# ST.JOSEPH'S COLLEGE FOR WOMEN (AUTONOMOUS), VISAKHAPATNAM<br/>VII SEMESTERBIOTECHNOLOGYTIME: 2 Hrs/ WeekBTH 7755 (3)CLINICAL LABORATORY TECHNIQUES<br/>(Skill Offered Course – SOC)Max. Marks: 50

### W.e.f 20AH Batch

### **OBJCECTIVES:** To enable the students to

- 1. Acquire knowledge to estimate blood parameters like glucose and urea.
- 2. Estimation of serum creatine, uric acid, serum proteins.
- 3. Estimation of serum cholesterol, calcium, phosphate, bilirubin.
- 4. Estimation of SGOT, SGPT and abnormal constituents of urine.

### **COURSE OUTCOMES: Students will**

- **CO1:** Be able to list out different types of nurseries and beds
- CO2: Indentify the nursery tools, implements and containers.
- **CO3:** Develop skill on potting media preparation and plant production
- **CO4:** Learn the technique of establishing cutting, layering, grafting etc.

# **PRACTICAL COURSE:**

- 1. Estimation of blood glucose.
- 2. Estimation of blood urea.
- 3. Determination of creatinine clearance.
- 4. Estimation of creatine in serum.
- 5. Estimation of uric acid in serum.
- 6. Estimation of serum total protein.
- 7. Estimation of Serum albumin.
- 8. Agar gel electrophoresis of serum proteins.
- 9. Agar gel electrophoresis of serum lipoproteins.
- 10. Estimation of Serum cholesterol.
- 11. Determination of SGOT.
- 12. Determination of SGPT.
- 13. Estimation of serum calcium.
- 14. Estimation of serum phosphate.
- 15. Estimation of serum bilirubin.
- 16. Determination of urine ascorbic acid.
- 17. Tests for abnormal constituents in urine.

# REFERENCES

- 1. Practical Biochemistry by T Plummer
- 2. Practical Biochemistry by J Jayaraman
- 3. Klemir and others: practical Biological chemistry.
- 4. Practical Biochemistry Koch and Hank Dunn and Drell

- 5. Microbiology laboratory Manual 4th Edit. By Cappuccino
- 6. Microbiology laboratory Manual (2001) by Aneja, K.M
- 7. Laboratory Manual in Microbiology by P.Gunasekaran (1996), New Age PublicationsIntroductory Microbiology. 1995, by Trevor Gross.

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