

Use separate answer
book for each group

Bachelor in Design (B.Des) Examination, 2015

Ceramic and Glass

Semester - VI

Paper - CG-VI/03

(Materials & Product Technology-II)

Time : Three Hours

Full Marks : 40

Questions are of value as indicated in the margin.

Group - A

Question No.1 is compulsory and answer **any one** from the rest.

1. Answer **any five** : 2×5=10
 - (a) Write the chemical formula of china clay and pyrophyllite.
 - (b) Write the name of one substitute of feldspar.
 - (c) What is Plaster of Paris?
 - (d) What is flux?
 - (e) Why fritting is done?
 - (f) Which Oxide mainly responsible for red colour is oxidising atmosphere?
 - (g) Define glaze.
2. Why drying is important for ceramic body? Describe different stages of drying. 2+8=10
3. Explain the term 'Biscuit and Gloss firing'. What are the advantages of these two processes in pottery manufacture? For porcelain and bone China firing which one are more appropriate - High bisque-low glost or low bisque - high glost? 3+4+3=10
4. Write short notes on **any two** : 5×2=10
 - (a) Humid Drying
 - (b) Oxydation stage
 - (c) Difference between China clay and ball clay
 - (d) Bone ash

Group - B

Answer **any two** questions from the following

1. Why glass is called super cool liquid? Describe the property and limitation. Write composition wise types of glasses. 4+2+2+2=10
2. Write about types of Soda-Lime glasses? Write a common composition of Soda Lime and detail faction about all the raw materials. 3+7=10
3. Describe about kiln form glass process. What is glass Devitrification and what are the remedies for devitrification? 4+6=10
4. Write short notes of **any four** : 2.5×4=10
 - (i) Glass Compatibility (ii) Glass Annealing (iii) Physical & chemical properties of glass
 - (iv) Glass batch preparation (v) Float Glass (vi) Glass Fusing