

18/12/17 (M) 37

SHAHEED BHAGAT SINGH STATE TECHNICAL CAMPUS, FEROZEPUR

ROLL No:

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Total number of pages:[1]

**B. Arch. || III || 3rd Sem
Building Science
Subject Code:AR-306
Paper ID:**

Time allowed: 3 Hrs

Max Marks: 60

Important Instructions:

- All questions are compulsory
- Assume any missing data

PART A (6x2 Marks)

Q. 1. Short-Answer Questions:

- What are the qualities you would look for in good building stone for masonry work?
- What are the rock forming minerals?
- Differentiate between safe bearing capacity and allowable bearing pressure.
- Differentiate between ultimate bearing capacity, safe bearing capacity, safe bearing pressure and allowable bearing pressure.
- How do you determine the void ratio of a soil.
- What is the importance of geology in architecture?

PART B (4×12 Marks)

Q. 2. What are the factors governing selection of building stones ? Explain Briefly.

OR

Explaining brief "Joints in rocks, their causes and effects on the engineering quality of rocks."

Q. 3. Explain the procedure of Determination of bearing capacity by plate load test with the help of neat sketches. What are its limitations and use?

OR

What are the various factors affecting bearing capacity of clay and sandy soils.

Q. 4. Give the step by step procedure for classification of a soil by Indian standard classification system.

OR

Describe the method for determination of specific gravity of solids.

Q. 5. State what do you know about formation, mode of occurrence and engineering utility of sedimentary rocks. What types of them are most common?

OR

What are the different types of settlement which can occur in a foundation?
How are these estimated?