



Date: 03-11-2018
Time: 09:00-12:00

Dept. No.

Max. : 100 Marks

Part-A

Answer all the questions

(10×2=20 Marks)

1. What is pH?
2. Define atomic weight.
3. Explain the working principle of transmission electron microscope.
4. What is the principle underlying spectrophotometry?
5. Name any two types of chromatography and mention their applications.
6. What is an electronic nose?
7. Describe how laser is produced.
8. How is blood haemoglobin level measured?
9. What is fluorescent *in situ* hybridization?
10. How are polyacrylamide gels made for SDS-PAGE?

Part-B

Answer any FOUR questions

(4×10=40 Marks)

11. Write short notes on pH meter.
12. What is cryopreservation? Explain the principle and procedure of cryopreservation.
13. Describe the technique of X- ray crystallography.
14. Give an account on good laboratory practices.
15. Explain the design and working of glucose biosensors.
16. Discuss the procedure for Western blotting.

Part-C

Answer any TWO questions

(2×20=40 Marks)

17. Give an account on scanning electron microscopy.
18. Write an essay on the different types of chromatography.
19. Discuss the different applications of X-rays in medicine and research.
20. Explain the principle and procedure of agarose gel electrophoresis of DNA.
