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SEAT No. _____

No. of Printed Pages: 2



SARDAR PATEL UNIVERSITY
NOVEMBER-2022
GENETICS & BIOTECHNOLOGY

US 05 CZ00 23

DATE: 12/11/2022 SATURDAY

B Sc. - V SEM. EXAMINATION

TIME: 10:00 AM-1.00 PM

MARKS: 70

Q-1 MULTIPLE CHOICE QUESTIONS:

[10]

1. IN GENETICS "aa" IS STAND FOR.
A, RECESSIVE B, DOMINANT C, HETEROGENIC D, NON ALLELIC
2. 15:1 IS CROSS
A, DIHYBRID B, MONOHYBRID C, BACK D, TEST
3. IN PEDIGREE ○ SYMBOL IS FOR
A, MALE B, FEMALE C, CARRIER D, CHILD
4. FRATERNAL TWINS ARE PRODUCED FROM
A, TWO ZYGOTE B, TWO SPERMATOZOON C, ONE ZYGOTE D, ALL POSSIBILITIES
5. DIAGRAM CHART OF CHROMOSOMES IS
A, PEDIGREE B, IDEOGRAM C, KARYOTYPE D, NONE
6. REPLICATION OF DNA ISMODEL
A, CONSERVATIVE B, TYPICAL C, SEMICONSERVATIVE D, DISPUTATIVE
7. E-DNA IS KNOWN AS
A, ELECTIVE B, EXTENDED C, ENABLE D, ELABORATED
8. TRANSFECTION IN ANIMALS ARE CALLED
A, POLYGENIC B, TRANSGENIC C, MONOGENIC D, TRIGENIC
9. THE MEANING OF VITRO IN IVF IS
A, LABORATORY B, MICROSCOPE C, GLASS D, ALL
10. CANCER IS ALSO CALLED AS
A, BENIGN B, NEOPLASIA C, TUMOUR D, NONE

Q-2 ANSWER IN SHORT [ANY TEN]

[20]

1. WRITE REASONS FOR SELECTION OF PEA PLANT BY MENDEL
2. DEFINE EPISTASIS?
3. WRITE ABOUT CONGENITAL ICHTHYOSIS
4. WRITE ABOUT DOUBLE CROSSING OVER
5. EXPRESS MUTATION
6. HARMFUL EVOLUTIONARY EFFECT OF EUPHENICS
7. DRAW HAIRPIN STRUCTURE OF tRNA
8. WRITE ABOUT RT PCR
9. WRITE ABOUT HOMOGENIZATION
10. WRITE ABOUT FLASK CULTURE
11. WRITE ABOUT PREPARATION OF SEMEN FOR IVF
12. WRITE ABOUT EMBRYO TRANSFER

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(P.T.O.)

Q-3 A, EXTRA NUCLEAR INHERITANCE IN LIMNEA [05]
B, EXPLAIN DOMINANT EPISTASIS [05]

OR

Q-3 A, GIVE DETAIL ACCOUNT OF MITOCHONDRIAL AND CHLOROPLAST DNA [05]
B, EXPLAIN LETHAL GENES AND SUB LETHAL GENES IN HUMAN [05]

Q-4 A, EXPLAIN PLOIDY [06]
B, EXPLAIN TETROMERIZATION [04]

OR

Q-4 A, EXPLAIN MECHANISM OF AMNIOCENTESIS [06]
B, EXPLAIN POSITIVE EUGENICS [04]

Q-5 A, DESCRIBE SEM AND TEM [05]
B, EXPLAIN POLYPEPTIDE CHAIN FORMATION BY RRNA [05]

OR

Q-5 A, DIFFERENTIATE B DNA AND Z DNA [05]
B, EXPLAIN RADIO IMMUNO ESSAY [05]

Q-6 A, DESCRIBE MORPHOLOGY OF CANCER CELLS [06]
B, TRANSGENIC ANIMALS AND THEIR USES [04]

OR

Q-6 A, CAUSES OF INFERTILITY IN MEN AND WOMEN [06]
B, TREATMENT FOR SUPER OVULATION [04]

[25]