

(2 ½ Hours)

[Total marks: 75]

- N.B.:** (1) All questions are compulsory
 (2) Figures to the right indicate full marks
 (3) Draw neat and labelled diagrams wherever necessary

Q.1 Describe the following

- a) Origin of oceans and continents **07**
OR
 a) Patterns of animal distribution – isolation and bipolarity **07**
 b) Palearctic realm **08**
OR
 b) Means of dispersal – accidental transportation by human agencies **08**

Q.2 Answer the following

- a) Site of exposure and root of exposure **07**
OR
 a) Animal models used in regulatory toxicology studies **07**
 b) Concept of extrapolation of dose **08**
OR
 b) Snake venom and scorpion venom **08**

Q.3 Explain the following

- a) Chi – square test and its significance **07**
OR
 a) Normal distribution – probability **07**
 b) Simple linear regression **08**
OR
 b) Standard variation (S.D) **08**

Q.4 Describe the following

- a) BLAST **07**
OR
 a) Bibliographic databases **07**
 b) Multiple sequence alignment **08**
OR
 b) Different types of protein chips **08**

Q.5 Write short notes on:

- a) Barriers of animal distribution – vegetative **04**
OR
- a) Nearctic realm **04**
- b) Ethical issues in animal studies **04**
OR
- b) Local toxicity **04**
- c) Z- transformation **04**
OR
- c) Alternate hypothesis **04**
- d) Pharmacogenomics – target identification **03**
OR
- d) PROSITE **03**
