## M.Sc. (Zoology) First Semester Old **ZOO-02 - General Physiology Paper-II**

| P. Pages: 1 Time: Three Hours |  | Hours          | * 1 6 9 3 *   |      |   | GUG/W/18/2195<br>Max. Marks : 80 |
|-------------------------------|--|----------------|---|------|---|----------------------------------|
|                               | Notes :  | 1.<br>2.<br>3. | All question are compulsory. All question carry equal marks Draw well labelled diagram when |      | er necessary.   |                                  |
| 1.                            | W  | Vrite aı       | n essay on respiratory pigment.   |      |   | 16                               |
|                               |  |                |   | 0    | OR .  |                                  |
|                               | V  | Vrite no       | otes on:  |      |   |                                  |
|                               | a)   | ) Fac          | ctors affecting enzyme action.  |      |   |                                  |
|                               | b) Chemical nature and biosynthesis of Neurotransmitters.  |                |   |      |   |                                  |
| 2.                            | Describe light producing organs in animals and its physiology.                                     |                |   |      |   | 16                               |
|                               |  |                |   | 0    | OR CONTRACTOR OF THE PROPERTY |                                  |
|                               | W<br>a)  |                | otes on:<br>ermoregulatory mechanism.   | b)   | Osmoregulation in pieces.   |                                  |
| 3.                            | Describe in details the classification & metabolism of carbohydrates with reference to glycolysis. |                |   |      |   | ce to <b>16</b>                  |
|                               |  |                |   | 0    | OR .  |                                  |
|                               | W<br>a)  |                | otes on:<br>gestion & absorption of lipids.   | b)   | Arginine -ornithine cycle.  |                                  |
| 4.                            | W  | Vrite ar       | n essay on cardiac cycle.   |      |   | 16                               |
|                               | OR   |                |   |      |   |                                  |
|                               | W<br>a)  |                | otes on nction of cerebrospinal fluid.  | b)   | Mechanism of reflex action.   |                                  |
| 5.                            | Attempt the following.   |                |   |      |   | 16                               |
|                               | a)   | ) Ch           | romatophores.   |      |   |                                  |
|                               | b  | ) Ste          | eroid Hormones.   |      |   |                                  |
|                               | c  | ) Ox           | idation of fatty acids.   |      |   |                                  |
|                               | d)   | ) Re           | sistance and Adaptation.  |      |   |                                  |
|                               |  |                |   | **** | ****  |                                  |