71 AD-15

se promoine minima 2 0 2 5 of probability of section 2

0 8 1

(FYUGP) sequel to without

(4th Semester)

BOTANY S THE PROPERTY OF

(MAJOR)

Paper: BCC-7

off (Genetics) same at the Control of the Control o

Full Marks: 75 Pass Marks: 40%

"orto militarem la arrea isoisoloto"

Time: 3 hours and the state of the state of

The figures in the margin indicate full marks for the questions medical (d)

1. Write a note on chromosome theory of inheritance. Explain multiple alleles and epistasis with suitable examples. 5+10=15

Or and the second

- 2. Write notes on the following: 5×3=15

 - (a) Penetrance and expressivity
 - (b) Principles of inheritance
 - (c) Lethal alleles

antimizin

(Turn Over)

STUTION STATES

PI-CI+2

2- March 1 + St. Lat.

T. Law P. W. T.

3. What is infective heredity? Explain infective heredity of Kappa particles in *Paramecium*. 2+13=15

Or

- 4. Discuss in detail the mitochondrial inheritance in yeast.
- 5. What is crossing over? Discuss the cytological basis of crossing over. 2+13=15

Or

- **6.** Write notes on the following: $5\times3=15$
 - (a) Recombination frequency
 - (b) Linkage

THE PROPERTY

- (c) Interference
- 7. Give an account on cis-trans complementation test for functional allelism. 15

Or

epident of the second of the s

taliant for the specific

8. Write a detailed note on chromosomal aberrations.

L25/420 (Continued)

9. Elaborate on genetic variation and speciation.

Or

- 10. Write notes on the following: $7\frac{1}{2} \times 2 = 15$
 - (a) Allele frequencies and genotype frequencies
 - (b) Hardy-Weinberg law

**