

SESSIONAL EXAMINATION, 2021
B.Sc 3rd SEMESTER
SUBJECT : BOTANY (HONOURS)
PAPER : BOT-HC-3036

TIME : 1 HOUR

TOTAL MARKS-20

1. Choose the correct answer.

1X3=3

(i) Trisomy 18 is -

(a) Edwards' Syndrome

(b) Patau's Syndrome.

(c) Turner's Syndrome

(d) Klinefelter Syndrome.

(ii) In case of dihybrid, the test cross produces F_2 progeny in what ratio -

(a) 1:1

(b) 1:1:1:1

(c) 1:2:1

(d) 9:3:3:1

iii. In which stage of meiosis I, crossing over takes place?

(a) Leptotene

(b) Zygotene

(c) Pachytene

(d) Diplotene.

2. Answer the following questions.

2X2=4.

i. What is back cross? Give a suitable example

ii. Differentiate between dominance and co-dominance

3. Q. What is Non-Mendelian inheritance? 3

4. Q. Define the term 'linked genes'. Distinguish between complete and incomplete linkage. $2+3=5$

5. Q. Define crossing over. Write about the importance of crossing over. $2+3=5$