Tribhuvan University Institute of Science and Technology B.Sc. CSIT Model Question 2075

	Disc. Coll Mo	uer Question 2075		c) Doe	d) Dode
1.	was present at the party.		15.	I open the present for you?	
	a) All but she	b) All but herself		a) Would	b) Must
	c) All but her	d) All but myself		c) Shall	d) Do
,	Ži.		16.	He is man of high es	steem
2.	Quinine is a drug a) for	_ maiaria. b) to		a) an	b) a
	c) against	d) on		c) some	d) none
3.	During rainy season,	10.00 G-3500	17.	He has a remarkable	for the arts.
J.	a) overflew b) overflown			a) Talence	b) Talency
	c) overfly	5		c) Talent	d) Talents
4.	He is as stubborn as a	d) overflying	18.	Snow is fallingnort	th of the mountains
7.	a) Child			a) Into	
	8:	b) Bull		c) Off	d) Down
	c) Donkey	d) Mule	19.	I don't think he con	
5.	Once you signed the paper, you cannot go			tomorrow.	to the ineeting
	back.			a) Would	b) Shall
	a) by	b) in	30	c) Used to	d) Might
	c) with	d) out	20.	He isone eyed man.	
6.	The principal told th	e class without		a) the	b) a
	permission.			c) an	d) none
	a) Not to enter	b) Not to have entered	- 21	The study of the mounta	3 Na 10 a 11 a 11 a 11 a 11 a 11 a 11 a 1
	c) Not entering	d) Do not enter		a) geology	b) geography
7.		the shops are closed.		c) chromatics	d) orology
	a) Shopping	b) To shop	22	The opposite of the word	
	c) To shopping	d) Shop	22.	a) beneficial	b) advantageous
8.	A horse neighs so as	goats		c) satisfactory	
	a) Howl	b) Roar	23.		visit of her grand children.
	c) Bleat	d) Grunt		a) Looking forward	The second to th
9.		ority his students		c) Looking for	
	a) To	b) Over		Shyam has done this wo	
	c) With	d) For		a) So did I	b) So am I
10.	(#) H	_we lived in		c) So have I	d) So has I
	a) Where	b) Which	25.		d) 50 has 1
	c) When	d) How		a) Died	b) Has died
11.	9			c) Have died	d) In dying
	a) Haven't they	b) didn't they	26.		
	c) Had they	d) Have they	-0.	The dimension (M ¹ L ² T ⁻² quantity that has unit:) refers to a physical
12.	, and the state of	(4) = 1		a) Joule	b) Pascal
	a) Did I know	b) Had I know		c) Newton	d) Watt
	c) Had I known	d) I know	27.		at a vector quantity
13.	and a synonym of			a) Angular momentum	b) Magnetic intensity
	splendid	13.5		c) Torque	d) Energy
	a) Superb	b) Sordid	28.		rection of the two forces
	c) Excellent	d) Marvelous		6N and 2N acting on a b	ody of mass 2Kg,the

14. Feminine of deer is

b) Doa

a) Do

Page -16

minimum acceleration of the body cannot be less	AZIS CIALS	c) 45°	d) 90°
than a) $4m/s^2$ b) $2m/s^2$	39.	When light passes to a) Wavelength decrease	
c) 2.5m/s^2 d) 3m/s^2		b) Wavelength increa	
9. A body is moved through certain distance from		c) Velocity increases	
rest under constant force. Then K.E. gained by		d) Frequency decreas	and the set of the second
the body is	40.		attern minima are obtained
a) Directly proportional to its mass	- 70.		ce between interfering waves
b) Inversely proportional to its mass		is	service the level of 1
c) Directly proportional to square root of mass		a) π/2	b) 2π
d) Independent of its mass		c) n $\pi/2$	d) (2n-1)π
30. A particle moves in a circle of radius 25cm at 2 rev/sec, the acceleration of the particle in m/s ² is a) π^2 b) $4\pi^2$	41.	X-rays are produced a) Electrons close to the	by energy changes in the nucleus
c) $2\pi^2$ d) $8\pi^2$	14	b) Electrons far from t	the nucleus
31. The absolute zero temperature is		c) Electrons and proto	ns
a) -273°C b) -273K		d) The nucleus	
c) -273.14°C d) -273.16°C	42.		ter worm over a nylon shirt
32. Melting point of ice		is removed. Sparking	
a) Decrease with the decrease of pressure		a) Static electricity	b) Current electricity d) Both
b) Increase with the increase of pressure	43.	c) None The notantial different	ice between the two charged
c) Is independent of pressured) Decrease with the increase of pressure	43.	representation of the article of the profit and profit and the pro	ted by 1mm is 100V, then
33. All gas at same temperature have same		the electric field prod	uced is
a) K.E b) Density		a) 10 ⁻⁵ V/m	b) 10 ⁵ V/m
c) RMS speed d) None of the above		c) 10 ³ V/m	d) 10 ⁻³ V/m
34. The rate of loss of heat from a body depends on	44.	The dielectric constant $a) \in_{r} = \in . \in_{o}$	$t \in_r $ is given by the relation b) $\in_r = \sqrt{(\in, \in_o)}$
the		a) $\epsilon_r = \epsilon \cdot \epsilon_o$ c) $\epsilon_r = \epsilon / \epsilon_o$	d) None
a) Temperature of the bodyb) Excess temperature of body over the surrounding	45.		acitor force on each plate is
c) Thermal capacity of the body		a) q^2/ϵ_0	b) $q^2/A\epsilon_0$
d) The temperature of the surrounding		c) $q^2/2A\epsilon_o$	d) Zero
35. The energy of molecular motion is expressed as: a) Friction b) Internal energy	46.	is passed through it. T	r is 1W and 1A of current hen find the resistance
c) Temperature d) Potential energy		a) 4.2Ω	b) 4200Ω
36. The velocity of sound in air is independent of	47.	c) 1Ω Wheatstone measures	d) 0.1Ω
change in	47.	a) Potential	b) emf
a) Pressure b) Density c) Temperature d) Humidity		c) Resistance	d) Current
c) Temperature d) Humidity 37. Sound waves having the following frequencies are	48.	S.I. unit equivalent to t	he magnetic field Tesla(T)
audible to human beings		may be a) Vsm ²	b) Vsm ⁻²
a) 5c/s b) 27000c/s		c) Vs ⁻¹ m ²	d) Vs ⁻¹ m ⁻²
c) 5000c/s d) 50,000c/s 38. When a mirror is rotated through an angle	49.	Which of the following	is used in the core of an
30° keeping incident ray constant then reflected		electromagnet a) Soft magnet	b) Soft steel
ray is rotated through an angle		c) Soft aluminum	
a) 25° b) 60°		c) Soft aluminum	d) Soft zinc

certain distance slowly in one case and quickly in second case. The emf induced is a) More in first case b) More in second case c) Equal in both case d) Zero in both case c) Equal in both case d) Zero in both case c) Equal in both case d) Zero in both case c) Equal in both case d) Zero in both case c) Equal in both case d) Zero in both case d) Zero in both case c) Equal in both case d) Zero in both case c) Equal in both case d) Zero in both case c) Equal in both case d) Zero in both case c) Equal in both case d) Zero in both case c) Equal in both case d) Zero in both case c) Equal in both case d) Zero in both case c) Equal in both case d) Zero in both case c) Equal in both case d) Zero in both case c) Equal in both case d) Zero in both case c) Equal in both case d) Zero in both case c) Equal in both case d) Zero in both case c) Equal in both case d) Zero in both case c) Equal in both case d) Zero in both case c) Equal in both case d) Zero in both case c) Equal in both case d) Zero in both case c) Equal in both case d) Zero in both case c) Equal in both case d) Zero in both case c) Equal in both case d) Zero in both case c) Equal in Equal in Call in Equal in Call in Call in Equal in Call	50.	A magnet is moved towards a coil through a certain distance slowly in one case and quickly in		61.	Which pure substance will not conduct	
a) More in first case b) More in second case c) Equal in both cases d) Zero in both case 51. Deliquescent salts can be used as a) Oxidizing agent b) Cleansing agent c) Drying agent d) Antiseptic 52. In the ideal gas equation PV=nRT, the value of gas constant depend only on a) The pressure of the gas b) The units of measurement c) The nature of the gas d) The volume of the gas d) The volume of the gas d) The volume of the gas 53. Equal weights of methane and hydrogen are mixed in an empty vessel at 25°C. The fraction of total pressure exerted by hydrogen is a) 1/2 b) 1/3 c) 1/9 c) 1/9 d) 8/9 54. Equivalent mass of a bivalent metal is 32.75 molecular mass of its chloride is a) 68.25 b) 103.75 c) 101.00 d) 36.50 55. Two electrons in an orbital are distinguished by the quantum number a) n b) 1 c) m d) s 56. The bond in HCI molecule in the vapor state is an example of a) Non polar bond b) Polar covalent bond c) Ionic bond d) Pure covalent bond e) Hond in the case of a) C) C) HOO, d) C) HOO, d) C) HOO, d) C) HSO, and 20 ml of SM nsold are mixed, the resulting solution would be a) Nooth are mixed, the resulting solution would be a) Nooth are mixed, the resulting solution would be a) Nooth are mixed, the resulting solution would be a) Nooth are mixed, the resulting solution would be a) Nooth are mixed, the resulting solution would be a) Nooth are mixed, the resulting solution would be a) Nooth are mixed, the resulting solution would be a) Nooth are mixed, the resulting solution would be a) Nooth are mixed, the resulting solution would be a) Nooth are mixed, the resulting solution would be a) Nooth are mixed, the resulting solution would be a) Nooth are mixed, the resulting solution would be a) Nooth are mixed, the resulting solution would be a) Nooth are mixed, the resulting solution would be an ordinary and the solution of the following processes involves the smelting processes involves the smelting proces					electricity?	
a) More in first case b) Where in second case c) Equal in both cases d) Zero in both case a) Ozidizing agent b) Cleansing agent c) Deliquescent salts can be used as a) Ozidizing agent b) Cleansing agent c) Drying agent d) Antiseptic 52. In the ideal gas equation PV=nRT, the value of gas constant depend only on a) The pressure of the gas b) The units of measurement c) The nature of the gas d) The volume of the gas d) T					a) Liquefied HCI	b) Molten NaCl
c) Equal in both cases d) Zero in both case 1) Deliquescent salts can be used as a) Oxidizing agent c) Drying agent d) Antiseptic 52. In the ideal gas equation PV=nRT, the value of gas constant depend only on a) The pressure of the gas d) The volume of the gas 3. Equal weights of methane and hydrogen are mixed in an empty vessel at 25°C. The fraction of total pressure exerted by hydrogen is a) 1/2 b) 1/3 c) 1/9 d) 8/9 5. Equivalent mass of a bivalent metal is 32.75 molecular mass of its chloride is a) 68.25 b) 103.75 c) 101.00 d) 136.50 5. Two electrons in an orbital are distinguished by the quantum number a) n b) 1 c) m d) s 5. Two electrons in an orbital are distinguished by the quantum number a) n b) 1 c) m d) s 5. The bond in HCl molecule in the vapor state is an example of a) Non polar bond c) lonic bond d) Pure covalent bond e) long to the time the tase of a) C pure time the time time time time time time time tim		a) More in first case	1949			d) Liquid Na
a) Oxidizing agent c) Drying agent d) Antiseptic b) Cleansing agent c) Drying agent d) Antiseptic b) Cleansing agent c) Drying agent d) Antiseptic b) If emperature is raised b) If temperature is raised b) If temperature is raised d) If concentration of SO₂ is decreased d) If concentration of O₂		c) Equal in both cases	d) Zero in both case	62.	The oxidation of SO2 by	Os to form so
a) Footbasing agent of Antiseptic color of the compound and the color of the color	51.	Deliquescent salts can be used as			exothermic reaction. Production of SO, will a	
52. In the ideal gas equation PV=nRT, the value of gas constant depend only on a) The pressure of the gas b) The units of measurement c) The nature of the gas d) The volume of the gas d) If concentration of SO₂ is decreased d) If concentration of SO₂ is formed to place when the lone of the product is in the extendance of the product is in the electrodes and ode location place when the ionic product is solution and takes place when the ionic product is solution and takes place when the ionic product is solution and takes place when the ionic product is solution and takes place when the ionic product is solution and takes place when the ionic product is solution in the case of a location		a) Oxidizing agent	b) Cleansing agent		maximum	
gas constant depend only on a) The prossure of the gas b) The units of measurement c) The nature of the gas d) The volume of the gas d) The volume of the gas d) The volume of the gas 3.3 Equal weights of methane and hydrogen are mixed in an empty vessel at 25°C. The fraction of total pressure exerted by hydrogen is a) 1/2 b) 1/3 c) 1/9 d) 8.9 54. Equivalent mass of a bivalent metal is 32.75 molecular mass of its chloride is a) 68.25 b) 103.75 c) 101.00 d) 3136.50 55. Two electrons in an orbital are distinguished by the quantum number a) n b) 1 c) m d) s 56. The bond in HCI molecule in the vapor state is an example of a) Non polar bond b) Polar covalent bond c) lonic bond d) Pure covalent bond		c) Drying agent	d) Antiseptic			
a) The pressure of the gas b) The units of measurement c) The nature of the gas d) The volume of the gas d) The volume of the gas d) The volume of the gas 33. Equal weights of methane and hydrogen are mixed in an empty vessel at 25°C. The fraction of total pressure exerted by hydrogen is a) 1/2 b) 1/3 c) 1/9 d) 8-9 54. Equivalent mass of a bivalent metal is 32.75 molecular mass of its chloride is a) 68.25 b) 103.75 c) 101.00 d) 136.50 55. Two electrons in an orbital are distinguished by the quantum number a) n b) 1 c) m d) s 56. The bond in HCl molecule in the vapor state is an example of a) Non polar bond c) Ionic bond d) Pure covalent bond colonic bond d) Pure covalent b	52.			8	b) If temperature is decre	ased
b) The units of measurement c) The nature of the gas d) The volume of the gas d) Auto-catalysis d) Auto-catalysi					c) If concentration of SO ₂ is decreased	
b) The units of measurement c) The nature of the gas d) The volume of the gas d) The volume of the gas 3. Equal weights of methane and hydrogen are mixed in an empty vessel at 25°C. The fraction of total pressure exerted by hydrogen is a) 1/2 b) 1/3 c) 1/9 d) 8/9 54. Equivalent mass of a bivalent metal is 32.75 molecular mass of its chloride is a) 68.25 b) 103.75 c) 101.00 d) 136.50 55. Two electrons in an orbital are distinguished by the quantum number a) n c) m d) s 66. The bond in HCl molecule in the vapor state is an example of a) Non polar bond c) lonic bond d) Pure covalent bond d) Pure covalent bond c) lonic bond d) Pure covalent bond d) Pure covalent bond c) lonic bond d) Pure covalent bond d) Pure covalent bond c) lonic bond d) Pure covalent bond d) Pure covalent bond c) lonic bond d) Pure covalent bond d) Pure covalent bond c) lonic bond d) Pure covalent bond d) Pure covalent bond c) lonic bond d) Pure covalent bond d) Pure covalent bond c) lonic bond d) Non polar bond b) Polar covalent bond c) lonic bond d) Non polar bond b) Polar covalent bond c) lonic bond d) Non polar bond b) Polar covalent bond c) lonic bond d) Non polar bond b) Polar covalent bond colonic bond d) Pure covalent bond colonic bond d) Pure covalent bond d) Pure covalent bond do lonic bond d) Pure covalent bond do lonic bond d) Pure covalent bond do lonic bond d					d) If concentration of O2 is decreased	
d) The volume of the gas 3) Acid catalysis a) Acid catalysis d) Auto-catalysis c) Anti-catalysis d) Auto-catalysis d		1907 - 19		63.		
53. Equal weights of methane and hydrogen are mixed in an empty vessel at 25°C. The fraction of total pressure exerted by hydrogen is a) 1/2 b) 1/3 c) 1/9 d) 8/9 54. Equivalent mass of a bivalent metal is 32.75 molecular mass of its chloride is a) 68.25 b) 103.75 c) 101.00 d) 136.50 55. Two electrons in an orbital are distinguished by the quantum number a) n b) 1 c) m d) s 56. The bond in HCl molecule in the vapor state is an example of a) Non polar bond d) Pure covalent bond c) lonic bond d) Pure covalent bond c) lonic bond d) Pure covalent bond c) lonic bond d) Pure covalent bond acid and as a base a) H30° b) HS04 c) HC03 d) Cl b) F 59. In which of the following species can act both as an acid and as a base a) H30° b) HS04 c) HC03 d) Cl Cl d) Reduces organic matter of tissues 67. Yellow color of HNO3 is due to the presence of a) N₂0 b) NO c) NO2 d) N₂05 (Sherned d) N₂503 is formed d) H₂SO2 is formed c) H₂SO3 is formed d) H₂SO2 is formed d) H₂SO3 is formed d) H₂SO3 is formed d) H₂SO3 is formed d) H₂SO3 is formed d) H₂SO4 is formed d) H₂SO4 is formed d) H₂SO5 is precipitated to anode c) H₃SO4 is formed d) H₂SO5 is precipitated to form CO2 d) Reduces organic matter of tissues 67. Yellow color of HNO3 is due to the presence of a) N₂O b) NO c) NO2 d) N₂O5 (Shormed d) N₂O5 is formed d) H₂SO3 is formed d) H₂SO3 is formed d) H₂SO3 is formed d) H₂SO3 is formed d) H₂SO4 is formed d) H₂SO5 is precipitated through acidified solution of H₂SO4 is formed d) H₂SO5 is precipitated through acidified solution of the following reaction of H₂SO4 and 20 ml of SM NaOH are mixed, the resulting solution would be a) Acidic b) Weakly alkaline c) Strongly alkaline d) H≥SO4 is formed d) H₂SO5 is precipitated through acidified solution of the following solution would be solved the following processes involves the smelting processes?					product is known as	y y one of the
 23. Equal weights of methane and hydrogen are mixed in an empty vessel at 25°C. The fraction of total pressure exerted by hydrogen is a) 1/2 b) 1/3 c) 1/9 d) 8/9 34. Equivalent mass of a bivalent metal is 32.75 molecular mass of its chloride is a) 68.25 b) 103.75 c) 101.00 d) 136.50 35. Two electrons in an orbital are distinguished by the quantum number a) n b) 1 c) m d) s 36. The bond in HCl molecule in the vapor state is an example of a) Non polar bond b) Polar covalent bond c) Ionic bond d) Pure covalent bond e) Ionic bond d) Pure covalent bond and as a base a) H30° b) HS04 c) HCO₃⁻ d) CΓ 37. Electron affinity is maximum in the case of a) Cl b) F 38. Which of the following species can act both as an acid and as a base a) H30° b) HS04 c) HCO₃⁻ d) CΓ 39. In which of the following reaction is H₂ acting as oxidizing agent? a) CuO+H₂→Cu+H₂O b) Ca+H₂→CaH₂ c) H₂+Cl₃→HCl d) N₂+3H₃→2NH₃ of SM NAOH are mixed, the resulting solution of H₅SO₂ and 20 ml of SM NAOH are mixed, the resulting solution of H₅SO₂ and 20 ml of SM NAOH are mixed, the resulting solution of H₅SO₂ and 20 ml of SM NAOH are mixed, the resulting solution of H₅SO₂ and 20 ml of SM NAOH are mixed, the resulting solution of H₅SO₂ and 20 ml of SM NAOH are mixed, the resulting solution of H₅SO₂ and 20 ml of SM NAOH are mixed, the resulting solution of H₅SO₂ and 20 ml of SM NAOH are mixed, the resulting solution of H₅SO₂ and 20 ml of SM NAOH are mixed, the resulting solution of H₅SO₂ and 20 ml of SM NAOH are mixed, the resulting solution of H₅SO₂ and 20 ml of SM NAOH are mixed, the resulting solution of H₅SO₂ and 20 ml of SM NAOH are mixed, the resulting solution of H₅SO₂ and 20 ml of SM NAOH are mixed, the resulting solution of H₅SO₂ and 20 ml of SM NAOH are mixed, the resulting solution of H₅SO₂ and 20 ml of SM NAOH are mixed, the resulting solution of H₅SO₂ and 20 ml of SM NAOH are mixed, the resulting solution of H₅SO₂ and 20 ml of SM NAOH are mixed, the resulting solution of H₅SO₂ and 20 ml					a) Acid catalysis	b) Positive catalysis
mixed in an empty vessel at 25°C. The fraction of total pressure exerted by hydrogen is a) 1/2 b) 1/3 c) 1/9 d) 8/9 d) 8	53.	Equal weights of methane	and hydrogen are		c) Anti-catalysis	
electrodes a) 1/2 b) 1/3 c) 1/9 d) 8/9 54. Equivalent mass of a bivalent metal is 32.75 molecular mass of its chloride is a) 68.25 b) 103.75 c) 101.00 d) 136.50 55. Two electrons in an orbital are distinguished by the quantum number a) n b) 1 c) m d) s 56. The bond in HCl molecule in the vapor state is an example of a) Non polar bond b) Polar covalent bond c) Ionic bond d) Pure covalent bond 57. Electron affinity is maximum in the case of a) Non polar bond b) Folar covalent bond 58. Which of the following species can act both as an acid and as a base a) H3O* b) HSO₄ c) HCO₃ 59. In which of the following reaction is H₂ acting as oxidizing agent? a) Cu+H₂→Cl₂→HCl d) N₂+3H₂→2NH₃ 60. When 100 ml of 1M solution of H₂SO₄ and 20 ml of 5M NaOH are mixed, the resulting solution would be a) Actidic b) Weakly alkaline c) Strongly alkaline d) Nares electrodes a) O₂ is liberated at anode d) Cu is discharged at anode node 1. Villing in the atmosphere of Carbon monoxide is dangerous because it a) Combines with homoglobin and		mixed in an empty vessel at 25°C. The fraction of total pressure exerted by hydrogen is		64.	In electrolysis of CuSO ₄ solution between Pt-	
c) 1/9 d) 8/9 54. Equivalent mass of a bivalent metal is 32.75 molecular mass of its chloride is a) 68.25 b) 103.75 c) 101.00 d) 136.50 55. Two electrons in an orbital are distinguished by the quantum number a) n b) 1 c) m d) s 56. The bond in HCl molecule in the vapor state is an example of a) Non polar bond b) Polar covalent bond c) Ionic bond d) Pure covalent bond c) HCl b) F c) B d) N 58. Which of the following species can act both as an acid and as a base a) H30° b) HSO₄ c) HCO₃ d) RCl c) HCO₃ d) Cl c) HCO₃ d) Cl c) HoCo₃ d) Cl c) HoCo₃ d) Cl d) Reduces organic matter of tissues 67. Yellow color of HNO₃ is due to the presence of a) N₂O b) NO c) NO₂ d) N₂O₃ d) Reduces organic matter of tissues 68. When SO₂ is passed through acidified solution of H₂SO₂ and 20 ml of 5M NaOH are mixed, the resulting solution would be a) Acidic b) Weakly alkaline d) Newerther smelting processe?						
54. Equivalent mass of a bivalent metal is 32.75 molecular mass of its chloride is a) 68.25 b) 103.75 c) 101.00 d) 136.50 55. Two electrons in an orbital are distinguished by the quantum number a) n b) 1 c) m d) s 56. The bond in HCl molecule in the vapor state is an example of a) Non polar bond b) Polar covalent bond c) Ionic bond d) Pure covalent bond d) S 58. Which of the following species can act both as an acid and as a base a) H3O* c) HCO₃⁻ d) C□ 59. In which of the following reaction is H₂ acting as oxidizing agent? a) CuO+H₂→Cu+H₂O b) Ca+H₂→CaH₂ c) H₂+Cl₂→HCl d) N₂+3H₂→ZNH₃ 60. When 100 ml of 1M solution of H₂SO₄ and 20 ml of 5M NaOH are mixed, the resulting solution would be a) Acidic c) SC₂ is liberated at anode d) Cu⁻⁺ is discharged at anode d) Cu⁻ is discharged at anode d) Cu⁻⁺ is discharged at anode d) Cu⁻ is discharged at anode d) Cu⁻ is discharged at anode do node n) Cu⁻ is discharged at anode n) Cu⁻		35	10 mm mm		a) O ₂ is liberated at anode	for all the last of the second
molecular mass of its chloride is a) 68.25 b) 103.75 c) 101.00 d) 136.50 55. Two electrons in an orbital are distinguished by the quantum number a) n b) 1 c) m d) s 56. The bond in HCl molecule in the vapor state is an example of a) Non polar bond b) Polar covalent bond c) Ionic bond d) Pure covalent bond c) B d) N 58. Which of the following species can act both as an acid and as a base a) H30° b) HS0₄ c) HCO₃⁻ d) CΓ 59. In which of the following reaction is H₂ acting as oxidizing agent? a) CuO+H₂→Cu+H₂O b) Ca+H₂→CaH₂ c) H₂+Cl₂→HCl d) N₂+3H₂→2NH₃ 60. When 100 ml of 1M solution of H₂SO₄ and 20 ml of 5M NaOH are mixed, the resulting solution a) Acidic b) Weakly alkaline c) Strongly alkaline 61. Living in the atmosphere of Carbon monoxide is dangerous because it a) Combines with hemoglobin and makes it incapable to absorb O₂ b) Dries up blood c) Combines with oxygen present inside to form CO₂ d) Reduces organic matter of tissues 62. Yellow color of HNO₃ is due to the presence of a) N₂O c) NO₂ d) N₂O₂ b) NO₂ c) H2SO₃ is formed c) H₂SO₃ is formed d) S is precipitated The compound having highest boiling point a) HF b) HCl c) HBF d) HI Which of the following processes involves the smelting processes?	54	1.15			b) H ₂ is liberated at catho-	de
a) 68.25 b) 103.75 c) 101.00 d) 136.50 55. Two electrons in an orbital are distinguished by the quantum number a) n b) 1 c) m d) s 56. The bond in HCl molecule in the vapor state is an example of a) Non polar bond b) Polar covalent bond c) Ionic bond d) Pure covalent bond c) Ionic bond d) Pure covalent bond c) Ionic bond d) Pure covalent bond c) B d) N 58. Which of the following species can act both as an acid and as a base a) H3O⁺ b) HSO₄ c) HCO₃ d) Cl b) HSO₄ c) HCO₃ d) Cl mwhich of the following reaction is H₂ acting as oxidizing agent? a) CuO+H₂→Cu+H₂O b) Ca+H₂→CaH₂ c) H₂+Cl₂→HCl d) N₂+3H₂→2NH₃ d) When 100 ml of 1M solution of H₂SO₄ and 20 ml of 5M NaOH are mixed, the resulting solution e) Strongly alkaline d) Nare-than solubility product d) More than solubility product d) More	54.	molecular mass of its abla	lent metal is 32.75		c) SO ₂ is liberated at anode	
c) 101.00 d) 136.50 Two electrons in an orbital are distinguished by the quantum number a) n b) 1 c) m d) s 56. The bond in HCl molecule in the vapor state is an example of a) Non polar bond c) lonic bond d) Pure covalent bond d) Pure covalent bond c) lonic bond d) More than solubility product d) M				410	d) Cu ⁺⁺ is discharged at an	node
 55. Two electrons in an orbital are distinguished by the quantum number a) n b) 1 c) m d) s commod s commod b) Polar covalent bond c) Ionic bond d) Pure covalent bond c) Ionic bond d) Pure covalent bond c) Ionic bond d) Pure covalent bond c) B d) N Electron affinity is maximum in the case of a) Cl b) F c) B d) N S8. Which of the following species can act both as an acid and as a base a) H30* b) HS04 c) HCO3- d) Cl SI In which of the following reaction is H₂ acting as oxidizing agent? a) CuO+H₂→Cu+H₂O b) Ca+H₂→CaH₂ c) H₂+Cl₂→HCl d) N₂+3H₂→2NH₃ d0. When 100 ml of 1M solution of H₂SO₄ and 20 ml of 5M NaOH are mixed, the resulting solution e) Strongly alkaline c) Strongly alkaline d) Naore than solubility product d) More than solubility product d) Mo		c) 101.00		65.		
a) n b) 1 c) m d) s 56. The bond in HCl molecule in the vapor state is an example of a) Non polar bond b) Polar covalent bond c) Ionic bond d) Pure covalent bond 57. Electron affinity is maximum in the case of a) Cl b) F c) B d) N S8. Which of the following species can act both as an acid and as a base a) H3O ⁺ b) HSO₄ ⁻ c) HCO₃ ⁻ d) Cl 59. In which of the following reaction is H₂ acting as oxidizing agent? a) CuO+H₂ → Cu+H₂O b) Ca+H₂ → CaH₂ c) H₂+Cl₂→HCl d) N₂+3H₂→2NH₃ 60. When 100 ml of 1M solution of H₂SO₄ and 20 ml of 5M NaOH are mixed, the resulting solution would be a) Actidic b) Weakly alkaline c) Strongly alkaline d) Nore than solubility product d) More than solubility product	55.	4) 130.30			IS	the folic product
a) n b) l c) m d) s 56. The bond in HCl molecule in the vapor state is an example of a) Non polar bond b) Polar covalent bond c) Ionic bond d) Pure covalent bond 57. Electron affinity is maximum in the case of a) Cl b) F c) B d) N 58. Which of the following species can act both as an acid and as a base a) H3O ⁺ b) HSO ₄ ⁻ c) HCO ₃ d) Cl 59. In which of the following reaction is H₂ acting as oxidizing agent? a) CuO+H₂→Cu+H₂O b) Ca+H₂→CaH₂ c) H₂+Cl₂→HCl d) N₂+3H₂→2NH₃ 60. When 100 ml of 1M solution of H₃SO₄ and 20 ml of 5M NaOH are mixed, the resulting solution would be a) Acidic b) Weakly alkaline c) Strongly alkaline c) Less than solubility product d) More than solubility product ed Mance than solubility product d) More than solubility product ed Mance than solubility product ed Ma		the quantum number				
c) m d) s The bond in HCl molecule in the vapor state is an example of a) Non polar bond b) Polar covalent bond c) Ionic bond d) Pure covalent bond 57. Electron affinity is maximum in the case of a) Cl b) F c) B d) N S8. Which of the following species can act both as an acid and as a base a) H3O⁺ b) HSO₄⁻ c) HCO₃⁻ d) Cl⁻ 59. In which of the following reaction is H₂ acting as oxidizing agent? a) CuO+H₂→Cu+H₂O b) Ca+H₂→CaH₂ c) H₂+Cl₂→HCl d) N₂+3H₂→2NH₃ 60. When 100 ml of 1M solution of H₂SO₄ and 20 ml of 5M NaOH are mixed, the resulting solution would be a) Acidic b) Weakly alkaline c) Strongly alkaline d) More than solubility product 66. Living in the atmosphere of Carbon monoxide is dangerous because it a) Combines with hemoglobin and makes it incapable to absorb O₂ b) Dries up blood c) Combines with oxygen present inside to form CO₂ d) Reduces organic matter of tissues 67. Yellow color of HNO₃ is due to the presence of a) N₂O b) NO c) NO₂ d) N₂O₃ 68. When SO₂ is passed through acidified solution of H₂S a) H₂SO₃ is formed c) H₂SO₄ is formed d) S is precipitated 69. The compound having highest boiling point a) HF b) HCl c) HBr d) HI Which of the following processes involves the smelting processe?			b) 1		c) Less than solubility pro	duct
 56. The bond in HCl molecule in the vapor state is an example of a) Non polar bond b) Polar covalent bond c) Ionic bond d) Pure covalent bond 57. Electron affinity is maximum in the case of a) Cl b) F c) B d) N 58. Which of the following species can act both as an acid and as a base a) H3O⁺ b) HSO₄⁻ c) HCO₃⁻ d) Cl⁻ 59. In which of the following reaction is H₂ acting as oxidizing agent? a) CuO+H₂→Cu+H₂O b) Ca+H₂→CaH₂ c) H₂Cl₂→HCl d) N₂+3H₂→2NH₃ 60. When 100 ml of 1M solution of H₂SO₄ and 20 ml of 5M NaOH are mixed, the resulting solution would be a) Acidic b) Weakly alkaline 66. Living in the atmosphere of Carbon monoxide is dangerous because it a) Combines with hemoglobin and makes it incapable to absorb O₂ b) Dries up blood c) Combines with oxygen present inside to form CO₂ d) Reduces organic matter of tissues Yellow color of HNO₃ is due to the presence of a) N₂O₂ e) NO₂ d) N₂O₃ d) N₂O₃ e) NO₂ d) N₂O₃ e) NO₂ d) N₂O₃ e) H₂SO₃ is formed d) H₂SO₃ is formed e) H₂SO₃ is formed d) S is precipitated 69. The compound having highest boiling point a) HF b) HCl c) HBr d) HI 69. Which of the following processes involves the smelting processes?		c) m	d) s	2 W	d) More than solubility pro	oduct
a) Non polar bond b) Polar covalent bond c) Ionic bond d) Pure covalent bond do Pure co	56.	The bond in HCl molecule in the vapor state is an example of		66.	Living in the atmosphere of Carbon monovide is	
c) Ionic bond d) Pure covalent bond 57. Electron affinity is maximum in the case of a) Cl b) F c) B d) N 58. Which of the following species can act both as an acid and as a base a) H3O ⁺ b) HSO ₄ c) HCO ₃ ⁻ d) Cl 59. In which of the following reaction is H₂ acting as oxidizing agent? a) CuO+H₂→Cu+H₂O b) Ca+H₂→CaH₂ c) H₂+Cl₂→HCl d) N₂+3H₂→2NH₃ 60. When 100 ml of 1M solution of H₂SO₄ and 20 ml of 5M NaOH are mixed, the resulting solution would be a) Acidic b) Dries up blood c) Combines with oxygen present inside to form CO₂ d) Reduces organic matter of tissues 67. Yellow color of HNO₃ is due to the presence of a) N₂O b) NO₂ c) NO₂ d) N₂O₂ d) N₂O₂ b) NO₂ c) NO₂ d) N₂O₂ c) H2₂SO₃ is formed b) H₂SO₂ is formed c) H₂SO₃ is formed d) S is precipitated 69. The compound having highest boiling point a) HF b) HCl c) HBr d) HI Which of the following processes involves the smelting processe?					dangerous because it	
c) Ionic bond d) Pure covalent bond 57. Electron affinity is maximum in the case of a) Cl b) F c) B d) N 58. Which of the following species can act both as an acid and as a base a) H3O ⁺ b) HSO ₄ c) HCO ₃ d) Cl 59. In which of the following reaction is H₂ acting as oxidizing agent? a) CuO+H₂→Cu+H₂O b) Ca+H₂→CaH₂ c) H₂+Cl₂→HCl d) N₂+3H₂→2NH₃ 60. When 100 ml of 1M solution of H₂SO₄ and 20 ml of 5M NaOH are mixed, the resulting solution would be a) Acidic b) Dries up blood c) Combines with oxygen present inside to form CO₂ d) Reduces organic matter of tissues 67. Yellow color of HNO₃ is due to the presence of a) N₂O b) NO₂ c) NO₂ d) N₂O₂ b) NO₂ c) NO₂ d) N₂O₂ c) H2₂SO₃ is formed b) H₂SO₃ is formed c) H₂SO₃ is formed d) S is precipitated 69. The compound having highest boiling point a) HF b) HCl c) HBr d) HI Which of the following processes involves the smelting processe?		N N	b) Polar covalent bond		a) Combines with hemogle	obin and makes it
a) Cl b) F c) B d) N 58. Which of the following species can act both as an acid and as a base a) H3O ⁺ b) HSO ₄ c) HCO ₃ ⁻ d) Cl 59. In which of the following reaction is H ₂ acting as oxidizing agent? a) CuO+H ₂ → Cu+H ₂ O b) Ca+H ₂ → CaH ₂ c) H ₂ +Cl ₂ →HCl d) N ₂ +3H ₂ →2NH ₃ 60. When 100 ml of 1M solution of H ₂ SO ₄ and 20 ml of 5M NaOH are mixed, the resulting solution would be a) Acidic b) Weakly alkaline c) Strongly alkaline c) Strongly alkaline c) Strongly alkaline c) C) Combines with oxygen present inside to form CO ₂ d) Reduces organic matter of tissues 67. Yellow color of HNO ₃ is due to the presence of a) N ₂ O b) NO c) NO ₂ d) N ₂ O ₅ 68. When SO ₂ is passed through acidified solution of H ₂ SO a) H ₂ SO ₃ is formed b) H ₂ SO ₃ is formed c) H ₂ SO ₄ is formed d) S is precipitated 69. The compound having highest boiling point a) HF b) HCl c) HBr d) HI 70. Which of the following processes involves the smelting process?			d) Pure covalent bond		meapable to absorb O ₂	
 d) N b) Heduces organic matter of tissues 67. Yellow color of HNO₃ is due to the presence of a) N₂O b) NO c) HCO₃⁻ d) Cl⁻ 68. When SO₂ is passed through acidified solution of H₂SO is formed c) H₂SO₃ is formed d) N₂SO₂ is formed e) H₂SO₃ is formed f) H₂SO₂ is formed f) H₂SO₃ is formed f) H₂SO₂ is formed f) H₂SO₃ is formed h) H₂SO₃ is formed	٥/.	b) F				
 d) N b) Heduces organic matter of tissues 67. Yellow color of HNO₃ is due to the presence of a) N₂O b) NO c) HCO₃⁻ d) Cl⁻ 68. When SO₂ is passed through acidified solution of H₂SO is formed c) H₂SO₃ is formed d) N₂SO₂ is formed e) H₂SO₃ is formed f) H₂SO₂ is formed f) H₂SO₃ is formed f) H₂SO₂ is formed f) H₂SO₃ is formed h) H₂SO₃ is formed					C) Combines with oxygen present inside to form CO ₂	
a) H3O ⁺ b) HSO ₄ c) HCO ₃ ⁻ d) Cl ⁻ 59. In which of the following reaction is H ₂ acting as oxidizing agent? a) CuO+H ₂ → Cu+H ₂ O b) Ca+H ₂ → CaH ₂ c) H ₂ +Cl ₂ →HCl d) N ₂ +3H ₂ →2NH ₃ 60. When 100 ml of 1M solution of H ₂ SO ₄ and 20 ml of 5M NaOH are mixed, the resulting solution a) Acidic b) Weakly alkaline c) Strongly alkaline d) Nawer less the smelting process? 61. When SO ₂ is passed through acidified solution of H ₂ SO ₃ is formed c) H ₂ SO ₃ is formed d) S is precipitated 62. H ₂ SO ₄ is formed d) S is precipitated 63. When SO ₂ is passed through acidified solution of H ₂ SO ₄ is formed c) H ₂ SO ₄ is formed d) S is precipitated 64. Which of the following highest boiling point a) HF b) HCl c) HBr 75. Which of the following processes involves the smelting process?	58		d) N	(7	d) Reduces organic matter	of tissues
a) H3O ⁺ b) HSO ₄ c) HCO ₃ d) Cl 59. In which of the following reaction is H ₂ acting as oxidizing agent? a) CuO+H ₂ → Cu+H ₂ O b) Ca+H ₂ → CaH ₂ c) H ₂ +Cl ₂ →HCl d) N ₂ +3H ₂ →2NH ₃ 60. When 100 ml of 1M solution of H ₂ SO ₄ and 20 ml of 5M NaOH are mixed, the resulting solution would be a) Acidic b) Weakly alkaline c) Strongly alkaline d) Newtonl b) HSO ₄ c) NO ₂ d) N ₂ O ₅ 68. When SO ₂ is passed through acidified solution of H ₂ SO ₃ is formed c) H ₂ SO ₃ is formed d) S is precipitated 69. The compound having highest boiling point a) HF b) HCl c) HBr 70. Which of the following processes involves the smelting process?	. 50.	acid and as a base		67.	Yellow color of HNO ₃ is	due to the presence of
c) HCO_3^- d) CI^- 59. In which of the following reaction is H_2 acting as oxidizing agent? a) $CuO+H_2 \rightarrow Cu+H_2O$ b) $Ca+H_2 \rightarrow CaH_2$ c) $H_2+CI_2 \rightarrow HCI$ d) $N_2+3H_2 \rightarrow 2NH_3$ 60. When 100 ml of $1M$ solution of H_2SO_4 and 20 ml of $5M$ NaOH are mixed, the resulting solution of H_2SO_4 and H_2SO_5 68. When SO_2 is passed through acidified solution of H_2SO_3 is formed c) H_2SO_3 is formed d) H_2SO_3 is formed c) H_2SO_4 is formed d) H_2SO_4 is formed e) H_2SO_4 is f		a) H3O ⁺	P) IICO -	19	4) 1120	
 59. In which of the following reaction is H₂ acting as oxidizing agent? a) CuO+H₂ → Cu+H₂O b) Ca+H₂ → CaH₂ c) H₂+Cl₂ → HCl d) N₂+3H₂ → 2NH₃ 60. When 100 ml of 1M solution of H₂SO₄ and 20 ml of 5M NaOH are mixed, the resulting solution would be a) Acidic b) Weakly alkaline c) Strongly alkaline 68. When SO₂ is passed through acidified solution of H₂SO₂ is formed c) H₂SO₃ is formed d) S is precipitated 69. The compound having highest boiling point a) HF b) HCl c) HBr d) HI 70. Which of the following processes involves the smelting processe? 					, K 1870	d) N ₂ O ₅
oxidizing agent? a) CuO+H ₂ → Cu+H ₂ O b) Ca+H ₂ → CaH ₂ c) H ₂ +Cl ₂ →HCl d) N ₂ +3H ₂ →2NH ₃ 60. When 100 ml of 1M solution of H ₂ SO ₄ and 20 ml of 5M NaOH are mixed, the resulting solution a) Acidic b) Weakly alkaline c) Strongly alkaline d) November a ctring as a) H ₂ SO ₃ is formed b) H ₂ SO ₂ is formed c) H ₂ SO ₄ is formed d) S is precipitated 69. The compound having highest boiling point a) HF b) HCl c) HBr d) HI 70. Which of the following processes involves the smelting processe?	59.		a) CI	68.	When SO2 is passed thro	ugh acidified solution of
a) CuO+H ₂ → Cu+H ₂ O b) Ca+H ₂ → CaH ₂ c) H ₂ +Cl ₂ →HCl d) N ₂ +3H ₂ →2NH ₃ 60. When 100 ml of 1M solution of H ₂ SO ₄ and 20 ml of 5M NaOH are mixed, the resulting solution a) Acidic b) Weakly alkaline c) Strongly alkaline b) Ca+H ₂ →CaH ₂ c) H ₂ SO ₄ is formed d) S is precipitated 69. The compound having highest boiling point a) HF b) HCl c) HBr 70. Which of the following processes involves the smelting processe?		agent.	reaction is H2 acting as		20	
60. When 100 ml of 1M solution of H ₂ SO ₄ and 20 ml of 5M NaOH are mixed, the resulting solution a) Acidic b) Weakly alkaline c) Strongly alkaline d) November of the compound having highest boiling point a) HF b) HCl c) HBr 70. Which of the following processes involves the smelting process?		a) $CuO+H_2 \rightarrow Cu+H_2O$	b) Ca+H ₂ →CaH ₂	14 14 T = 1	c) H SO : o	b) H ₂ SO ₂ is formed
of 5M NaOH are mixed, the resulting solution a) Acidic b) Weakly alkaline c) Strongly alkaline b) Weakly alkaline a) HF b) HCl c) HBr d) HI 70. Which of the following processes involves the smelting process?			d) No+3H>2NIII	69	The second of th	d) S is precipitated
b) HCl would be a) Acidic b) Weakly alkaline c) Strongly alkaline d) New 2 d d d d d d d d d d d d d d d d d d	60.	when 100 ml of 1M solution of the Go		~~.	a) HF	ghest boiling point
a) Acidic b) Weakly alkaline c) Strongly alkaline d) New 1		The mixed, t	he resulting solution		,	b) HCI
c) Strongly alkaline d) Neural smelting processes involves the		and be	The Colombia of the Colombia		Control Medical Control Contro	d) HI
d) Mout-1		1 50 11 50000-0000-000	b) Weakly alkaline		smelting process	ocesses involves the
-203 -2 -2		, swalling	d) Neutral		a) Al ₂ O ₃ .2H ₂ O → Al ₂ O + 21	
					2- 111 ₂ O ₃ TZF	120

b) ZnCO ₃ →Zn+CO ₂	Actual Total	82	. The value of sin(co	
	c) $2PbS+O_2 \rightarrow 2PbO+2SO_2$		(a) x (c) $1+x^2$ (b) $1-x^2$ (d) $\sqrt{(1-x^2)}$	
d) $Fe_2O_3+3C \rightarrow 2Fe+3CO$			(c) $1+x^2$	(d) $\sqrt{(1-x^2)}$
n t wasses for n	In Down's process for manufacture of metallic sodium a small amount of CaCl ₂ is added to a) Increase the electrical conductivity b) Lower melting point of NaCl		If $cosec c^2x-2=0$, th	en x is
sodium a small amount			(a) $\pm \pi/6$	(b) $\pm \pi/4$
a) Increase the electrical			(c) $n\pi \pm \pi/4$	(d) $n\pi + \pi/2$
b) Lower melting point o			$\begin{bmatrix} k & 1 & 0 \end{bmatrix}$	ne a con l'All Tavia de
c) Increase the temperatu	re of electrolysis	79	2 0 k	JACOB A
d) Stabilize the metallic s	sodium	84.	$\begin{bmatrix} k & 1 & 0 \\ 2 & 0 & k \\ 0 & 2 & -1 \end{bmatrix} =$	0, then k =
72. Which of the following i		84.	(a) 1	(b) -1
a) Cu ₂ S	b) Cu ₂ O		(c) 0	$(d) \pm 1$
c) CuCO ₃	d) CuCO ₃ .Cu(OH) ₂		(-)	
73. Cosmetic powders and		85.		$hich A = \begin{bmatrix} 6 & x-2 \\ 3 & x \end{bmatrix}_{has}$
a) ZnO	27 3 			hich A = L has
c) $Zn(NO_3)_2$	d) ZnSO ₄		no inverse is (a) 0	(b) 1
74. Rusting of iron in moist	t air involves	1 1	(c) -2	(d) 2
a) Loss of electrons by F		86.		ation has zero solutions only
b) Gain of electrons by F	⁷ e		then the solution is	ition has zero solutions only
c) Dehydration of Fe	d) Hydration of Fe		(a) non trivial	(b) trivial
75. Aromacity of benzene i	s due to		(c) unique	(d) particular
a) Ring	 b) Hyper conjugation 	. 87.	$(1+i)^6 + (1-i)^6 =$	
c) Three double bonds	12		(a) 0	(b) i
d) Delocalization of elec	d) Delocalization of electrons		(c) 1	(d)-1
76. If $ x-2 =5$, then x is in			$(2i)^2$	40, 508.40
(a) {3,5}	(b) $\{2,\infty\}$	88.	(1+1)	the same of the
(c) {2,5}	(d) {-3,7}		(a) -i	(b) 1+i
77. A-B =	6) K		(c) 2i	(d)-2i
(a) B-A	(h)A - B	89.	If one root of $5x^2 + 2x$	-k=0 is the reciprocal of the
	(0)		other than k = (a)-5	(b)5
(c) B - A	(d) $\overline{B} - A$		(c) 2/5	(d)5/2
78. If $f(x)=2x-3$, then $f^{-1}(x)$	=	90.		$+y^2+3x-2=0 \text{ represents:}$
(a) $(x+3)/2$	(b) $1/(2x-3)$		(a) hyperbola	(b) parabola
(c) 1/(3-2x)	(d) $1/(2x+3)$)		(c) ellipse	1980 March 1980 Control (1980
79. The period of the funct		91.	The area of the triang	le with vertices (1,-1), (-1,1)
(a) 2π (c) π	(b) $\pi/2$		and (-1,-1) is	The second of the second of the second
0.0	(d) -π		(a) ½	(b) -2
as routen, seventil an	The fourth, seventh and tenth terms of a G.P. are l,m,n respectively, then		(c) 2	(d) 0
(a) $ln = m^2$	(b) $l^2 = m^2 + n^2$	92.	$\lim_{n\to\infty}\frac{1+2+\dots+n}{n^2}=$	
(c) $l^2 = mn$	(d) $n^2 = lm$		(a) ½	(b) 0
- ne nen tei in of the se	ries: 1.3+3.5+5.7+ is		(c) 1/n	(d) n
	11 #00 #00 #00 12 #00 #00 -00 #00 #00 #00 #00 #00 #00 #00 #00 #00	93.	$\lim_{x\to 0} \frac{5x^2 + 4x \tan x}{x^2}$	
(C)HII -1	(a) n(n-1)		X	(h)(0
	Control of the section of the	· ·		(0) 0
(a) $\ln = m^2$ (c) $l^2 = mn$	(b) $l^2 = m^2 + n^2$ (d) $n^2 = lm$		(a) ½ (c) 1/n, 5x ² + 4xtanx	(b) 0

94. If
$$y = \sqrt{x + \sqrt{x + \sqrt{x + \dots}}}$$

then
$$\frac{dy}{dx} =$$

$$(a)2\sqrt{x}$$

(b)
$$\sqrt{x^3}$$

(c)
$$\frac{\sqrt{x}}{2y-1}$$

(d)
$$\frac{1}{2y-1}$$

95. If $y = e^{\sqrt{ax^2+b}}$ then dy/dx=

(a)
$$\frac{axy}{\sqrt{ax^2+b}}$$

(b)
$$\frac{ax}{\sqrt{ax^2+b}}e^{\sqrt{ax^2+b}}$$

(c)
$$\frac{x}{\sqrt{ax^2+b}}$$

(d)
$$e\sqrt{ax^2+b}$$

96.
$$\int \frac{dx}{1-x^2}$$

$$\frac{1}{2} \ln \left| \frac{1-x}{1+x} \right| + c$$

$$\frac{1}{(\mathsf{d})} \frac{1}{2} \ln \left| \frac{1+x}{1-x} \right| + c$$

97.
$$\int_{1}^{2} \frac{\sin(Int)}{t} dt_{=}$$

- (a) 1-cos(ln2)
- (b) cos2
- (c) cos(ln2)
- (d) 1+cos(ln2)

98. The critical points for $f(x) = x^3 - 3x$ are:

 $(a) \pm 3$

(b) $\pm \sqrt{3}$

 $(c) \pm 1$

(d) 0, $\pm \sqrt{3}$

The area bounded by the a-axis and the curve y = x^3 and ordinates of x = 2 and x = 4 is

- (a) 60sq. units
- (b) 256 sq. units
- (c) 240 sq. units
- (d) 272 sq. units

100. If $\log_a 81 = 4$ then the value of a =

a) 4

b) 5

c) 3

d) -4

English Answer:

1.a 2.c 3.d 4.a 5.b 6.a 7.a 8.c 9.b 10.a 11.a 12.a 13.b 14.c 15.c 16.b 17.c 18b 19.a 20.b 21.d 22.a 23.d 24.c 25.a

Physics Answer:

26.a 27.d 28.b 29.d 30.a 31.d 32.d 33.d 34.b 35.b 36.a 37.c 38.b 39.a 40.d 41.d 42.b 43.b 44.c 45.c 46.c 47.c 48.b 49.b 50b

Chemistry Answer:

51.b 52.b 53.d 54d 55.d 56.c 57.a 58..b 59.b 60.a 61.c 62.b 63.d 64. A 65.d 66.a 67.d 68.c 69.d 70.d 71. B 72d 73.b 74.a 75.d

Mathematics Answer:

76.d 77.c 78.a 79.a 80.a 81.c 82.d 83.c 84.b 85.c 86.b 87.a 88.b 89.a 90.d 91.c 92.a 93.a 94.d 94.b 96.b 97.a 98.c 99.a 100. c

FORMULA BOOK SECTION