

B.Sc. Semester III (Honours) Examination, 2018-19**GEOLOGY****Course ID : 32012****Course Code : SHGEL-302C-6(T)**

Course Title : Sedimentology

Time: 1 Hour 15 Minutes**Full Marks: 25***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 five* questions of the following: 1×5=5
 - (a) What is ripple index?
 - (b) What is 'geopetal fabric'?
 - (c) Define diagenesis.
 - (d) What is arkose?
 - (e) What do you mean by supercritical flow?
 - (f) What is CCD?
 - (g) What is meant by 'textural inversion'?
 - (h) What is a reverse graded bed?

 2. Answer *any two* questions of the following: 5×2=10
 - (a) Distinguish between the followings: 2·5×2=5
 - (i) Conglomerate and breccia
 - (ii) Laminar flow and turbulent flow
 - (b) Briefly discuss about textural maturity and mineralogical maturity of sandstone.
 - (c) How does the subaqueous bedform change with flow velocity and sediment grain size? State with diagram.
 - (d) Justify your answer: 2·5×2=5
 - (i) Reduction in grain-size is recorded in downstream direction.
 - (ii) Dry cold climatic condition is indicated by the presence of unaltered feldspar in an arkose.

 3. Answer *any one* of the following questions: 10×1=10
 - (a) Briefly describe the different stages of diagenesis of sandstone. 10
 - (b) Furnish the Dunham's classification of limestone. What is dolomitization? 8+2=10
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