
4. has already graduated

Question 2:

Choose the synonym for the following word Hallowed

1. Sacred
2. Old
3. Inactive
4. Effective

Question 3:

As _____ cuts it as well as he does, I always have my hair cut at Johnson's.

1. anyone
2. someone else's
3. no one else
4. everyone

Question 4:

Mohit _____ his century before it is the end of the match.

1. will score
2. will have scored
3. has scored

4. scores

Question 5:

Which word is a adverb in this sentence?

There are no interesting programmes tonight.

1. interesting
2. programmes
3. there
4. tonight

Chemistry

Question 1

Which one of the following molecules has the smallest bond angle?

1. NH_3
2. H_2Se
3. H_2S
4. PH_3

Question 2

The addition of arsenic to germanium makes the latter a:-

1. Extrinsic semiconductor
2. Metallic conductor
3. Intrinsic semiconductor
4. Mixed conductor

Question 3

For an ideal binary liquid solution with $p°A > p°B$, which of the following relations between xA (mole fraction of A in liquid phase) and yA (mole fraction of A in vapor phase) is correctly represented?

1. $xA > yA$
2. $xA = yA$

3. xA < yA
4. xA and yA cannot be correlated with each other

Question 4

In the reaction, $3Cl_2 + 6NaOH \rightarrow NaClO_3 + 5NaCl + 3H_2O$ The element which loses as well as gains electrons is:-

1. CL
2. Na
3. O
4. None of the above

Question 5

An element has three elements in the 4th shell, the atomic number of the elements is:-

1. 27
2. 21
3. 13
4. 31

Physics

Question 1

The photoelectric effect was discovered by:-

1. Einstein
2. Hertz
3. Millikan
4. Halwachs

Question 2

An electron, a proton and a deutron and an α-particle have same linear momenta. Which one of them possesses least kinetic energy?

1. Electron
2. Deutron

3. α-particle
4. Proton

Question 3

Three equal masses P, Q and R pulled with a constant force F. They are connected to each other with strings. The ratio of the tension between PQ and QR is:-

1. 2:1
2. 1:2
3. 3:1
4. 1:1

Question 4

To avoid slipping while walking on ice one should take larger steps because of the:-

1. Larger normal reaction
2. Smaller normal reaction
3. Smaller friction
4. Larger friction

Question 5

If the Earth shrinks in its radius by 4%, mass remaining the same, the value of 'g' on its surface:-

1. Remains constant
2. Decreases by about 8%
3. Increases by about 8%
4. Decreases by about 4%

Mathematics

Question 1

If a, b, c are in A.P. and p, p' are the A.M. and G.M. respectively between a and b while q,q' are the A.M. and G.M. respectively between b and c, then:-

1. pq = p' q'

2. $p_2 + q_2 = p'_2 + q'_2$
3. $p_2 - q_2 = p'_2 - q'_2$
4. None of the above

Question 2

The number of ways in which different flowers can be strung to form a garland so that 4 particular flowers are never separated is:-

1. 288
2. 5! . 4!
3. 4! . 4!
4. 0

Question 3

The chance of throwing a total of 3 or 5 or 11 with two dice is:

1. 5/36
2. 1/9
3. 2/9
4. 19/36

Question 4

The distance of the point (x, y) from x-axis is:-

1. |x|
2. y
3. x
4. |y|

Question 5

The mean of 50 observations is 36. If two observations 30 and 42 are deleted, then the mean of the remaining observations is:-

1. 36
2. 48
3. 38
4. None of the above

Biology

Question 1

Seeds swell when placed in water due to:-

1. Transpiration
2. Imbibition
3. Hydrolysis
4. Osmosis

Question 2

Which of the following combinations is correct?

1. Lipase - Ester bond
2. Protease - Phosphodiester bond
3. Nucleases - Glycosidic Bond
4. Amylase - Peptide bond

Question 3

Proteins embedded in the cell membrane function to:-

1. Produce energy for the cell
2. Transport materials in and out of the cell
3. Carry genetic information
4. Store excess water

Question 4

Which of the following is not a STOP codon?

1. Opal
2. Amber
3. Ochre
4. Gyro

Question 5

Who is known as the father of modern bee science?

1. Huber
2. Fahian
3. Whenson
4. Kurian

Horticulture

Question 1

Sugarcane + Potato is an intercropping system of:

1. Autumn season
2. Zaid season
3. Spring season
4. Rainy season

Question 2

Which of the following is TPS variety of Potato?

1. JH 222
2. Chipsona-II
3. Anand
4. HPS-1/113

Question 3

Bending of tomato plants towards light is called—

1. Phototropism
2. Vernalisation
3. Photo-respiration
4. None of these

Question 4

Seed-plot technique is adopted in—

1. Onion
2. Potato
3. Sugarcane
4. Tomato

Question 5

IARI released 11 new varieties of HYV crops. Which one is variety of marigold?

1. Pusa Raunak
2. Pusa Madhurima
3. Pusa Bahar
4. All of these

Crop production

Question 1

Pulses fit well in cropping system as they are

1. Short duration crops
2. Long duration crops
3. Diseases resistant crops
4. Moisture stress resistant crops

Question 2

Groundnut pegs when developed in the soil form

1. Roots
2. Stems
3. tubers
4. Fruit

Question 3

Pedology considers soil as a

1. Natural body
2. Purely a synthesized one

3. Medium for plant growth
4. Powdered rock mass of the earth crust

Question 4

The strongest chemical agent for breaking dormancy is

1. Potassium nitrate
2. Gibberellins
3. Ethylene
4. Cumerin

Question 5

The rice variety containing “Dee-geo-woo-gen” is

1. Indrasan
2. Basmati
3. Tilak
4. IR-8