Sl. No.	**: 1447**	**F-7**
Unique Paper code	**: 2191301**	
Paper	**: Sedimentology and principles of stratigraphy**	
Course	**: B.Sc. (H) Geology (Erstwhile FYUP)**	
Semester	**: III**	

Duration: 3 hours Maximum Marks: 75

Attempt any five questions. All questions carry equal marks.

Q1. What is the significance of Walther's law in sedimentation and stratigraphy? Give a brief outline of sedimentary facies during transgression and regression.

Q2. What is the difference between millimetre and phy scale? Describe 4 major classes of particle size in sediments. Give a brief note on methods used for measuring the grain size in sediments.

Q3. What do you understand by lower and upper flow regimes in sedimentation? Explain your answer in terms of bed form stability diagram with neat sketches and key sedimentary structures.

Q4. Discuss key components of mudrocks. What kind of sedimentary environments will favour formation of black shales?

Q5. Describe basic components of siliciclastic rocks. Discuss sedimentological features of Arenite and Wacke in detail.

Q6. What are the post depositional structures? Explain your answer with labelled diagrams of any three such structures occurring in sedimentary records.

Q7. Describe any four of following sedimentary structures with labelled sketches.

(i) Climbing ripples
(ii) Flute casts
(iii) Flaser bedding
(iv) Trough cross bedding
(v) Wave formed ripples

Q8. What are major components of the carbonate rocks? Discuss the important features of allochemical and microcrystalline limestones.