

12

TUP

Reg. No. _____

Unit Test - I

BIOLOGY

Time : 1.30 hrs.

Max. Marks : 50

Note : Candidate should answer Part - I (Bio-Botany) & Part - II (Bio - Zoology)

PART - I (BIO - BOTANY) Marks : 25

SECTION - 1

Note : i) Answer all the questions. $5 \times 1 = 5$

ii) Choose the most appropriate answer from the given four alternatives and write the option code and corresponding answer.

1. First cell of male gametophyte in angiosperm is.....
a) microspore b) megaspor e) Nucleus d) primary endosperm nucleus
2. The genes controlling the seven pea characters studied by Mendel are known to be located on how many different chromosomes?
a) seven b) six c) five d) four
3. In Asexual reproduction, which plant is produced by Regeneration?
a) yeast b) planaria c) marchantia d) bacteria
4. The Duplicate genes ratio is.....
a) 12 : 3 : 3 : 1 b) 9 : 7 c) 13 : 3 d) 15 : 1
5. Which plant is obtained polygenic inheritance?
a) wheat kernal colour b) Mirabilis jalapa c) maize d) pea

SECTION - 2

Note : Answer any three questions. $3 \times 2 = 6$

6. What is Mellitophily?
7. What is Backcross?
8. What is cryopreservation?
9. What are Lethal genes?
10. What are the types of Intergenic inheritance?

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UDUMALPET

SECTION - 3

Note : Answer any three questions. Q.No.14 is compulsory.

$3 \times 3 = 9$

11. Write the functions of Tapetum.
12. Differentiate incomplete dominance and codominance.
13. Draw and label the parts of T.S. of mature anther.
14. Enumerate the characteristic features of Anemophilous flowers.
15. Write a short note on Atavism.

SECTION - 4

Note : Answer any one of the following $1 \times 5 = 5$

16. a) Write a suitable diagram explain the structure of an ovule. (OR)
b) Explain about the Dihybrid cross in garden pea.

SECTION - 1

Note : i) Answer all the questions.

5 x 1 = 5

ii) Choose the most appropriate answer from the given four alternatives and write the option code and corresponding answer.

1. What is the name of division of multinucleated parent in to many multinucleate daughter.
a) restorative b) anisogamy c) plasmotomy d) paedogamy
2. Which enzyme helps to penetrate the ovum during fertilization.
a) hydro chloric acid b) hyaluronic acid c) spermiogenesis
d) hyaluronidase
3. What is the name of condition in which female do not have function uterus.
a) Azoospermia b) Mayer Rokitansky syndrome c) klimetertors syndrome d) orchidectomy.
4. If the child's blood group is 'O' and father's blood group is 'A' and mother's blood group is 'B', the gene type of the parent will be
a) $I^A I^A$ and $I^B I^O$ b) $I^A I^O$ and $I^B I^O$ c) $I^A I^O$ and $I^O I^O$ d) $I^O I^O$ and $I^B I^B$
5. A mRNA molecule is produced by
a) Transcription b) Replication c) Duplication d) Translation

SECTION - 2

Note : Answer any three questions.

3 x 2 = 6

6. Differentiate between the Mesogamy and Exogamy.
7. What is Morula?
8. Expand the following : a) ZIFT b) ICSI
9. Define Null Allele.
10. What is Nucleoside and Nucleotide?

SECTION - 3

Note : Answer any three questions. Question No.15 is compulsory.

3 x 3 = 9

11. What is parthenogenesis and its types with examples.
12. Draw the flow chart of spermatogenesis.
13. What are surgical sterilisation methods. Explain its types.
14. Explain the genetic bases of ABO blood grouping in man.
15. Write any two Autosomal Aneuploidy in human beings.

SECTION - 4

Note : Answer any one question.

1 x 5 = 5

16. Explain the phases of Menstrual cycle.
17. Explain inheritance pattern occur in the Marriage between colour blind male and normal visioned female.