

LESSONPLAN (5th Sem Ceramic)
TESTING OF CERAMIC

| Sl no | Topic | Reference | Assignment | Comment/ period |
|-------|--|-----------|------------|--------------------|
| 1.0 | COURSE CONTENT | | | |
| 1.1 | INTRODUCTION | S. SEN | YES | 1Period |
| 1.2 | Importance of Testing of Ceramic Raw materials & products. | S. SEN | YES | 2Period |
| 1.3 | Sampling of raw materials & products for testing. | S. SEN | YES | 2Period |
| 2.0 | TESTING OF CERAMIC RAW- MATERIALS | | | |
| 2.1 | Measurement of moisture by various methods. | S. SEN | NO | 2Period |
| 2.2 | Particle size analysis by sedimentation and centrifuged method. | S. SEN | YES | 2Period |
| 2.3 | Particle size determination by modern method. | S. SEN | YES | 1Period |
| 2.4 | Testing of clay for ceramic use. | S. SEN | YES | 2Period |
| 3.0 | TESTING OF HEAVY CLAY WARES AND PLASTER OF PARIS.. | | | |
| 3.1 | Testing of common bricks, dimensional tolerance, water absorption, compressive strength, efflorescence and war page. | S. SEN | YES | 2Period |
| 3.2 | Testing of salt glazed sewer pipes. | S. SEN | YES | 2Period |
| 3.3 | Testing of tiles. | S. SEN | YES | 2Period |
| 3.4 | Testing of plaster of paris. | S. SEN | NO | 2Period |
| 4.0 | TESTING OF WHITE WARES | | | |
| 4.1 | Physical properties of green ware and fired ware. | S. SEN | YES | 1Period |
| 4.2 | Chemical properties of fired products. | S. SEN | NO | 1Period |
| 4.3 | Testing of glaze | S. SEN | NO | 1Period |
| 4.4 | Testing of electrical insulators. | S. SEN | YES | 2Period |
| 5.0 | TESTING OF REFRACTORIES | | | |
| 5.1 | Permeability test of refractory. | S. SEN | YES | 2Period |
| 5.2 | Chemical properties and chemical analysis. | S. SEN | NO | 1Period |
| 5.3 | Mechanical properties of refractory product (Abrasion resistance and ccs) . | S. SEN | YES | 1Period |
| 5.4 | Thermal conductivity. | S. SEN | NO | 1Period |
| 5.5 | Slag attack. | S. SEN | YES | 2Period |
| 5.6 | Thermal shock resistance & high temperature deformation. | S. SEN | YES | 1Period |
| 5.7 | Hot modules of rupture & creep. | S. SEN | NO | 2Period |
| 5.8 | Spalling resistance of refractories. | S. SEN | YES | 4Period |

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| 6.0 | QUALITY CONTROL OF CERAMIC. | | | |
| 6.1 | Describe the testing schedule of various whiteware products. | S. SEN | YES | 2Period |
| 6.2 | Describe the routine control and laboratory tests required at regular intervals in white ware industries. | S. SEN | YES | 2Period |
| 6.3 | Describe the works control on refractory making. | S. SEN | NO | 2Period |
| 6.4 | Describe the testing and Quality control scheme for various whiteware products Tableware, Sanitary wares, glazed wall and floor tiles. | S. SEN | YES | 4Period |