NEET Sample Paper for Botany

Q.1 Statement I: Potato and brinjal are two different genera but both belong to the species Solanum. Statement II: Mangifera and indica are specific and generic epithets, respectively.

- (1) Statement I and Statement II both are correct.
- (2) Statement I is correct, but Statement II is incorrect.
- (3) Statement I is incorrect, but Statement II is correct.
- (4) Statement I and Statement II both are incorrect.

Q.2 Identify the correct order of organization of genetic material from largest to smallest;

- (1) Chromosome, genome, nucleotide, gene
- (2) Chromosome, gene, genome, nucleotide
- (3) Genome, chromosome, nucleotide, gene
- (4) Genome, chromosome, gene, nucleotide

Q.3 A researcher while investigating the responses of phytohormones in seedlings found some common characteristics like:

- I. Horizontal growth of seedling.
- II. Swelling of the axis.
- III. Apical hook formation in seedlings

The above characteristics were due to the influence of;

- (1) Abscisic acid
- (2) Auxin
- (3) Gibberellins
- (4) Ethylene

Q.4 Selaginella and Salvinia are considered to represent a significant step towards the evolution of seed habit because;

- (1) Gametophytes are monoecious.
- (2) Male gametes are motile.
- (3) Embryo develops in female gametophyte which is retained on parent sporophyte.
- (4) Male gametophyte is retained in the parental body forever.

Q.5 Out of 64 codons, 61 codons code for 20 amino acids. This is due to;

(1) Wobbling of codon.

(2) Overlapping of gene.

- (3) Code being nearly universal.
- (4) Degeneracy of genetic code.

