- Q.23 Explain mixing of plaster of paris with water.
- Q.24 List production controls in body preparation department.
- Q.25 Define foaming and anti foaming agents.
- Q.26 Explain tape casting process.
- Q.27 How mechanical properties changes with temperature?
- Q.28 Briefly explain how models are made.
- Q.29 Explain how viscosity, of slip or glaze is determined in production control.
- Q.30 Explain Ceramic laboratory hazards.
- Q.31 How plaster of paris is mixed in water?
- Q.32 Explain different binders used in Ceramic industry.
- Q.33 Explain the concept of electrical double layer formation.
- Q.34 Tell the purposes of lubricants and preservatives in Ceramic Industry.
- Q.35 Explain how particle charging in liquid suspension (slip) takes place.

SECTION-D

- **Note:** Long answer type questions. Attempt any two questions out of three questions. (2x10=20)
- Q.36 Explain in detail glaze department production controls.
- Q.37 Explain production controls used in press department controls.
- Q,38 Define pressing. Explain pressing operation with the help of diagram.

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5th SEM / Ceramic Engineering

Subject : Ceramics Processing Technology

M.M. : 100

SECTION-A

- Note: Multiple choice questions. All questions are compulsory (10x1=10)
- Q.1 Approximate moisture content in slip is
 - a) 10-20% b) 25-50%
 - c) 0-5% d) All of above
- Q.2 _____ pressing method gives least density variation during shaping.
 - a) Double acting b) Isostatic
 - c) Single acting d) All of the above
- Q.3 In dry pressing of non plastic material _____ is usually added
 - a) Methanol b) Pthanol
 - c) Binder d) All of these
- Q.4 In pressing operation which operation takes place at start?
 - a) Compaction b) Ejection
 - c) Filling of die d) All at same time
- Q.5 In tape casting the thickness of sheet is controlled by adjusting:
 - a) height of the doctor blade above the plastic carrier sheet.
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- b) 'The carrier sheet speed.
- c) By adjustment of the slurry viscosity.
- d) All of these
- Q.6 With increase in pressing pressure the fired density of tile
 - a) Increases b) Decreases
 - c) Remain same d) First increases then decreases
- Q.7 Which of the following effect properties of finished wares
 - a) Physical properties of raw materials
 - b) Moulding pressure
 - c) Sintering or firing temperature
 - d) All of these
- Q.8 The ratio of the _____ to the compact height is the compaction ratio.
 - a) Fill height b) Length of die
 - c) Breadth of die d) weight of granules
- Q.9 Which of the following pollutants are found in gaseous emissions?
 - a) Solid particles of low melting fluxes
 - b) carbon mono oxide
 - c) Sulphur of fuel
 - d) All of the above
- Q.10 Which of the following is NOT press department control?
 - a) Viscosity b) Moisture content
 - c) Compression ratio d) Green MOR
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SECTION-B

- **Note:** Objective type questions. All questions are compulsory (10x1=10)
- Q.11 In double acting pressing pressure is applied from ______sides. (Single side / Both side / All side).
- Q.12 With increase in moulding pressure green density _____. (Increases / Decreases).
- Q.13 Alpha plaster is prepared by calcinations in _____atmosphere. (Damp/Dry)
- Q.14 The difference in weight of tile before and after glazing gives applied weight of glaze. (True/False)
- Q.15 _____ casting method does not involve plaster of paris moulds. (Tape / Hollow)
- Q.16 Firing shrinkage increases with increase in die pressure. (True / False)
- Q.17 Beta plaster is prepared by calcinations in _____ atmosphere. (Damp / Dry)
- Q.18 While mixing of POP with water. water is added in POP, (True / False)
- Q.19 _____ is an example of deflocculants. (Resin, sodium silicate)
- Q.20 The control of glaze department include _____. (Viscosity, Strength, MOR)

SECTION-C

- **Note:** Short answer type questions. Attempt any twelve questions out of fifteen questions. (12x5=60)
- Q.21 How POP mould is made? Explain
- Q.22 List properties that changes with change in moulding pressure.

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