## DAV Public School, CRRC, Medical Road, Gaya

Sunday Test (21.07.2024)
Class: XI
Time : 40 Min
Sub: Chemistry
F.M. : 20

Section - A (2 X $5=10$ )

1. How many grams of NaOH should be dissolved to make 100 ml of 0.15 M NaOH solution?
2. Calculate the mole fraction of ethanol and water in a sample of rectified spirit which contains $46 \%$ ethanol by mass ( $w / w$ )
3. Calculate the mass percentage of iron and sulphur in $\mathrm{Fe}_{2}\left(\mathrm{SO}_{4}\right)_{3}$
(Atomic mass of $\mathrm{Fe}=56 \mathrm{u}, \mathrm{S}=32 \mathrm{u}, \mathrm{O}=16 \mathrm{u}$ )
4. Calculate the amount of water produced by combustion of 1.6 gram of Methane.
5. Calculate the mass of 1 molecule of $\mathrm{CO}_{2}$ in gram

## Section - B (5×2=10)

6. How many atoms and molecules are present in 64 gram of sulphur $\left(\mathrm{S}_{8}\right)$ ?
7. A Compound contains $4.07 \%$ hydrogen, $24.27 \%$ carbon and $71.65 \%$ chlorine. Find its molecular formula.
