

2020/TDC(CBCS)/ODD/SEM/ BOTHCC-303T/140

(a) Define pleiotropy: ...

TDC (CBCS) Odd Semester Exam., 2020 held in March, 2021

YNATOB On chloroplast

Write a (Semestera) in mindendrial

Course No.: BOTHCC-303T

is (Genetics) ship between

distance aroung genes and percentage of

Full Marks: 50 Pass Marks: 20

Time: 3 hours before the

The figures in the margin indicate full marks for the questions

noise um SECTION Allord out W Int

What is gene pool?

1. Answer any ten of the following questions:

ignatum noisisyni si ta/W 2×10=20

- (a) Define lethal alleles.
- (b) rII locus
- (c) What is pedigree analysis?



(3)

8. Describe in detail about physical mutagen

with suitable example.

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6

6

6

6

6

6

(Turn Over)

3×2=6

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(d) Define pleiotropy. (e) Write a short note on variegation in	(s) Define genetic variation. (t) What are qualitative inheritance and quantitative inheritance?			
Four O'clock plant.				
(f) Write a short note on chloroplast mutation.	effecting gene frequency in Hardy Weenburg- population. 4-2-5			
(g) Write a short note on mitochondrial mutations.	SECTION—B Answer any five questions			
(h) Write a short note on infective heredity.	2. Write in detail about chromosome theory of			
(i) What is the relationship between distance among genes and percentage of recombination?	inheritance with suitable examples.3. Write in detail about principles of inheritance with suitable examples.			
(j) How is recombination frequency calculated? Find & Smill.	4. Write an essay on extra-nuclear inheritance.			
(k) Define sex linkage. m and m sarupit and (l) Define two-factor crosses.	5. Discuss in depth about maternal effect and its use in heredity and evolutionary study.			
(m) Write briefly on deletion mutation.	6. Discuss in detail about sex-linked			
(n) Write briefly on position effect.	inheritance.			
(o) What is inversion mutation?	7. Write briefly on:			
(p) What is translocation mutation?	(a) Interference			
(q) What is gene pool?	(b) Coincidence			

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(r)

Define gene frequency.

(Continued)

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9.	Describe CIB method	of mutation detection.

10. Describe Hardy-Weinberg law with suitable examples. Also write about the factors effecting gene frequency in Hardy-Weinberg population.

4+2

SECTION-B

11. Describe in detail about speciation.

* * *

Write in detail about chromosome theory of inheritance with suitable examples.

Write in detail about principles of inheritance with sunable examples.

Wife an essay on exara-ruce in the area.

bscuss in depth about maternal effect and its use in heredity and evolutionary study.

Discuss in details about sex-linked

Tite briefly oursetters easiers and \$x2=6

(a) Interference

(ii) Coincidence

massible in detail about physical material

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