**SUBJECT PLAN (5th Sem)**

**Ceramic Whiteware**

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| **Sl.No** |  **TOPIC** | **Reference** | **Assignment** | **Comment/Periods** |
| 1.0 | INTRODUCTION TO WHITE WEAR. |  |  |  |
| 1.1 | Explain the term whiteware and its classification. | Sudhir sen | Yes | One period |
| 1.2 | International scenario in manufacturing of white wear. | Sudhir sen | Yes | One period |
| 1.3 | International scenario in manufacturing of whiteware. | Sudhir sen | Yes | One period |
| 1.4 | Selection of principal raw material for use in white ware and heavy clayware industries. | Sudhir sen | Yes | One period |
| 1.5 | Explain the quality and characteristics of the raw material used for whiteware making. | Sudhir sen | Yes | Two periods |
| 1.6 | describe the influence of raw materials on white ware and heavy clay ware products making. | Sudhir sen | Yes | Two periods |
| 2.0 | PROCESS OF MANUFACTURING FOR WHITEWARE AND HEAVY CLAYWARE. (Describe in details of the following) |  |  |  |
| 2.1 | Materials processing. | Sudhir sen | Yes | One period |
| 2.2 | fabrication slip casting, plastic saping, semi dry and dry process. | Sudhir sen | Yes | Two periods |
| 2.3 | Drying operation. | Sudhir sen | Yes | One period |
| 2.4 | Glazing operation. | Sudhir sen | Yes | One period |
| 2.5 | Firing operation. | Sudhir sen | Yes | One period |
| 2.6 | Explain the remedies for green rejection. | Sudhir sen | Yes | One period |
| 2.7 | Describe the causes of drying and firing defects and their remedies. | Sudhir sen | Yes | Two periods |
| 3.0 | BODY AND GLAZE FORMATION, CHARACTERISTICS AND MANUFACTURING OF THE FOLLOWING WHITEWARE IN DETAIL. |  |  |  |
| 3.1 | Earthenware a. Fine earthenware b. Common earthenware glazed tile (floor and wall) c. Earthenware sanitary ware. | Sudhir sen | Yes | a. One periodb. One periodc. One period |
| 3.2 | Stonewarea. Fine stonewareb. Coarse stonewarec. Sanitary waresd. Vitreous China sanitary wares.e. Chemical stoneware for chemical engineering.f. Acid resistant bricks and tiles. | Sudhir sen | Yes | a. One periodb. One periodc. One periodd. One periode. One periodf. One period |
| 3.3 | Porcelain warea. Hard porcelainb. Soft porcelainc. Chemical porcelain.d. Electrical porcelain.e. Bone China and frittered China. | Sudhir sen | Yes | a. one periodb. One periodc. One periodd. One periode. One period |
| 3.4 | Heavy clay wares.a. Common building bricks.b. Paving back.c. Face brick.d. Common building tiles.e. Salt glazed stoneware pipes. | Sudhir sen | Yes | a. One periodb. One periodc. One periodd one periode. One period |
| 4.0 | CERAMIC GLAZE. |  |  |  |
| 4.1 | Define glaze and classification of glaze. | Sudhir sen | Yes | One period |
| 4.2 | Various type of glaze. | Sudhir sen |  | One period |
| 4.3 | Raw materials and their influence on glaze. | Sudhir sen | Yes | One period |
| 4.4 | Preparation of glaze. | Sudhir sen | Yes | One period |
| 4.5 | Glaze frit and its preparation. | Sudhir sen | Yes | One period |
| 4.6 | Glaze application and decoration. | Sudhir sen | Yes | One period |
| 4.7 | Glaze defect and their elimination. | Sudhir sen | Yes | One period |
| 4.8 | Glaze calculation. | Sudhir sen | Yes | Two periods |
| 4.9 | Testing of glaze. | Sudhir sen | Yes | One period |
| 5.0 | PLASTER OF PARIS. |  |  |  |
| 5.1 | Various types of plaster of Paris and their preparation. | Sudhir sen | Yes | Two periods |
| 5.2 | Various type of plaster of paris products. | Sudhir sen | Yes | Two periods |
| 5.3 | Quality of plaster of paris for ceramic use. | Sudhir sen | Yes | Two periods |
| 5.4 | Plaster of paris mould for ceramics shaping. | Sudhir sen | Yes | Two periods |