

PARUL UNIVERSITY
FACULTY OF APPLIED SCIENCE
M.Sc., Winter 2018-19 Examination

Semester: 1**Subject Code: 11211105****Subject Name: Sedimentary Petrology and Sedimentology****Date: 10/12/2018****Time: 10:30A.M. to 1:00 P.M.****Total Marks: 60****Instructions:**

1. All questions are compulsory.
2. Figures to the right indicate full marks.
3. Make suitable assumptions wherever necessary.
4. Start new question on new page.

- Q.1. A) Essay type/ Brief note (4x2) (Each of 04 marks) (08)**
 (a) Describe the classification of arenaceous sedimentary rocks.
 (b) Describe the classification of carbonate sedimentary rocks.
- Q.1. B) Answer the following questions (Any two) (04)**
 (a) Short note/ Brief note (2x2)/ Schematically label the figures (2x2) (Each of 02 marks) (04)
 1. Explain texture of a sediment with respect to grain size and roundness.
 2. Short note on Chemical weathering. (04)
 (b) Short note on grain to grain relationship. (04)
 (c) Short note on Porosity. (04)
- Q.2. A) Answer the following questions. (04)**
 (a) Short note/ Brief note (2x2)/ Fill in the blanks. (Each of 02 marks) (04)
 1. Particles between 256 mm to 64 mm are known as _____.
 2. Sandstones make up _____ % of all sedimentary rocks.
 (b) Give the definition of quartz wacke and greywacke. (04)
- Q.2. B) Answer the following questions (Any two) (03)**
 (a) Short note/ Multiple choice questions. (Each of 01 marks) (03)
 1. What holds a sedimentary rock together?
 a) Cement b) Fossils c) Water in pore spaces d) Silt
 2. Clastic sedimentary rocks are also known as _____.
 a) Terrigenous b) Carbonates c) Evaporites d) Rudaceous
 3. _____ rocks are formed as a result of chemical precipitation.
 a) Evaporites b) Carbonates c) Terrigenous d) Argillite
 (b) What are herringbone structures? (03)
 (c) What are argillaceous rocks? Give suitable examples. (03)
- Q.3. A) Essay type/ Brief note (4x2) (Each of 04 marks) (08)**
 (a) Write a short note on Conglomerates.
 (b) Write a short note on Lacustrine environments of deposition.
- Q.3. B) Answer the following questions (Any two) (04)**
 (a) Short note/ Brief note (2x2)/ Schematically label the figures (2x2) (Each of 02 marks) (04)
 1. What is marine environment of deposition? Describe shelf sediment transport & deposition.
 2. Describe cross stratification structures.
 (b) Short note on Limestones. (04)
 (c) Short note on Shales. (04)
- Q.4. A) Answer the following questions. (04)**
 (a) Short note/ Brief note (2x2)/ Fill in the blanks. (Each of 02 marks) (04)
 1. The upper and lower surfaces of beds are known as _____.
 2. _____ is the degree of sharpness of the corners and edges of the grain.
 (b) Write a short note on authigenic minerals. (04)
- Q.4. B) Answer the following questions (Any two) (03)**
 (a) Multiple choice questions. (Each of 01 marks) (03)
 1. Mud supported limestones are called as _____.
 a) Grainstones b) Packstones c) Mudstones d) Wackestones
 2. Conglomerates that contain an assortment of many kinds of clasts are ____ conglomerates.
 a) Metamict b) Polymict c) Oligomict d) Petromict
 3. Particle size < 1/256 are
 a) Clay b) Fine sand c) Sand d) Coarse sand
 (b) Short note on chemical composition of sandstones. (03)
 (c) Short note on physical weathering. (03)