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RNLKWC/B.Sc.-CBCS/VS/ZOO/H/C12P/22

2022

Zoology

[HONOURS]

(CBCS)

(B.Sc. Fifth Semester End Examinations-2022)

PAPER-C12P

(PRACTICAL)

Full Marks: 20

Time: 02 Hrs

The figures in the right hand margin indicate marks

Candidates are required to give their answers in their own words as far as practicable

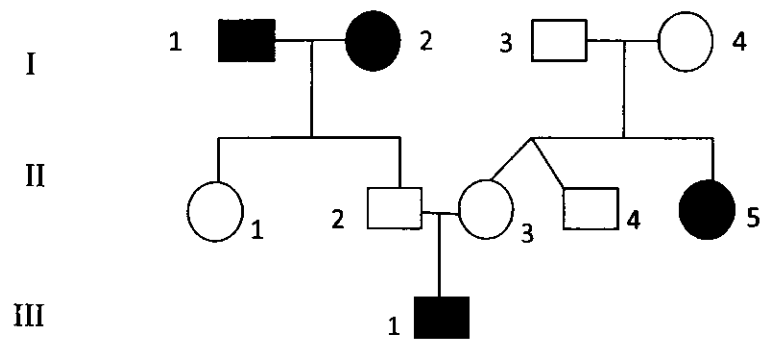
Illustrate the answers wherever necessary

1. From a cross between grey body long wing *Drosophila melanogaster* and Ebony body-vestigial wing flies, the following progenies were obtained in F₂. Grey long=380, Ebony=135, vestigial = 125. Ebony vestigial = 40. Test the goodness of fit of the data to a 9:3:3:1 ratio using χ^2 test considering probability at 5% level. 5
2. In Ecoli four Hfr stains donate the following genetic markers shown in the order donated:

Strain 1 :	M	Z	X	W	C
Strain 2 :	L	A	N	C	W
Strain 3 :	A	L	B	R	U
Strain 4 :	Z	M	U	R	B

All these Hfr strains are derived from the same F^+ strain. What is the order of these markers on the circular chromosome of the original F^+ ? 5

3. Write the description, analysis, genotype and conclusion of the following pedigree scheme. 5



- 4. Lab note book 2
 - 5. Viva - voce 3
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