

- Q.22 List steps to measure density of slip.
- Q.23 Explain doctor blade process.
- Q.24 Discuss is-ostatic pressing.
- Q.25 Define foaming and de-foaming agents.
- Q.26 Explain how fired density changes with moulding pressure.
- Q.27 Explain development of electrical double layer.
- Q.28 Briefly explain how moulds are made.
- Q.29 Explain how viscosity of slip or glaze determined in production control.
- Q.30 Explain upstream measures to reduce pollution.
- Q.31 Write pollutants of glaze.
- Q.32 Write role of binders and lubricants.
- Q.33 Explain how firing shrinkage changes with pressure.
- Q.34 Write procedure of determining applied weight of glaze.
- Q.35 Explain characteristics if binder.

#### SECTION-D

**Note:** Long answer type questions. Attempt any two questions out of three questions. (2x10=20)

- Q.36 Discuss in detail casting method of making hollow and solid wares.
- Q.37 Explain process of model making.
- Q.38 Explain production controls used in pressing department.

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**5th Sem. / Ceramic Engg.**

**Subject:- Ceramic Processing Technology**

Time : 3Hrs.

M.M. : 100

#### SECTION-A

**Note:** Multiple choice questions. All questions are compulsory (10x1=10)

- Q.1 In dry pressing of non-plastic material \_\_\_\_\_ is usually added.
  - a) Methanol                      b) Ethanol
  - c) Binder                        d) All of these
- Q.2 In case of pressing the physical state of body is
  - a) Fluid suspension      b) Plastic mass
  - c) Damp powder          d) Dry powder
- Q.3 Which of the following is not type of press?
  - a) Toggle                      b) Tableting
  - c) Screw                        d) Injection
- Q.4 Which casting method DO NOT require use of plaster of paris moulds?
  - a) Solid casting              b) Hollow casting
  - c) Tape casting              d) All of these

(20)

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- Q.5 During pressing, increase in moulding pressure results \_\_\_\_\_ green density.
- Increases
  - Decreases
  - Remain same
  - First increases then decreases
- Q.6 Strength of tile \_\_\_\_\_ as the volume fraction of pores increases.
- Increases
  - Decreases
  - Remain same
  - First increases then decreases
- Q.7 Which of the following is NOT press department control?
- Viscosity
  - Moisture control
  - Compression ratio
  - Green MOR
- Q.8 \_\_\_\_\_ pressing method gives least density variation during shaping.
- Double acting
  - Isostatic
  - Single acting
  - All of the above
- Q.9 In pressing operation which operation takes place at start?
- Compaction
  - Ejection
  - Filling of die
  - All at same time
- Q.10 The ratio of the \_\_\_\_\_ to the **compact height** is the compaction ratio.
- Fill height
  - Length of die
  - Breadth of die
  - Weight of granules

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## SECTION-B

**Note:** Objective type questions. All questions are compulsory. (10x1=10)

- Q.11 \_\_\_\_\_ pressing method gives least density variation during shaping.
- Q.12 \_\_\_\_\_ casting method does not involve plaster of paris moulds. (Tape/Hollow)
- Q.13 Firing shrinkage increases with increase in die pressure. (True/False)
- Q.14 Compaction ratio is the ratio of fill room height to \_\_\_\_\_.
- Q.15 Doctor blade process is used to shape thin sheets. (True/False)
- Q.16 With increase in moulding pressure green density \_\_\_\_\_. (Increases/Decreases)
- Q.17 Poly vinyl alcohol is used as \_\_\_\_\_. (Binder/Lubricant)
- Q.18 Alpha plaster is prepared by calcinations in \_\_\_\_\_ atmosphere. (Damp/Dry)
- Q.19 Residue control is employed in body preparation department. (T/F)
- Q.20 \_\_\_\_\_ is used as deflocculant. (Sodium Silicate/Quartz)

## SECTION-C

**Note:** Short answer type questions. Attempt any twelve questions out of fifteen questions. (12x5=60)

- Q.21 Explain extrusion process.

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