QP CODE: 25019373

25019373

Reg No : .....

Name : .....

B.Sc DEGREE (CBCS)) REGULAR/ IMPROVEMENT/ REAPPEARANCE / MERCY CHANCE EXAMINATIONS, FEBRUARY 2025

Fourth Semester

Core Course - GL4CRT04 - MINERALOGY

(Common for B.Sc Geology Model I, B.Sc Geology and Water Management Model III)

2017 Admission Onwards

18BA4992

Time: 3 Hours Max. Marks : 60

Part A

*Answer any **ten** questions.*

*Each question carries **1** mark.*

1. Define electromagnetic radiation.
2. What is polarised light?
3. Interference colour of mica plate is.
4. Name the polymorphs of Al2SiO5.
5. Name any two orthoamphiboles.
6. Name any two microcrystalline varieties of quartz.
7. Draw the P-T stability phase diagram of Al2SiO5 polymorphs.
8. Chemical composition of epidote is.
9. Blue coloured gem variety of cordierite is called.
10. Ore of zinc is.
11. Ore of Cr is.
12. Name a phosphate ore of Th.

(10×1=10)

Part B

*Answer any **six** questions.*

*Each question carries **5** marks.*

13. Discuss the terms relief, birefringence, interference colour and their determination.

14. Explain uniaxial indicatrix.

15. What is solid solution? Describe the various facors affecting it.

16. Describe the types of mica minerals.

17. Describe the classification of feldspars.

18. Describe feldspathoid group of minerals.

19. Differentiate different types of clay minerals.

20. Describe the physical properties of zeolites. Add a detailed note on their occurrence.

21. Write a short note on native elements.

(6×5=30)

Part C

*Answer any **two** questions.*

*Each question carries **10** marks.*

22. Write an essay on the parts and functions of petrological microscope. Add a note on optical accessories.

23. What are silicates? Explain the classification of silicate structures with examples.

24. Write an essay on pyroxenes. Explain their classification, physical and optical properties and occurrence.

25. Explain the physical and optical properties and occurrences of carbonate group of minerals.

(2×10=20)