SAMPLE QUESTIONS
FOR
COMPUTER BASED PRE-ADMISSION ENTRY TEST

BACHELOR PROGRAMMES
(REGULAR/SELF FINANCE)

● Each Section carries five examples of the question type contained in the Test Paperin the subject of English, Mathematics/Biology/Economics/English Comprehension, Physics/Statistics/Business Mathematics, Basic Mathematics and Chemistry/Computer Science/Accounting /General Knowledge.

● For further details related to structure of question paper for different groups, pleae refer to FAQs on FAQ.pdf (neduet.edu.pk)

● Duration of the Test shall be two hours.

(SAMPLE QUESTIONS)

SECTION I (ENGLISH)

1. Choose the alternative closest in meaning to the underlined words in the following sentence.

   He is <u>good at</u> making model airplanes.

   (A)   useful   (B)   competent   (C)   clever   (D) skillful

2. Choose one word to fit the meaning in the following sentence.
   The teacher asked him to   his mistake.
   (A) expect   (B) accept   (C) aspect   (D) inspect

3. Which of the underlined words (given below as options) is incorrect?
   The idea <u>for</u> the air-supported plastic structures <u>has come</u> from <u>an</u> aeronautical engineer <u>in</u> 1945.

   (A)   for   (B)   has come   (C)   an   (D) in

4. Choose the best option to complete the sentence.
   Bilal graduates from this University, he wants to go abroad for higher studies.
   (A)   By the time   (B) After   (C) Before   (D) Until

5. Read the given paragraph and choose the best option as the summary.

   For centuries Asia has suffered under the insolence of the White Man, I have myself seen this insolence in ways that made my blood boil and that, if I had been and Asian and not a European would have roused me to fury. This long experience of European domination has naturally produced a mood of resistance, and, as always happens in such cases, there is a danger lest the fight for independence should become a desire for conquest.

   (A)   The White Man's behaviour has produced a rebellious attitude among the Asians.
   (B)   The White Man's insolence has affected both the Europeans and the Asians.
   (C)   There is danger that the Asians may strike back in reaction to the White Man's domination.
   (D)   Asians have suffered at the hands of the Europeans.

SECTION II (MATHEMATICS) - (For Pre-Engineering Group)

1. The product of $(2,3)$ and $(1,1)$ is   .

   (A) (2,3)   (B) (1,5)   (C) (1,-5)   (D) (-1,5)

2. $\csc 2x - \cot 2x =$

   (A)   sec x   (B)   cos x   (C)   cot x   (D)   tan x

3. The limit of $(x^2 - 4) / (x^2 - 2x)$ as x tends to 2 is   .

   (A) 0   (B) 2   (C) -2   (D) 4

4. Equation of normal to the parabola $y = 5 - x^2$ at the point where $x = 2$ is   .

   (A) 4y - x = 8   (B) 4y - x = 2   (C) y + 4x = 9   (D) y + 4x = 7

5. $\int_{1}^{2} \left(x - \frac{1}{x^2}\right) dx =$

   (A) 0   (B) 1   (c) 2   (D) 4

OR
SECTION II (BIOLOGY) - (For Pre-Medical Group)

1. In plants, inorganic salts are absorbed from the soil to the upper regions of the plants where they can be utilized during metabolism. This process is known as:

   (A) Transportation   (B) Transpiration   (C) Photosynthesis   (D) Osmosis

2. Which of the following statements is NOT true?
   (A)   Arteries have a smaller lumen than veins.
   (B)   Arterial walls contain much elastic tissue and smooth muscle.
   (c)   Blood flow through veins occurs against gravity.
   (D)   Arteries carry blood towards the heart.

3. "The appearance of an individual on the basis of inherent traits including both physical and Physiological" is the definition of

   (A)   Phenotype   (B) genotype   (C) homozygous   (D) heterozygous

4. Protein synthesis takes place in

   (A)   Ribosome   (B) Mitochondria   (C) Endoplasmic Reticulum (D) Golgi apparatus

5. Which of the following, regarding DNA, is _incorrect_?
   (A)   Adenine pairs with Tymine
   (B) cytosine pairs with Gnanine
   (C)   There are two hydrogen bonds between A and T (A=T) and three between c and G (c=G)
   (D)   The coiling of double helix is left handed.

OR

SECTION II (ECONOMICS) - (For Commerce Group)

1. The number of factors of production is?
   (A) One (B) Two (C) Three (D) Four

2. The law of diminishing marginal returns applies especially to:
   (A) Industry (B) Agriculture (C) Mining (D) None of these.

3. The utility is maximum when marginal utility is:
   (A) Positive (B) Negative (C) Zero (D) None of these.

4. The total cost is equals to:
   (A) $A.F_c+A.V_c$ (B) F_c+V_c (C) $F_c+A.V_c$ (D) F_c+M_c

5. The book 'Wealth of Nation' is written by:
   (A) J. S. Mill (B) Adam Smith (C) Robert Malthus (D) William Robbins

OR

SECTION II ENGLISH (Reading Comprehension) - (For Humanities Group)

Question: Read the given passages and answer the comprehension questions by selecting the best option for each question

Passage One

Those privileged members of the community who have been through a secondary or public school education may be expected to know something about the elementary physics and chemistry of a hundred years ago, but they probably know hardly more than any bright boy can pick up from an interest in wireless or scientific hobbies out of school hours. As to the learning of scientific method, the whole thing is palpably a farce. Actually, for the convenience of teachers and the requirements of the examination system, it is necessary that the pupils not only do not learn scientific method but learn precisely the reverse, that is, to believe exactly what they are told and to reproduce it when asked, whether it seems nonsense to them or not. The way in which educated people respond to such quackeries as spiritualism or astrology, not to say more dangerous ones such as racial theories or currency myths, shows that fifty years of education in the method of science in Britain or Germany has produced no visible effect whatever.

Adapted from: *The Social Function of Science*, John D Bernal (1939)

1. The author blames all of the following for the failure to impart scientific method through the education system **except**

(A) poor teaching   (B) examination method
(C) lack of interest on the part of students   (D) lack of direct experience

2. If the author were to study current education in science to see how things have changed since he wrote the piece, he would probably be most interested in the answer to which of the following questions?
(A) Do students know more about the world about them?
(B) Do students spend more time in laboratories?
(C) Can students apply their knowledge logically?
(D) Have textbooks improved?

3. Astrology is mentioned as an example of
(A) a science that needs to be better understood   (B) a belief which no educated people hold
(C) something unsupportable to those who have absorbed the methods of science
(D) an acknowledged failure of science

SECTION III (PHYSICS)

1. The magnitude of the resultant vector of the vectors $2i + 2j - k$ and $j + 7k$ is   .

   (A)   0   (B)   5   (C)   7   (D) 10

2. If $g = 9.8$ m/sec² at the surface of earth, the value of 'g' at a height equal to the radius of earth is   .

   (A)   0   (B)   2.45   (C)   4.9   (D) 9.8

3. The coefficient of cubical expansion of a substance depends upon   .

   (A)   change in volume   (B)   original volume
   (C)   rise in temperature   (D)   none of these

4. A radio station broadcasts at frequency of 2000 kHz, having a wave length of

   (A)   2000 m   (B)   1000 m   (C)   300 m   (D)   150 m

5. Gamma rays are fast moving   .

   (A)   electrons   (B)   protons   (C)   neutrons   (D)   photons

OR

SECTION III (STATISTICS) - (For Science Group / Statistics)

1. Find the modal value of the following data 2, 3, 4, 5,6, 6, 7, 8?
   (A)   5   (B)   7   (C)   6   (D) 8

2. How many committees of size 3 can be formed from a group of 4 men and 5 women, if there is no restriction?
   (A)   508   (B)   84   (C)   42   (D) 61

3. Find the number of permutation of letters of the word, all taken together THATTA? (A) 60
      (B)   720   (C)   120   (D) 150

4. If two coins are tossed simultaneously find probability that at least 1 head appears. (A)
      0.25   (B)   0.50   (C)   0.75   (D) 1.00

5. If A = [0, 1, 2, 3], B = [2, 3, 4], c = [4, 5, 6, 7, 8] find the order of (A U B)?
   (A)   15   (B)   5   (C)   7   (D) 10

OR

SECTION III (BUSINESS MATHEMATICS) - (For Commerce Group)

1. if $\dfrac{a^2 - b^2}{a+b} = \dfrac{6}{3}$ then a – b = _____

   (A) 6   (B) 2   (C) 3   (D) None of these.

2. If x : 4 :: 3 : 2 then x = _____

   (A) 8   (B) 6   (C) $\dfrac{8}{3}$ (D) $\dfrac{3}{2}$

3. Effective rate of interest can be computed by the formula_____.

   (A) $e = \left(i + \dfrac{i}{m}\right)^m - 1$ (B) $e = \left(1 - \dfrac{i}{m}\right)^m$ (C) $e = \left(1 + \dfrac{i}{m}\right)^m$ (D) None of these

4. In a binary system, the decimal number 4 is equivalent to _____?

   (A) 111   (B) 110   (C) 100   (D) 101

5. If determinant of matrix $\begin{bmatrix} 1 & x \\ 1 & 2 \end{bmatrix} = 0$, then x = _____

   (A) 1   (B) 0   (C) 2   (D) -2

OR

SECTION III (BASIC MATHEMATICS) - (For Humanities Group)

1. If set A= {1, 2, 3, 4} and set B= {a, b, c, d}, the order of AUB is _____

   (A) 4   (B) 8   (C) 2   (D) 16

2. The average of five number 1, 2, 3, 4, x is 5, find x?

   (A) 5   (B) 15   (C) 10   (D) 20

3. One root of the equation $x^2 + 5x - 6 = 0$ is _____

   (A) 2   (B) 3   (C) 0   (D) -6

4. If Matrix $A = \begin{bmatrix} 7 & 4 \\ 3 & 2 \end{bmatrix}$ and Matrix $A = \begin{bmatrix} 1 & 0 \\ 0 & 1 \end{bmatrix}$, find determinant of A+B is _____

   (A) 12   (B) 24   (C) 0   (D) 36

5. The linear equation x + y = 1 and x = 2, find the value of x and y?

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

SECTION IV (CHEMISTRY)

1. Under what conditions of temperature and pressure will a real gas behave most like an ideal gas?

   (A) low temperature & low pressure   (B) low temperature & high pressure
   (C) high temperature & low pressure   (D) high temperature & high pressure

2. For complete oxidation, 1 mol of an organic compound requires 3 mol of oxygen gas. What could be the formula of the compound?

   (A) CH_3CH_2OH (B) CH_3CHO (C) CH_3CH_3 (D) CH_3CO_2H

3. Ammonia gas can be obtained by heating an ammonium salt with _____ .

   (A) an acid   (B) an alkali   (C) an oxidizing agent
   (D) a reducing agent

   (A) an acid   (B) an alkali   (C) an oxidizing agent   (D) a reducing agent

4. An example of a polymer made from two different monomers is _____ .

   (A) polythene   (B) nylon   (C) PVC   (D) protein

5. Maximum possible number of electrons in an energy level or shell 'n' is given by

   (A) $2n^2$ (B) $4n^2$ (C) $4n$ (D) $2n^4$

OR

SECTION IV (COMPUTER SCIENCE) - (For Science Group)

1. The component of CPU that manages all operations is called?

   (A) Arithmetic and Logic Unit   (B) control Unit
   (c) Linker   (D) Memory Unit

2. _____ is the name of a computer virus.?

   (A) Hypertext   (B) Boot sector
   (C) Trojan Horse   (D) Shell

3. _____ is a small amount of storage available as part of CPU?

   (A) Buffer   (B) ROM
   (C) RAM   (D) Register

4. _____ is computer software designed to operate and control the computer hardware and to provide a platform for running

   (A) Application software, system software   (B) Application software, system software
   (C) System software, operating system   (D) Application software, operating system

5. The _____ statement computes the value of an arithmetic expression and assigns the result of that to a variable.

   (A) LET   (B) FOR
   (C) REM   (D) Data

OR

SECTION IV (ACCOUNTING) - (For Commerce Group)

1. Which of the following equations properly represents a derivation of the fundamental accounting equation?

   (A) Assets + liabilities = owner's equity. (B) Assets = owner's equity
   (C) cash = assets.   (D) Assets - liabilities = owner's equity.

2. Which of these items would be accounted for as an expense?

   (A) Repayment of a bank loan.   (B) Dividends to stockholders
   (C) The purchase of land.   (D) Payment of the current period's

3. Akbar had beginning total stockholders' equity of Rs. 160,000. During the year, total assets increased by Rs. 240,000 and total liabilities increased by Rs. 120,000. Akbar net income was Rs. 180,000. No additional investments were made; however, dividends did occur during the year. How much were the dividends?

   (A) Rs. 20,000.   (B) Rs. 60,000.
   (C) Rs. 140,000.   (D) Rs. 220,000.

4. On a classified balance sheet, the appropriate ordering of specific classifications is:

   (A) current assets; long-term investments; property, plant, and equipment; intangible assets; other assets
   (B) current assets; property, plant, and equipment; long-term investments; intangible assets; other assets.
   (C) current assets; intangible assets; property, plant, and equipment; long-term investments; other assets.
   (D) current assets; other assets; long-term investments; intangible assets; property, plant, and equipment.

5. The proper journal entry to record Raheem company's billing of clients for Rs. 500 of services rendered is:

   (A) Cash   500   (B) Accounts Receivable 500
        Account Receivable   500   Capital Stock   500

   (C) Account Receivable   500   (D) Cash   500
        Service Revenue   500   Service Revenue   500

OR

SECTION IV (GENERAL KNOWLEDGE) - (For Humanities Group)

1. Which surah is preface of Holy Quran?

        (A) Al-fatiha   (B) Al-Baqarah

        (C) Al-Ikhlas   (D) Al-Falaq

2. Prophet Muhammad (PBUH) belonged to_____family.

        (A) Banu Anus   (B) Banu Khuzah

        (C) Banu Hashim   (D) Banu Qainoqua

3. USA, UK, France, Russa and China are the permanent members of;

        (A) UNO   (B) European Union

        (C) Security Council   (D) Council of Welfare

4. Who is associated with the creation of Facebook?

        (A) Mark Zuckerberg   (B) Steve Jobs

        (C) Bill Gates   (D) Larry Page

5. Which is the planet closest to the sun in the solar system?

        (A) Venus   (B) Mercury

        (C) Mercury   (D) Jupitar