

JEXPO 2013 Chemistry Question Paper With Answers

51. $\text{CuSO}_4 \cdot 5\text{H}_2\text{O}$ $\xrightarrow{\text{T}_1}$ CuSO_4 , H_2O $\xrightarrow{\text{T}_2}$ CuSO_4 In this process T_1 and T_2 are respectively as

Answer: (C) 125°C and 200°C

52. Excess ammonia on reaction with Cl_2 gas forms

Answer: (C) NCl_3

53. Nitrolim is a mixture of

Answer: (B) CaCN_2 and C

54. For HNO_3 identification, we run 'ring test', the composition of which is

Answer: (C) $\text{Fe}(\text{NO})(\text{H}_2\text{O})_5\text{SO}_4$

55. Identification of original diamond is done by

Answer: (B) xray

56. Components of producer gas are

Answer: (C) $\text{CO} + \text{H}_2$

57. Baking powder is a mixture of

Answer: (C) Sodium bicarbonate and potassium hydrogen tartarate

58. Main components of German silver are

Answer: (D) CuZnNi

59. The formula of Nessler's reagent is

Answer: (C) K_2HgI_4

60. A small amount of powder is added into dil. H_2SO_4 acid solution and the evolved gas turbids lime water. Powder and gas are

Answer: (D) ferrous sulphide and hydrogen sulphide

61. When an aqueous solution of $\text{Ba}(\text{NO}_3)_2$ is added to a dilute solution of an acid a white precipitate is formed. The precipitate is insoluble in hydrochloric acid. What is the acid?

Answer: (B) HCl

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62. Which of the following metals is present in all the three alloys-brass, bronze and duralumin? Answer:

(B) Cu

63. Lightest metal is

Answer: (C) Lithium

64. On contact of two gases a solid is formed. Two gases are

Answer: (A) H₂S and NH₃

65. Washing liquid for photographic plate is

Answer: (C) sodium thio-sulphate solution

66. In which of the following reactions a black precipitate is not formed?

Answer: (C) CuSO₄ + H₂S

67. For plastering of broken hands and legs the following sulphate compound is used

Answer: (B) CuSO₄

68. Conc. H₂SO₄ has no action on which class of compounds?

Answer: (A) Metal Sulphides****

69. The formula of brown ring, formed in the ring test of nitrate radical is

Answer: (A) [Fe(H₂O)₅(NO)₂]SO₄

70. Which of the following can not decolourise bromine?

Answer: (A) ethylene

71. How many covalent bonds are present in the molecule C₃H₈?

Answer: (C) 10

72. C₄H₆ this hydrocarbon cannot contain

Answer: (B) One triple bond in the molecule

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73. The components of a mixture of diethyl ether and acetone may be separated through?

Answer: (A) Sublimation****

74. The pungent smell of the gas coming out from leakage of LPG cylinder is due to

Answer: (D) Mercaptane

75. 2.5 mole of anhydrous copper (II) sulphate is converted completely to blue vitriol. How many moles of water has been added to it

Answer: (C) 12.5 Mole

76. Which of the following when dissolved in water produce neutral aqueous solution

Answer: (B) Common salt

77. Which of the following salts makes aqueous solution as acidic

Answer: (B) NH_4HSO_4

78. A compound, where electrovalent, covalent and coordinate, all three types of bond exist is

Answer: (B) $\text{Ca}(\text{OCl})\text{Cl}$

79. How much amount of CO_2 may be obtained from 10kg of lime stone?

Answer: (B) 4.4 kg

80. According to penetration power which one of the following is correct?

Answer: (C) $\alpha\text{-ray} > \gamma\text{-ray} > \beta\text{-ray} > \text{x-ray}$

81. Find the total charges present in 0.2 mole of phosphate (PO_4^{3-}) ion.

Answer: (unknown to me)

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82. Litmus test of aqueous suspension of soap shows

Answer: (B) red litmus turns to blue

83. Both the ions of which of the following pairs have 8 electrons in the L-shell?

Answer: (B) S²⁻ and Cl⁻

84. A gas at 1 atm. pressure of volume 100 litre is heated from 100°C to 200°C. If volume remains constant then find out its pressure?

Answer: (B) 1.268 atm.

85. Which of the following is most metallic in nature?

Answer: (A) Mn

86. How does the nature of oxides of their elements changes across a period (i.e. from left to right) in the periodic table?

Answer: (B) basic > acidic > neutral

87. How many ions are produced in the aqueous solution s by their dissociation when 1 mole of ferrous sulphate and 1 mole of feric sulphate are dissolved in excess of water

Answer: (A) 3N

88. Flourine (F), Chlorine(Cl), Bromine(Br) and Iodine(I) follow electronegativity order:

Answer: (B) I < Br < Cl < F

89. Which of the following is amphoteric oxide?

Answer: (C) Al₂O₃

90. How many hydrogen atom are present in 2g of methane?

Answer: (A) 3.011×10^{23}

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91. $^{19}\text{K}^{39}$ and $^{20}\text{Ca}^{40}$ are converted to mono positive and Dipositive ions respectively. The number of which particle / particles is/are the same in both the ions

Answer: (B) electrons and neutrons

92. Which of the following is the electronic arrangement of CA atom?

Answer: (C) K(2)L(8)M(8)N(2)

93. Hydrogen of acetylene is more acidic than hydrogen of ethylene, because hydrogen of acetylene attached to (B) SP² carbon

94. On heating ammonium cyanate produces

Answer: (A) Urea

95. Ethanol and dimethyl ether, the two different compounds are having the same formula, this property is known as

Answer: (D) Isomerism

96. What are the functional groups present in the two isomeric compounds having the same molecular formula C₃H₆O

Answer: (B) One isomer contains >C=O group and the other OH group

97. The catalyst which is used for converting acetylene to ethylene is known as?

Answer: (A) Lindlar catalyst

98. Eco friendly polymer is

Answer: (B) Polyvinyl Chloride

99. An organic compound which contains both the amine and carboxylic acid group is

Answer: (D) vinegar

100. The monomer of teflon polymer is

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Answer: (C) tetrafluoro ethylene