

Q.18 Write role of binder and lubricants in Ceramic Industry.

Q.19 Write sources of Alumina containing raw materials.

Q.20 Write name four synthetic raw materials.

Q.21 Write properties and uses of Andalusite.

Q.22 Write role of deflocculant in slip.

SECTION-D

Note: Long answer questions. Attempt any two questions out of three Questions. **(2x8=16)**

Q.23 Explain frit making manufacturing process.

Q.24 Name different types of clays. Write properties and uses.

Q.25 Name different types of industrial waste material. Explain any two source and utilization of materials.

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**3rd Sem.
Branch : Ceramic
Sub.: Ceramic Raw Materials**

Time : 3 Hrs.

M.M. : 60

SECTION-A

Note: Multiple type Questions. All Questions are compulsory. (6x1=6)

Q.1 Example of secondary clay is:

- a) Ball clay
- b) Fire clay
- c) Earthenware clay
- d) All of these

Q.2 None clay plastic raw materials is

- a) Steatite
- b) Feldspar
- c) Silica
- d) All of these

Q.3 Which of the following has highest plasticity?

- a) Bentonite
- b) Ball clay
- c) China Clay
- d) Quartz

- Q.4 Formula of Potash feldspar is
- $K_2O \cdot SiO_2$
 - $K_2O \cdot Al_2O_3 \cdot 6SiO_2$
 - K_2CO_3
 - All of these
- Q.5 Purpose of fritting is to convert ____.
- Soluble raw materials into insoluble form.
 - Fine raw materials into bulky form.
 - Toxic raw materials in to less toxic or non toxic form
 - All of these
- Q.6 _____ is one of coloring oxide used in glaze.
- Ball clay
 - Cobalt oxide
 - Grog oxide
 - All of above
- Q.8 Formula of clay is $Al_2O_3 \cdot 2SiO_2 \cdot 2H_2O$. (True/False)
- Q.9 Ball clay is _____ plastic raw materials in comparison to China clay. (More/Less)
- Q.10 The formula of Quartz is _____. (SiO_2/MgO_2)
- Q.11 Lubricants are used to increase friction between ceramic powder and metal dies. (True/False)
- Q.12 _____ is the industrial waste materials used as raw materials in Ceramic Industry. (Fly ash / Feldspar)
- SECTION-C**
- Note:** Short answer type Questions. Attempt any eight questions out of ten Questions. (8x4=32)
- Q.13 Define primary and transported clays.
- Q.14 Explain beneficitation and purification of clay.
- Q.15 Write properties and uses of Pyrophyllite.
- Q.16 Write properties and uses of Bone ash.
- Q.17 Explain role of flux in Ceramic Industry.
- SECTION-B**
- Note:** Objective/Completion type questions. All questions are compulsory. (6x1=6)
- Q.7 Kyanite is a flux material. (True/False)