

B.Sc. 3rd Semester (Honours) Examination, 2020 (CBCS)

Subject: Geology

Paper: CC-5

(Igneous Petrology)

Time: 2 hours

Full Marks: 40

*The figures in the margin indicate full marks
Candidates are required to give their answers
in their own words as far as practicable*

1. Answer any eight of the following questions.

8x5=40

- (a) Do you normally expect quartz in an olivine bearing rock?-Justify.
- (b) What is porphyritic texture? Discuss its origin.
- (c) Explain how viscosity depends on chemical composition of the magma.
- (d) Write short note on ring dike.
- (e) What is the significance of pillow structure and vesicles in lava?
- (f) What is the significance of thermal divide in $\text{NaAlSi}_3\text{O}_8\text{-SiO}_2$ system?
- (g) What is assimilation? What will be the product when a basaltic magma invades a granitic rock?
- (h) Discuss the characters of MORB?
- (i) What is subsolvus granite and how does it develop?
- (j) Why plutonic rocks are coarse grained?