

Write an equation

- (i) Decomposition of hydrogen peroxide in presence of manganese (IV) oxide.

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- (ii) The reaction between sodium and the product in (b) (i). (1mk)

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- (d) Identify atoms which are isotopes. (1mk)

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- (e) State the type of bond between Y and T. (1mk)

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25. (a) Define the following terms

- (i) An acid (1mk)

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- (ii) A weak acid (1mk)

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- (iii) A strong acid

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(b) Complete the following table about acids (6mks)

Acid	Strength	Basicity
	Weak strong	1, 2, 3, or 4
Nitric acid (HNO ₃)
Sulphuric acid (H ₂ SO ₄)
Ethanoic acid (CH ₃ COOH)
Methanoic acid (HCOOH)
Phosphoric acid (H ₃ PO ₄)
Carbonic acid (H ₂ CO ₃)

26. (a) Calculate the number of moles contained in the following masses of given compounds

(i) 2 grams of sodium hydroxide (NaOH). (Na = 23, O = 16, H = 1). (2 ½ mks)

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(ii) 6 grams of Aluminium sulphate (Al₂(SO₄)₃). (Al = 27, S = 32, O = 16). (2 ½ mks)

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(b) A compound X contains 40% of copper, 20% sulphur and 40% oxygen. Calculate the empirical formula of the compound. (Cu = 64, S = 32, O = 16) (3mks)

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