

Qus-1 Complete the following reactions

- (a)  $\text{CH}_3\text{CH}_2\text{OH} \xrightarrow{443\text{K}} \text{---} \text{---} \text{---}$
- (b)  $\text{CH}_3\text{CH}_2\text{OH} + \text{Na} \rightarrow \text{---} \text{---} \text{---}$
- (c)  $\text{CH}_3\text{CH}_2\text{OH} + \text{CH}_3\text{COOH} \rightarrow \text{---} \text{---} \text{---}$
- (d)  $\text{CH}_3\text{COOH} + \text{NaHCO}_3 \rightarrow \text{---} \text{---} \text{---}$
- (e)  $\text{CH}_3\text{COOC}_2\text{H}_5 + \text{NaOH} \rightarrow \text{---} \text{---} \text{---}$

Qus-2 Seema has organic compound 'A' which is constituent of beer & used as fuel also and on heating with Alkaline Potassium permanganate gives another comp. 'B' which turns blue litmus red. A & B combined to give sweet smell compound. Tell A, B, C & write equations also

Qus-3 Why carbon forms compound mainly by covalent bond. Explain in brief two main reasons for carbon forming large no. of comp.

Qus-4 Give Reasons (a) Reaction b/w Methane & chlorine is substitution reaction

- (b) Soaps do not form lather in hard water
- (c) Covalent bonded compounds are poor conductor of electricity & have low M.P & B.P
- (d) carbon can't attain noble gas electronic config. by gaining or losing electrons from valence shells

Qus-5 Explain cleansing action of Soap with help diagram

Qus-6 You have three unlabelled test tubes containing ethanol, ethanoic acid & soap sol. Explain the method you used to identify the comp.

Qus-7 Draw the structure of Eye & state the role of cornea, Iris, Pupil, Ciliary muscles, Retina & optic nerve

Qus-8 Define Power of Accommodation. write normal & far point of Normal Eye

Qus-9 Draw a labelled diagram to illustrate the recombination of spectrum of light  
What is dispersion of light & why it is necessary to use two prism.

Qus-10 Explain Rainbow formation. Draw a diag. also.

Qus-11 A student is unable to see clearly the words written on blackboard. Name the defect  
State the cause & Explain the method to correct  
Make the diagram also.

Q-12 Give Reasons: (a) Stars twinkle at night  
(b) Advanced sunrise & delayed sunset  
(c) Sky appears dark to astronauts  
(d) Danger signals are red in colour  
(e) Colour of sky is blue  
(f) Sun appears reddish in sunrise & sunset & at noon <sup>white</sup>

Qus-13 Define

- (i) Colour blindness      ii Spectrum of light      iii Cataract  
(iv) Hypermetropia      (v) Presbyopia

Qus-14 What are the environmental consequences of increasing demand for Energy. What steps should be taken to reduce Energy consumption

Qus-15 Define Bio gas. Why it is considered as an ideal fuel. Explain the working of bio-gas plant with a labelled diagram.

Qus-16 How solar cooker works. What are advantages & disadvantages of using solar cooker

Q-17 Give Reasons (1) There is a need to harness non-conventional source of Energy

- (2) Bio gas is regarded as a boon to farmers  
(3) Tidal Energy is not likely to be Potential source of Energy  
(4) Coal & Petroleum should be used judiciously  
(5) Hydro Power Plant & Nuclear Power Plant are good <sup>alternate</sup> ~~source~~ of Energy