

Register No.:

858

April 2024

Time - Three hours
(Maximum Marks: 100)

- [N.B.** 1. Answer all questions under Part-A. Each question carries 3 marks.
2. Answer all the questions either (A) or (B) in Part-B. Each question carries 14 marks.]

PART - A

1. Write a note on salt glaze.
2. Differentiate between raw and fritted glaze.
3. State the fritting rules.
4. List any three characteristics of gums.
5. What is proximate analysis?
6. Calculate the molecular weight of $\text{Pb}(\text{OH})_2$.
7. What is decalcomania?
8. What is gloss hair lining?
9. Give three advantages of enamel application.
10. Mention the classification of enamel.

[Turn over..

PART - B

11. (a) Define Opacifier and discuss about opacification by Zirconium.
(Or)
(b) Write short notes on (i) Bristol glaze (ii) Earth glaze.
12. (a) Explain the milling process and equipment used for the preparation of glaze.
(Or)
(b) Explain the various fluxes used in glaze and also explain its role in glazes.
13. (a) Calculate the recipe for the frit of formula $0.30 \text{ Na}_2\text{O}$, $0.10 \text{ K}_2\text{O}$, 0.60 CaO , $0.18 \text{ Al}_2\text{O}_3$, 2.00 SiO_2 , $0.60 \text{ B}_2\text{O}_3$ using borax, whiting, feldspar, china clay and flint.
(Or)
(b) The analysis of a glaze is given as following;
 $\text{PbO} = 53.24\%$, $\text{CaO} = 5.72\%$, $\text{Al}_2\text{O}_3 = 5.21\%$, $\text{SiO}_2 = 35.81\%$.
Calculate the molecular formula.
14. (a) Explain the process of Screen printing.
(Or)
(b) Explain the thermal, physical and chemical properties of glazes.
15. (a) Explain the various enamel materials.
(Or)
(b) Describe about jewellery enamel.
