2013
M.Sc.
4th Semester Examination
BIOCHEMISTRY
PAPER—BIC-402
Full Marks : 40
Time : 2 Hours

The figures in the right-hand margin indicate full marks.

Candidates are required to give their answers in their
own words as far as practicable.

Illustrate the answers wherever necessary.

Group — A

1. Answer any five from the following : 5×2
   (a) How does Vipor Venom work in the living system?
   (b) What is seasonal allergy?
   (c) What is the use of 6-OH-Dopamine in neurology research?
   (d) What are reactive nitrogen species? Why it is harmful?
   (e) What are phase-II drug metabolizing enzymes?
   (f) Define eustress and distress.
   (g) What is genotoxic carcinogen?
   (h) What is Huntington’s chorea?

(Turn Over)
2

Group — B

Answer any two from the following: 2×5

2. What are the features of Alzheimer's Disease? Mention in brief its cause and possible therapeutic management.  \[2\frac{1}{2}+2\frac{1}{2}\]

3. How stress factors modulate immunity? 5

4. Mention antioxidative and pro-oxidative property of ascorbate. 5

5. Discuss on Phase-I drug metabolising enzymes. Why polycyclic aromatic hydrocarbons are harmful? 3+2

Group — C

Answer any two from the following: 2×10

6. (i) What is Cotard Syndrome?
   (ii) What is the neurological basis of HIV-associated Dementia?
   (iii) How stress can generate hypertension? 2+5+3

7. (i) Define biotoxin. Mention their primary functions.
   (ii) What is biotransformation of xenobiotics? (2+4)+4

8. (i) Define heat stress index.
   (ii) Briefly define immunogen, allergen, carcinogen. What are their mode of action? 3+7

9. (i) Discuss in brief about nanomedicine.
   (ii) Why porus silica are utilizable in biotechnological research work? Mention its advantage.
   (iii) What is nanofibres? 4+4+2