



CHEMISTRY

BOOKS - S CHAND CHEMISTRY (HINGLISH)

MODEL TEST PAPER 5

Section A

1. When a ball is thrown vertically upwards, its velocity goes on decreasing. What happens to

its potential energy as its velocity becomes zero ?



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2. If 2 mL of acetone is present in 45 mL of its aqueous solution ,calculate the concentration of this solution .



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3. What mass of nitrogen, N_2 , will contain the same number of molecules as 1.8g of water,

H_2O ? (Atomic masses :)

$N = 14u, H = 1u, O = 16u$)



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4. (a) What are radioactive isotopes ? Give two examples of radioactive isotopes

(b) Give any two uses of radioactive isotopes

(c) An element Z contains two naturally

occurring isotopes ${}_{17}^{35}\text{Z}$ and ${}_{17}^{37}\text{Z}$. If the average atomic mass of this element be 35.5 u, calculate the percentage of two isotopes.



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5. (a) What are valence electrons ? Where are valence electrons situated in an atom ?

(b) What is the number of valence electrons in the atoms of an element having atomic number 13 ? Name the valence shell of this atom.



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Section B

1. If the back of your hand is moistened with alcohol , you will find that it rapidly becomes dry. Why is it that while it is drying , your hand feels cool ?



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2. A student wants to have 3.011×10^{23} atoms each of magnesium and carbon elements. For this purpose, he will have to weigh :



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