

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.

- (A) already graduates
- (B) already graduate
- (C) will have already graduated
- (D) has already graduated

Question 2: Choose the synonym for the following word “Hallowed “

- (A) Sacred
- (B) Old
- (C) Inactive
- (D) Effective

Question 3: As _____ cuts it as well as he does, I always have my hair cut at Johnson's.

- (A) anyone
- (B) someone else's
- (C) no one else
- (D) everyone

Question 4: Mohit _____ his century before it is the end of the match.

- (A) will score
- (B) will have scored
- (C) has scored
- (D) scores

Question 5: Which word is a adverb in this sentence? There are no interesting programmes tonight.

- (A) Interesting
- (B) Programmes
- (C) There
- (D) tonight

Chemistry

Question 1 : Which one of the following molecules has the smallest bond angle?

- (A) NH_3
- (B) H_2Se
- (C) H_2S

(D) PH_3

Question 2 : The addition of arsenic to germanium makes the latter a:-

- (A) Extrinsic semiconductor
- (B) Metallic conductor
- (C) Intrinsic semiconductor
- (D) Mixed conductor

Question 3: For an ideal binary liquid solution with $p^{\circ}A > p^{\circ}B$, which of the following relations between x_A (mole fraction of A in liquid phase) and y_A (mole fraction of A in vapor phase) is correctly represented?

- (A) $x_A > y_A$
- (B) $x_A = y_A$
- (C) $x_A < y_A$
- (D) x_A and y_A 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:-

- (A) Cl
- (B) Na
- (C) O
- (D) None of the above

Question 5 : An element has three elements in the 4th shell, the atomic number of the elements is:-

- (A) 27
- (B) 21
- (C) 13
- (D) 31

Physics

Question 1: The photoelectric effect was discovered by:-

- (A) Einstein
- (B) Hertz
- (C) Millikan
- (D) Halwachs

Question 2 : An electron, a proton and a deuteron and an α -particle have same linear momenta. Which one of them possesses least kinetic energy?

- (A) Electron
- (B) Deuteron
- (C) α -particle

(D) 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:-

- (A) 2:1
- (B) 1:2
- (C) 3:1
- (D) 1:1

Question 4 : To avoid slipping while walking on ice one should take larger steps because of the:-

- (A) Larger normal reaction
- (B) Smaller normal reaction
- (C) Smaller friction
- (D) Larger friction

Question 5 : If the Earth shrinks in its radius by 4%, mass remaining the same, the value of 'g' on its surface:-

- (A) Remains constant
- (B) Decreases by about 8%
- (C) Increases by about 8%
- (D) 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:-

- (A) $pq = p'q'$
- (B) $p^2 + q^2 = p'^2 + q'^2$
- (C) $p^2 - q^2 = p'^2 - q'^2$
- (D) 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:-

- (A) 288
- (B) $5!4!$
- (C) $4!4!$
- (D) 0

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

- (A) $\frac{5}{36}$
- (B) $\frac{1}{9}$
- (C) $\frac{2}{91}$
- (D) $\frac{9}{36}$

Question 4 : The distance of the point (x, y) from x-axis is:

- (A) $|x|$
- (B) Y
- (C) X
- (D) $|y|$

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:-

- (A) 36
- (B) 48
- (C) 38
- (D) None of the above

Biology

Question 1 Seeds swell when placed in water due to:-

- (A) Transpiration
- (B) Imbibition
- (C) Hydrolysis
- (D) Osmosis

Question 2: Which of the following combinations is correct?

- (A) Lipase - Ester bond
- (B) Protease - Phosphodiester bond
- (C) Nucleases - Glycosidic Bond
- (D) Amylase - Peptide bond

Question 3: Proteins embedded in the cell membrane function to:-

- (A) Produce energy for the cell
- (B) Transport materials in and out of the cell
- (C) Carry genetic information
- (D) Store excess water

Question 4: Which of the following is not a STOP codon?

- (A) Opal
- (B) Amber
- (C) Ochre
- (D) Gyro

Question 5: Who is known as the father of modern bee science?

- (A) Huber
- (B) Fahian
- (C) Whenson

(D) Kurian

Horticulture

Question 1: Sugarcane + Potato is an intercropping system of:

- (A) Autumn season
- (B) Zaid season
- (C) Spring season
- (D) Rainy season

Question 2: Which of the following is TPS variety of Potato?

- (A) JH 222
- (B) Chipsona-II
- (C) Anand
- (D) HPS-1/113

Question 3: Bending of tomato plants towards light is called—

- (A) Phototropism
- (B) Vernalisation
- (C) Photo-respiration
- (D) None of these

Question 4: Seed-plot technique is adopted in—

- (A) Onion
- (B) Potato
- (C) Sugarcane
- (D) Tomato

Question 5: IARI released 11 new varieties of HYV crops. Which one is variety of marigold?

- (A) Pusa Raunak
- (B) Pusa Madhurima
- (C) Pusa Bahar
- (D) All of these

Crop production

Question 1: Pulses fit well in cropping system as they are

- (A) Short duration crops
- (B) Long duration crops
- (C) Diseases resistant crops
- (D) Moisture stress resistant crops

Question 2: Groundnut pegs when developed in the soil form

- (A) Roots
- (B) Stems
- (C) Tubers
- (D) Fruit

Question 3: Pedology considers soil as a

- (A) Natural body
- (B) Purely a synthesized one
- (C) Medium for plant growth
- (D) Powdered rock mass of the earth crust

Question 4: The strongest chemical agent for breaking dormancy is

- (A) Potassium nitrate
- (B) Gibberellins
- (C) Ethylene
- (D) Cumerin

Question 5: The rice variety containing “Dee-geo-woo-gen” is

- (A) Indrasan
- (B) Basmati
- (C) Tilakl
- (D) R-8