

**ST. JOSEPH'S COLLEGE (AUTONOMOUS) BANGALORE-27**  
**MID-SEMESTER TEST: AUGUST 2016**  
**M.Sc. BOTANY – III SEMESTER**  
**BO: 9115: CYTOLOGY, GENETICS AND MOLECULAR BIOLOGY**

**Time: 1 ½ hrs.**

**Max. Marks: 35**

**A. Explain or define any FIVE of the following**

**5 x 2= 10**

- 1) Miescher's nuclein
- 2) Okazaki fragments
- 3) Neoplasia
- 4) Apoptosis
- 5) Histone proteins
- 6) Lethal genes
- 7) Incomplete and co-dominance

**B. Write critical notes on any THREE of the following**

**3 x 5=15**

- 8) Telomere
- 9) Pathways of two tumor suppressor genes
- 10) Forms of DNA
- 11) Complementary gene interaction
- 12) Activation factors of oncogenesis

**C. Give a comprehensive account of any ONE of the following**

**1x 10=10**

- 13) Centromere kinetochore complex
- 14) Mechanism of replication of DNA