---

5. IONS - ELECTRONEGATIVE IONS

SOLUTIONS

TEACHING TASK

JEE MAINS LEVEL QUESTIONS

1. In the periodic table, which group typically contains monovalent electronegative ions?

   a) Group 1 (Alkali metals) b) Group 2 (Alkaline earth metals)

   c) Group 17 (Halogens) d) Group 18 (Noble gases)

Answer:C

Solution:Halogens (Group 17) typically form monovalent electronegative ions (e.g., Cl^-, F^-).

2. Which monovalent electronegative ion is commonly found in table salt?

   a) Nitrate (NO^{3-}) b) Sulfate (SO_4^{2-}) c) Chloride (Cl^-) d) Phosphate (PO_4^{3-})

Answer:C

Solution:Table salt (NaCl) contains the chloride ion (Cl^-).

3. In which compound is a monovalent electronegative ion present?

   a. CaO b. H_2O c. KBr d. CO_2

Answer:C

Solution:KBr contains the monovalent electronegative ion Br^- (bromide).

4. Which of the following elements tends to form monovalent electronegative ions?

   a. Oxygen (O) b. Sodium (Na) c. Calcium (Ca) d. Aluminum (Al)

Answer:A

Solution:Oxygen tends to form divalent electronegative ions (O^{2-}), but among the given options, it is the most electronegative element. (Note: The question asks for monovalent, but none of the options perfectly fit. If strictly monovalent, halogens like Cl would be correct, but they are not listed here.)

5. Which of the following ions is divalent and electronegative?

   a. Mg^{2+} b. O^{2-} c. K^+ d. Cl^-

Answer:B

Solution:Oxygen forms a divalent electronegative ion (O^{2-}).

6. Which of the following elements tends to form bivalent electronegative ions?

   a. Phosphorus (P) b. Sodium (Na) c. Sulfur (S) d. Potassium (K)

Answer:C

Solution:Sulfur tends to form bivalent electronegative ions (S^{2-}).

7. Super oxide ion is:

A) O_2^{2-} B) O^{-2} C) O_2^- D) O_2

Answer:C

Solution:The superoxide ion is O_2^- (a monovalent anion of oxygen in a diatomic form).

8. Choose the trivalent anions from the following:

i) Aluminate ii) Dichromate iii) Bromide iv) Boride

A) i, ii, iii B) (i), (iv) C) i, iii D) i, ii, iii, iv

Answer:B

Solution:i) Aluminate (AlO_3^{3-}) $\rightarrow$ Trivalent anion (charge: 3–).

iv) Boride (B^{3-}) $\rightarrow$ Trivalent anion (charge: 3–).

The other options:

ii) Dichromate ($Cr_2O_7^{2-}$) $\rightarrow$ Divalent anion (charge: 2–).

iii) Bromide (Br^-) $\rightarrow$ Monovalent anion (charge: 1–).

9. Carbonate and bicarbonate ions are respectively:

A) CO_2^{3-} and HCO_2^- B) HCO_2^- and CO_2^{3-} C) HCO_3^- and CO_3^{2-} D) CO_3^{2-} and HCO_3^-

Answer:D

Solution:Carbonate ion: CO_3^{2-}

Bicarbonate ion: HCO_3^-

10. The Chloride and Nitrate ions are respectively:

A) Cl^- and NO_3^- B) Cl^{2-} and NO_4^- C) Cl^+ and NO_3^- D) Cl^- and NO_3^+

Answer:A

Solution:Chloride ion: Cl^-

Nitrate ion: NO_3^-

11. Sulphite and sulphate ions are respectively :

A) SO_3^- and SO_4^- B) SO_4^- and SO_3^- C) SO_3^{2-} and SO_4^{2-} D) SO_4^{2-} and SO_3^{2-}

Answer:C

Solution:Sulphite ion $\rightarrow$ SO_3^{2-} (contains 3 oxygen atoms, charge: 2–).

Sulphate ion $\rightarrow$ SO_4^{2-} (contains 4 oxygen atoms, charge: 2–).

12. What is valency and valence electrons in nitride ion ?

A) 3, 5 B) 5, 8 C) 3, 8 D) 8, 8

Answer:C

Solution:Nitride ion (N^{3-}) has a valency of 3 and 8 valence electrons (5 original + 3 gained).

13. Identify tetra valent ion

A) Ferri cyanide B) Ferro cyanide C) Carbide D) Hydride

Answer:C

Solution:Carbide (C^{4-}) is a tetravalent anion.

JEE ADVANCED LEVEL QUESTIONS

MULTI CORRECT ANSWERS

1. Which of the following elements doesn't tend to form the electronegative ions?

   a) Alkali metals b) Noble gases c) metals d) Halogens

Answer:A,B,C

Solution:a) Alkali metals (e.g., Na, K – they form electropositive ions, not electronegative)

b) Noble gases (e.g., He, Ne – they rarely form any ions due to stable electron configuration)

c) Metals (most metals lose electrons to form cations, not electronegative ions)

d) Halogens (They do form electronegative ions, e.g., Cl^-, F^-)

2. Which of the following elements having valency 3

   A)chromium B)aluminium C)nitrogen D)phosphorous

Answer:A,B,C,D

Solution:

A) Chromium $\rightarrow$ Variable valency (2, 3, 6), can have valency 3

B) Aluminium $\rightarrow$ Atomic no. 13 $\rightarrow$ Configuration: 2,8,3 $\rightarrow$ Valency = 3

C) Nitrogen $\rightarrow$ Atomic no. 7 $\rightarrow$Configuration: 2,5 $\rightarrow$ Gains 3 electrons $\rightarrow$ Valency = 3

D) Phosphorus $\rightarrow$Atomic no. 15 $\rightarrow$ Configuration: 2,8,5 $\rightarrow$ Can show valency 3 and 5

3. Which of the following ions can form covalent bonds due to their electronegativity?

   a) Na^+ b) Cl^- c) O^{2-} d) Mg^{2+}

Answer:B,C

Solution: b) Cl^- (Can form polar covalent bonds, e.g., in HCl)

c) O^{2-} (Forms covalent bonds in molecules like H2O)

a) Na^+ (Forms ionic bonds, not covalent)

d) Mg^{2+} (Forms ionic bonds, not covalent)

4. Among the listed ions, which ones tend to form ionic compounds with metals?

   a) O^{2-} b) Cl^- c) F^- d) Na^+

Answer:A,B,C

Solution: a) O^{2-} (Forms ionic oxides, e.g., MgO)

b) Cl^- (Forms ionic chlorides, e.g., NaCl)

c) F^- (Forms ionic fluorides, e.g., CaF_2)

d) Na^+ (It's a cation, so it bonds with anions, not metals)

REASON AND ASSERTION TYPE

A) Both Assertion and Reason are true, and Reason is the correct explanation for Assertion.

B) Both Assertion and Reason are true, but Reason is NOT the correct expla nation for Assertion.

C) Assertion is true, but Reason is false.

D) Assertion is false, but Reason is true.

5. Assertion: Electronegative ions are generally formed by nonmetals.

Reason: Nonmetals have a higher tendency to gain electrons to achieve a stable electron configuration and form negative ions.

Answer:A

Solution:Assertion is true: Nonmetals (e.g., F, Cl, O) tend to form electronegative ions (anions) because they gain electrons.

Reason is true and explains the Assertion: Nonmetals have high electronegativity and gain electrons to achieve a stable octet (noble gas configuration), forming negative ions.

6. Assertion: Anions are generally larger in size than their parent atoms.

Reason: When an atom gains an electron to form an anion, the electron-electron repulsion increases, causing an increase in size.

Answer:A

Solution:Assertion is true: Anions (e.g., Cl^-, O^{2-}) are larger than their neutral atoms because adding electrons increases electron cloud repulsion.

Reason is true and explains the Assertion: The addition of an electron increases electron-electron repulsion, reducing effective nuclear charge per electron and expanding the atomic radius.

Statement type

A) Both Statements are true B) Both Statements are false

C) Statement I is true, Statement II is false.

D) Statement I is false, Statement II is true.

7. Statement I : An ion or radical formed by the acceptance of 3 electrons is called trivalent electronegative ion.

Statement II : SO_4^{2-} is a trivalent radical.

Answer:C

Solution:

Statement I is true: A trivalent electronegative ion gains 3 electrons (e.g.,

N^{3-} , P^{3-}).

Statement II is false: SO_4^{2-}(sulfate) is a divalent (2–) ion, not trivalent.

8. Statement I : PO_3^{-3} is a trivalent electronegative ion.

   Statement II : An ion or a radical formed by the acceptance of one electron is called monovalent electronegative ion.

Answer:A

Solution:Statement I is true: PO_3^{3-}(phosphite) has a 3– charge, making it trivalent.

Statement II is true: Monovalent ions (e.g., Cl^-, F^-) gain one electron.

COMPREHENSION TYPE

Comprehension - I

Electronegativity is a measure of an atom's ability to attract and hold onto electrons. Electronegative ions, often referred to as anions, are formed when atoms gain electrons. These ions play a crucial role in chemical bonding and the formation of compounds. Let's explore electronegative ions through a series of multiple-choice questions.

9 What is electronegativity?

A) The ability of an atom to lose electrons

B) The measure of an atom's ability to attract and hold onto electrons

C) The total number of electrons in an atom

D) The size of an atom

Answer:B

Solution:Electronegativity describes how strongly an atom pulls shared electrons in a bond (e.g., fluorine is the most electronegative element).

10. Which type of ions are formed when atoms gain electrons?

A) Cations B) Anions C) Isotopes D) Radicals

Answer:B

Solution:Atoms that gain electrons become negatively charged ions (anions), like Cl^- or O^{2-}.

11. In the periodic table, where are the most electronegative elements usually found?

A) Group 1 B) Group 2 C) Group 17 (halogens) D) Group 18 (noble gases)

Answer:C

Solution:Halogens (e.g., F, Cl) are the most electronegative nonmetals

12. What charge do electronegative ions typically carry?

A) Positive B) Negative C) Neutral D) Variable

Answer:B

Solution:Electronegative ions (anions) gain electrons, resulting in a negative charge (e.g., F^-, S^{2-}).

Comprehension - II

An ion or radical formed by the acceptance of 2 electrons is called bivalent electronegative ion or radical.

13. Sulphate ion is a

A) Monovalent negative ion B) Bivalent negative ion

C) Bivalent positive ion D) Monovalent positive ion

Answer:B

Solution:The sulfate ion (SO_4^{2-}) has a 2– charge, making it a bivalent (divalent) anion.

14. $C\ell^-$, O^{-2}, N^{-3} are respectively called as:

A) mono, di, trivalent ions B) mono, tetra, divalent ions

C) mono, tri, divalent ions D) All the above

Answer:A

Solution:Cl^- = Monovalent (1– charge, gains 1 electron).

O^{2-} = Divalent (2– charge, gains 2 electrons).

N^{3-} = Trivalent (3– charge, gains 3 electrons).

Integer type

15. The valency of hypochlorite ion is_____

Answer: 1

Solution:Hypochlorite ion = ClO^-

It carries a 1– charge, so its valency is 1.

16. Charge on bisulphide ion is _____

Answer: -1

Solution:Bisulphide ion = HS^-

It has a 1– charge (monovalent).

17. Charge on carbide ion is_____

Answer: -4

Solution: Carbide ion = C^{4-}

It gains 4 electrons, giving it a 4– charge (tetravalent).

Matrix Matching

18.

Column-I	**Column-II**
a) SO_4^{2-}	1) Oxide
b) O_2^{2-}	2) Sulphite
c) SO_3^{2-}	3) Sulphate
d) S^{2-}	4) Sulphide
	5) Peroxide

Answer: a-3,b-5,c-2,d-4

Solution:

a) SO_4^{2-} 3) Sulphate

b) O_2^{2-} 5) Peroxide

c) SO_3^{2-} 2) Sulphite

d) S^{2-} 4) Sulphide

LEARNERS TASK

CONCEPTUAL UNDERSTANDING QUESTIONS (CUQ's)

1. Anions carry

   A) poistive charge B) negative charge C) Neutral D) None

Answer:B

Solution:Anions are negatively charged ions formed by gaining electrons (e.g., Cl^-, O^{2-}).

2. Number of electrons gained by nitrogen to form nitride ion

   A) 1 B) 2 C) 3 D) 4

Answer:C

Solution:Nitrogen (N) gains 3 electrons to achieve a stable octet, forming N^{3-}

3. The species which carry negative charge are called

   A) electropositive ions B) electronegative ions

   C) valency D) variable valency

Answer:B

Solution:Electronegative ions (anions) are formed when atoms gain electrons.

4 Chloride ion is

   A) c^{-4} B) Cl^{-1} C) Cl^{-2} D) C^{-1}

Answer:B

Solution:Chloride ion has a 1– charge (Cl^-).

5. Sulphide ion has valency

   A) 1 B) 2 C) 3 D) 4

Answer:B

Solution:Sulphide (S^{2-}) has a valency of 2 (gains 2 electrons).

6. The valency of Boride ion is

   A) 1 B) 2 C) 3 D) 4

Answer:C

Solution:Boride (B^{3-}) is a trivalent ion.

7. Which of the followoing does not have valency 2

   A)sulphate ion B) carbonate ion C) oxide ion D) superoxide ion

Answer:D

Solution:Superoxide (O_2^-) has a valency of 1, while others (sulphate, carbonate, oxide) are divalent (valency 2).

8. Which of the following are trivalent ?

   A) nitrate ion B) nitrite ion C) nitride ion D) chloride ion

Answer:C

Solution:Nitride (N^{3-}) is trivalent. Others:

Nitrate (NO_3^-) = monovalent

Nitrite (NO_2^-) = monovalent

Chloride (Cl^-) = monovalent.

9. Number of electrons gained by carbon is

   A) 2 B) 1 C) 3 D) 4

Answer:D

Soluton:Carbon forms carbide ion (C^{4-}) by gaining 4 electrons.

10. CH_3COO^{-1} is

    A) carbonate ion B) carbide ion C) acetate ion D) acetic acid

Answer:C

Soluton:CH_3COO^{-1} is the acetate ion, the conjugate base of acetic acid.

JEE MAIN LEVEL QUESTIONS

1. Which of the following elements commonly forms a monovalent electronegative ion?

   a) Sodium (Na) b) Chlorine (Cl) c) Calcium (Ca) d) Oxygen (O)

Answer:B

Solution:Chlorine forms Cl^- (monovalent anion).

Sodium (Na) forms Na^+ (monovalent cation).

Oxygen forms O^{2-} (divalent anion).

Calcium forms Ca^{2+} (divalent cation).

2. Which of the following is not a monovalent electronegative ion formed by nitrogen?

   a) Nitride ion b) Nitrate ion c) Nitrite ion d) All the above

Answer:A

Solution:Nitride is N^{3-} (trivalent), while nitrate (NO_3^-) and nitrite (NO_2^-) are monovalent.

3. The electronegativity of an element indicates:

   a) Its ability to lose electrons b) Its tendency to gain electrons

   c) Its atomic mass d) Its charge

Answer:B

Solution:Electronegativity measures an atom's ability to attract electrons in a bond .

4. Which of the following elements commonly forms bivalent electronegative ions?

   a) Sodium (Na) b) Oxygen (O) c) Calcium (Ca) d) Chlorine (Cl)

Answer:B

Solution:Oxygen forms O^{2-}. Others:

Na^+ (monovalent cation), Ca^{2+} (divalent cation), Cl? (monovalent anion).

5. In the periodic table, bivalent electronegative ions are typically found in which group?

   a) Group 1 b) Group 2 c) Group 16 d) Group 17

Answer:C

Solution:Group 16 (O, S) forms 2– ions (e.g., O^{2-}, S^{2-}).

6. Which compound doenot contain a bivalent electronegative ion?

   a. Sodium chloride (NaCl) b. Water (H_2O)

   c. Magnesium oxide (MgO) d. Calcium carbonate ($CaCO_3$)

Answer:A

Solution:NaCl has Cl^- (monovalent)

7. The electron configuration of a bivalent electronegative ion is characterized by:

   a. Gaining two electrons b. Losing two electrons

   c. Sharing two electrons d. Gaining one electron

Answer:A

Solution:Bivalent anions (e.g., O^{2-}) gain 2 electrons to achieve stability.

8. Identify phosphide ion

   A) PO_4^{-3} B) P^{4-} C) P^{3-} D) PO_3^{4-}

Answer:C

Solution:Phosphide ion is P^{3-} (gains 3 electrons).

9. Cyanide ion is represented as:

   A) CN^- B) SNC^- C) SN^- D) None

Answer:A

Solution:Cyanide is CN^-(carbon-nitrogen single bond with a negative charge).

10. Which of the following is hydroxide ion?

    A) H^+ B) OH^- C) OH^+ D) H^-

Answer:B

Solution:Hydroxide ion is OH^-.

11. Which of the following contains positive charge

    A) Ammonium B) Nitrogen C) Oxide D) Argon

Answer:A

Solution:Ammonium is NH_4^+ (positively charged polyatomic ion).

12. Negative valency refers
    A) Protons and neutrons are equal B) Atom lost electrons
    C) Atom gained electrons
    D) Motion number is more than electron number

Answer:C

Solution:Negative valency indicates electron gain

13. The valency of nitrogen is
    A) 1 B) 3 C) 5 D) both B, C

Answer:D

Solution:Nitrogen shows variable valency: 3 (e.g., NH_3) and 5 (e.g., HNO_3).

14. What is the symbol for the nitrate ion ?

    A)NO^- B) NO_2^- C) NO_3^- D) NO_2^{3-}

Answer:C

Solution:Nitrate ion is NO_3^- (monovalent).

15. The valency of carbon is
    A) 1 B) 2 C) 3 D) 4

Answer:D

Solution:Carbon typically forms 4 bonds (e.g., CH_4, CO_2).

16. Which is having the highest negative valency among the following
    A) Nitrate B) Sulphate C) Oxide D) Carbide

Answer:D

Solution:Carbide (C^{4-}) has a 4– charge, higher than others:

Nitrate (NO_3^-, 1–), Sulphate (SO_4^{2-}, 2–), Oxide (O^{2-}, 2–).

17. Formula for sulphide ion
    A) SO_3^{-2} B)SO_3^{-2} C) SO_2^{-2} D) S^{-2}

Answer:D

Solution:Sulphide is S^{-2} (monatomic anion).

ADVANCED LEVEL QUESTIONS

MULTI CORRECT ANSWERS

1. Which of the following ions are considered electronegative?
    a) Cl^- b) Na^+ c) O^{2-} d) K^+

Answer:A,C

Solution:Electronegative ions (anions) gain electrons and carry a negative charge. Cl^- (chloride) and O^{2-} (oxide) are anions.

Na^+ and K^+ are cations (electropositive).

2. Which elements commonly form trivalent electronegative ions?
   a. Nitrogen (N) b. Phosphorus (P) c. Sulfur (S) d. Fluorine (F)

Answer:A,B

Solution:Nitrogen forms N^{3-} (nitride).
Phosphorus forms P^{3-} (phosphide).
Sulfur forms S^{2-} (divalent), and fluorine forms F^- (monovalent).

3. The trivalent electronegative ion commonly found in phosphate compounds is represented by the chemical symbol:
   a. PO_5^{3-} b. PO_4^{3-} c. $P_2O_3^{3-}$ d. $P_2O_5^{3-}$

Answer:B

Solution:Phosphate ion is PO_4^{3-} (trivalent).

4. Which of the following is trivalent electronegative ions?
   A) Nitride B) Phosphide C) Phosphite D) Phosphate

Answer:A,B,C,D

Solution:A) Nitride (N^{3-}),B) Phosphide (P^{3-}),C) Phosphite (PO_3^{3-}),D) Phosphate (PO_4^{3-}) are trivalent electronegative ions

5. The monovalent ion/radical among the following is :
   A) Sodium B) Carbonate C) Chromate D) Bicarbonate

Answer:A,D

Solution:A) Sodium (Na^+) $\rightarrow$ Charge = +1 $\rightarrow$ Monovalent cation
D) Bicarbonate (HCO_3^-) $\rightarrow$ Charge = –1 $\rightarrow$ Monovalent anion

6. which are divalent electrovalent radical
   A) Oxide B) Sulphide C)Zincate D)sodium

Answer:A,B,C

Solution:A) Oxide (O^{2-}) $\rightarrow$ Gains 2 electrons $\rightarrow$ Charge = –2 $\rightarrow$ Divalent anion and electrovalent
B) Sulphide (S^{2-}) $\rightarrow$ Gains 2 electrons $\rightarrow$ Charge = –2 $\rightarrow$ Divalent electrovalent ion
C) Zincate (ZnO_2^{2-}) $\rightarrow$ A polyatomic ion, charge = –2 $\rightarrow$ It is an electrovalent radical

REASON AND ASSERTION TYPE

A) Both Assertion and Reason are true, and Reason is the correct explanation for Assertion.

B) Both Assertion and Reason are true, but Reason is NOT the correct expla nation for Assertion.

C) Assertion is true, but Reason is false.

D) Assertion is false, but Reason is true.

7. Assertion: Fluoride ions (F^-) are negatively charged.
   Reason: Fluorine gains electrons to achieve a stable electron configuration and becomes a negatively charged ion.

Answer:A

Solution:Assertion is true: Fluoride ions (F^-) carry a negative charge (monovalent an-

ion).

Reason is true and explains the Assertion: Fluorine (Group 17) gains 1 electron to achieve a stable octet (like neon), forming F^-.

8. Assertion: Oxygen tends to form electronegative ions.
   Reason: Oxygen has a strong attraction for electrons.

Answer:A

Solution:Assertion is true: Oxygen forms O^{2-} (oxide ion), a classic electronegative ion.

Reason is true and explains the Assertion: Oxygen is highly electronegative (3.44 on Pauling scale) and strongly attracts electrons to complete its valence shell.

COMPREHENSION TYPE

Comprehension - I

An ion or radical formed by the acceptance of 2 electrons is called bivalent electronegative ion or radical.

9. The number of electrons accepted by an atom of an element is called
   A) Its electronegative valency B) Its electropositive valency
   C) Its outermost shell D) Both 1 and 2

Answer:A

Solution:Electronegative valency refers to the number of electrons an atom gains to achieve a stable electron configuration (forming anions).

Comprehension - II

The ion having a negative charge on it is known as electronegative ion.

10. Phosphide and phosphate ions are respectively:
    A) PO_4^{3-} and P^{3-} B) P^{3-} and PO_4^{3-} C) PO_3^{4-} and P^{4-} D) P^{4-} and PO_3^{4-}

Answer:B

Solution:Phosphide ion = P^{3-} (phosphorus gains 3 electrons).

Phosphate ion = PO_4^{3-} (phosphorus in +5 oxidation state with 4 oxygens).

11. The bivalent ion/radical among the following is :
    A) Nitride B) Phosphide C) Antimony D) Sulphate

Answer:D

Solution:Sulphate is divalent (2– charge). Others:

Nitride (N^{3-}) and phosphide (P^{3-}) are trivalent.

Antimony (Sb) can form Sb^{+3} or Sb^{5+}

12. The trivalent ion/radical among the following is :
    A) Zinc B) Boride C) Barium D) Oxide

Answer:B

Solution:Boride is trivalent (3– charge). Others:

Zinc (Zn^{2+}) is divalent.

Barium (Ba^{2+}) is divalent.

Oxide (O^{2-}) is divalent.

Integer type

13. Valency of peroxide ion is_____

Answer:2

Solution:Peroxide ion = O_2^{2-}

It carries a 2– charge, so its valency is 2.

14. Oxygen get stability by gaining _____ electrons

Answer:2

Solution:Oxygen (O) has 6 valence electrons and gains 2 electrons to achieve a stable octet, forming O^{2-}

15. Valency of Bicarbonate Ion is _____

Answer:1

Solution:Bicarbonate ion = HCO_3^-

16. Valency of Borate ion is _____

Answer:3

Solution:Borate ion = BO_3^{3-}

It carries a 3– charge, so its valency is 3.

Matrix Matching

17.

Column-I	**Column-II**
a) Acetate ion	1) H^-
b) Hydride ion	2) CH_3COO^-
c) Bromide ion	3) I^-
d) Iodide ion	4) Br^-
	5) Mn^{+2}

Answer:a-2,b-1,c-4,d-3

Solution:

a) Acetate ion	2) CH_3COO^-
b) Hydride ion	1) H^-
c) Bromide ion	4) Br^-
d) Iodide ion	3) I^-

18.

Column-I	**Column-II**
A) carbon	1) trivalent
B) hypochlorite	2) monovalent
C) sulphate	3) divalent
D) borate	4) tetravalent

Answer:A-4,B-2,C-3,D-1

Solution:

A) carbon	**4) tetravalent**
B) hypochlorite	2) monovalent
C) sulphate	3) divalent
D) borate	1) trivalent

KEY

				TEaching task					
			JEE MAINS LEVEL QUESTIONS						
1	2	3	4	5	6	7	8	9	10
C	C	C	A	B	C	C	B	D	A
11	12	13							
C	C	C							
			JEE ADVANCED LEVEL QUESTIONS						
1	2	3	4	5	6	7	8	9	10
A,B,C	A,B,C,D	B,C	A,B,C	A	A	C	A	B	B
11	12	13	14	15	16	17	18		
C	B	B	A	1	-1	-4	a-3,b-5,c-2,d-4		
				LEARNERS Task					
				CUQ'S					
1	2	3	4	5	6	7	8	9	10
B	C	B	B	B	C	D	C	D	C
			JEE Main LEVEL QUESTIONS						
1	2	3	4	5	6	7	8	9	10
B	A	B	B	C	A	A	C	A	B
11	12	13	14	15	16	17			
A	C	D	C	D	D	D			
			ADVANCED LEVEL QUESTIONS						
1	2	3	4	5	6	7	8	9	10
A,C	A,B	B	A,B,C,D	A,D	A,B,C	A	A	A	B
11	12	13	14	15	16	17		18	
D	B	2	2	1	3	a-2,b-1,c-4,d-3		A-4,B-2,C-3,D-1	