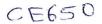
DSC₁



V Semester B.Sc. Examination Oct/Nov-2019

CBCS (2016 Batch onwards)

DSE-1

SERICULTURE

Paper-V: Cytogenetics and Breeding of Mulberry and Silkworm

Time: 3 Hours Max.Marks:70 Instructions: 1) All Questions are Compulsory. 2) Draw diagrams wherever necessary. I. Answer the following questions: (5x1=5)1) Write the differences between haploid and diploid cell. 2) Write the chromosome number of mulberry. 3) What is parthenocarpy? 4) Define mutation. 5) Write any two hereditary traits of egg. II. Write short notes on any five of the following: (5x3=15)6) Lampbrush chromosome. 7) Inversion. 8) Plant Acclimatization. 9) Physical mutagen. 10) Disease resistance 11) Linkage group. 12) Racial characters of Chinese type cocoons. III. Answer any four of the following: (4x5=20)13) Explain Interphase stage. 14) Write a note on physical mutagenesis. 15) Name the appliances used and their uses in mulberry hybridization. 16) Explain conventional methods of breeding in mulberry. 17) Explain line breeding in silkworm. 18) Explain parthenogenesis in silkworm. IV. Answer any three of the following: (3x10=30)19) Write in detail the various stages of Meiosis-I. 20) Explain megasporogenesis and development of female gametophyte in mulberry. a) Translocation. 21) Explain: b) List out the roles of IBPGR. 22) Give a detail account on silkworm germplasm bank.

23) List out the objectives of silkworm breeding and explain line breeding and cross breeing.