## UG 2<sup>nd</sup> Semester Examination 2020

## **CHEMISTRY**

## [HONOURS]

**Course Code: CEMHT-4 (Organic)** 

Full Marks: 10

## Answer any five questions from the following:

[2x5=10]

1. Find out the absolute configuration (R, S) of the following compound based on axial chirality:

- 2. Define 'Buttressing effect' with an example.
- 3. Designate the following Newman formula as sp, sc, ac or ap with proper sign:

$$\begin{array}{c} & COOH \\ H & & Br \\ H_2N & & OH \end{array}$$

- 4. Define proton sponges with an example.
- 5. 2- Ethyl-3-methylcyclobuta-2-en-1-one exists exclusively in keto form. Explain.
- 6. What is primary kinetic isotope effect? Explain with an example.
- 7. Why the substitution reaction of  $EtSCH_2CH_2Cl$  in ethanol is faster than  $EtOCH_2CH_2Cl$ ? Explain.