Total: 100 Question
20 Questions from each section
Total Time: 90 minutes

BS(CS)-Pre-Eng
Sections:

1. General Knowledge
2. English
3. Physics
4. Chemistry
5. Mathematics

BS(CS)-Pre-Med
Sections:

1. General Knowledge
2. English
3. Physics
4. Chemistry
5. Biology

BS(CS)-Sci-Gen/Computers
Sections:

1. General Knowledge
2. English
3. Physics
4. Computing
5. Mathematics

BS(CS)-Others
Sections:

1. General Knowledge
2. English
3. Analytics
4. Computing
5. Mathematics

1.   General Knowledge

1. The largest ocean of the world is _____?

    a) Atlantic
    b) Pacific
    c) Indian
    d) None of these

2. Which is the longest river of Pakistan?

    a) River Ravi
    b) Indus River
    c) River Cheenab
    d) River Jehlum

3. Emirates is an airline of _____?

    a) Saudi Arabia
    b) Qatar
    c) UAE
    d) Malaysia

4. Capital of India is_____?

    a) Mumbai
    b) Dehli
    c) Chennai
    d) Lucknow

5. Shaheen Air Line is the airline of _____?

    a) Pakistan
    b) Brunei
    c) India
    d) Iran

2.English

1. The science departments wanted the money to be used for laboratory equipments _____ the chancellor decided in favour of the library.
   a. So that
   b. Consequently
   c. But
   d. Although

2. The teacher often <u>discusses</u> ------------------------ our difficulties & <u>offers</u> helpful <u>suggestion</u>.
   a. Discusses
   b. About
   c. Offers
   d. Suggestion

3. It was past bed time, when I <u>arrived home</u> , but I found them -------------------------- at the table <u>waiting for</u> me.
   a. Past
   b. Arrived home
   c. Sitting both
   d. Waiting for me

4. It was midnight _____ he finished his home work.
   a. Although
   b. When
   c. After
   d. So

5. The idea <u>for</u> the air supported plastic structure --------------------- from <u>an</u> aeronautical engineer <u>in</u> 1945.
   a. For
   b. Has come
   c. An
   d. In

3.Physics

1. If the sizes of charged bodies are very small compared to the distances between them, we treat them as _____.

    a. Zero charges
    b. Point charges
    c. Single charge
    d. No charges

2. The property which differentiates two kinds of charges is called _____.

    a. Equality of charge
    b. Polarity of charge
    c. Fraction of charge
    d. None of the option

Explanation: The property which differentiates two kinds of charges is called polarity of charge.

3. The ionisation potential of hydrogen is 13.6 V. The energy of the atom in n = 2 state will be
    (a) -10.2 eV
    (b) -6.4eV
    (c) – 3.4 eV
    (d) – 4.4 eV

4. The electron in hydrogen atoms is excited to n = 5 state, the number of different frequencies of radiation which may be emitted is:
    (a) 4
    (b) 10
    (c) 8
    (d) 5

5. The ratio of the angular momentum of an electron in first orbit to that in the second orbit is
    (a) 12
    (b) 14
    (c) 4
    (d) 2

4.CHEMISTRY

1. The constituent part of matter is/are_____:

a. Electron
b. Proton
c. Neutron
d. **All of these**

2. Which of the following colours possess highest frequency?

a. Yellow
b. Green
c. Blue
d. **Indigo**

3. Second shell can have electrons.

a. 6
b. 7
c. **8**
d. All of these

4. Which of the following atom has largest radius?

a. Na
b. Mg
c. Ca
d. **K**

5. Analysis of an unknown substance showed that it has a high boiling point and is brittle. It is an insulator as a solid but conducts electricity when melted. Which of the following substances would have those characteristics?

a. HCl
b. Al
c. **KBr**
d. SiF_4

5.Mathematics

1. **Can we write 0 in the form of p/q?**

a. Yes

b. No

c. Cannot be explained

d. None of the above

Explanation: 0 is a rational number and hence it can be written in the form of p/q.

Example: 0/4 = 0

2. **The three rational numbers between 3 and 4 are:**

a. 5/2, 6/2, 7/2

b. 13/4, 14/4, 15/4

c. 12/7, 13/7, 14/7

d.11/4, 12/4, 13/4

Explanation: There are many rational numbers between 3 and 4

To find 3 rational numbers, we need to multiply and divide both the numbers by 3+1 = 4

Hence, 3 x (4/4) = 12/4 and 4 x (4/4) = 16/4

Thus, three rational numbers between 12/4 and 16/4 are 13/4, 14/4 and 15/4.

3. **In between any two numbers, there are:**

a. Only one rational number

b. Two rational numbers

c. Infinite rational numbers

d. No rational number

Explanation: Take the reference from question number 2 explained above

4. **√9 is _____ number.**

a. A rational

b. An irrational

c. Neither rational nor irrational

d. None of the above

Explanation: √9 = 3

5.   3√6 + 4√6 is equal to:

a. 6√6

b. 7√6

c. 4√12

d. 7√12

Explanation: 3√6 + 4√6 = (3 + 4)√6 = 7√6

6.Biology

1. Control of organisms by using living organisms is called
   a) Bioremediation
   b) Integrated disease management
   c) Antisepsis
   d) Biological control

2. Branch of biology which deals with the study of chemical components and chemical processes in living organisms is called
   a) Molecular biology
   b) Physiology
   c) Biochemistry
   d) Atomic biology

3. _____ is the potential source of chemical energy for cellular activities
   a) **C-H bond**
   b) C-O bond
   c) C-N bond
   d) P-O-C bond

4. Percentage of water in brain cells is

   a) 20%
   b) 65%
   c) **85%**
   d) 89%

5. Breakdown of large molecules into smaller ones utilizing water molecules is

   a) Hydration
   b) Hydrolysis
   c) Dehydration synthesis
   d) Electrolysis

7.Computing

1. _____ is a set of rules that defines how webpages transfer on the Internet

a. Top-level domain
b. **Hypertext Transfer Protocol**
c. IPv4
d. Web 2.0

2. Power users may work with a high-end desktop, sometimes called a(n) _____, that is designed to handle intense calculations and powerful graphics.

a. Laptop
b. Server farm
c. **Gaming desktop**
d. workstation

3._____ software is an application that allows users to organize data in columns and rows and perform calculations on the data.

a. **Spreadsheet**
b. Presentation
c. Document management
d. Database

4.. The _____ is the main circuit board of the computer.

a.ALU
b.**Motherboard**
c.CPU
d. System chassis

5. The _____ is the method the Internet uses to store domain names and their corresponding IP addresses.

a. **domain name system (DNS)**
b. W3C
c. top-level domain (TLD)
d. File Transfer Protocol (FTP)

8.Analytics

Question(1-4)

A developer will build five houses in a certain town on a street that currently has no houses on it.
The developer will select from seven different styles of houses—F, G. H, I, J, K. and L. The town's planning committee has placed the following restrictions on the developer:
No style can be selected for more than one house.
Either style I must be selected or style L must be selected, but both cannot be selected.
If style K is selected, then style H must also be selected.
If style G is selected, then style I cannot be selected.

1. If style G is one of the styles selected for the street, then which of the following styles must also be selected?

(A)F
(B) J
(C) K
(D) **L**.

2. Which of the following is an acceptable combination of styles that can be selected for the street?

(A)F, G, H, J. K
(B) F, G, J, K, L
(C) F, H, J H. L
(D) G. H, I, J. K

3. If style L is one style not selected for the street, then the other style NOT selected must be which of the following? -

(A)F
(B) G
(C) H
(D) I

4. If F, G. and J are three of the styles selected for the street, then which of the following must be the other two styles selected?

(A) H and I
(B) H and K
(C) H and L
(D)I and K

Question 5-9
Seating arrangement in a row:
Directions for questions 9 to 13: Answer the questions based on the following information.
i. A, B, C, D, E, F and G are sitting on a bench and all of them are facing East.
ii. C is to the immediate right of D, but not next to F.
iii. B is at the extreme end and has E as his neighbour.
iv. G is between E and F.
v. D is sitting third from the South end.

5. Who is sitting to the right of E?
(1)A
(2) C
(3) D
(4) G

6. Which of the following pairs is sitting at the extreme ends?
(1)A, B
(2) A, E
(3) C, B
(4) F, B

7. The person sitting third from the North end is_.
(1)E
(2) F
(3) G
(4) D

8. Between which of the following pairs is D sitting?
(1)A, C
(2) A, F
(3) C, E
(4) C, F

9. Which of the conditions from i to v given above is not required to find out the place where A is sitting?

(1) i
(2) ii
(3) iii
(4) All are required.