Day: Monday

Date: 15-04-2019

S-2019-1008

Time: 12:00 NOON TO 02:00 PM

Max. Marks: 40

N.B.:

1) All questions are **COMPULSORY.**
2) Figures to the right indicate **FULL** marks.
3) Draw neat and labelled diagram **WHEREVER** necessary.

Q.1 Attempt **ANY TWO** of the following: (10)

a) Explain plastid transmission in *Mirabilis Jalapa.*

b) Describe quantitative genetics.

c) Explain Mendel's Law of segregation.

Q.2 Attempt **ANY TWO** of the following: (10)

a) Describe coupling and repulsion phase in linkages.

b) Describe mean deviation and standard deviation of biostatistics.

c) Explain back cross and test cross with suitable examples.

Q.3 Attempt **ANY TWO** of the following: (10)

a) Describe concept and characters of multiple alleles.

b) Explain central value and dispersion of biostatistics.

c) Describe deletions and translocations.

Q.4 Attempt **ANY FIVE** of the following: (10)

a) Describe significance of statistics in genetics.

b) Explain epistasis factors in gene interactions.

c) Describe induced mutations.

d) Give definition of cytoplasmic inheritance.

e) Explain types of duplications.

f) Give multiple factor hypothesis.

g) What is male sterility in plants?

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