

M.Sc.(Zoology) (C.B.C.S. Pattern) Sem-III  
**ZOO-X / PSCZOOT10-4-Paper-X-Special Group - Animal Physiology-I (Paper - I)**  
**Physiology of Digestion and Excretion**

P. Pages : 1

Time : Three Hours



**GUG/S/19/11310**

Max. Marks : 80

- Notes :
1. All questions are compulsory.
  2. All questions carry equal marks.
  3. Illustrate your answer with suitable diagrams.

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|-----------|---|-----------|
| <b>1.</b> | Give detail account on histology of stomach and add a note on composition and functions of gastric juice. | <b>16</b> |
|           | <b>OR</b>   |           |
|           | Write note on   | <b>8</b>  |
|           | a) Mechanism of pancreatic secretion.   |           |
|           | b) Histology of liver and bile secretion.   | <b>8</b>  |
| <b>2.</b> | Give detail account on synthesis, chemical and functions of gastrointestinal hormones.                    | <b>16</b> |
|           | <b>OR</b>   |           |
|           | Write notes on:   | <b>8</b>  |
|           | a) Digestion and absorption of fats.  |           |
|           | b) Histology of small and large intestine.  | <b>8</b>  |
| <b>3.</b> | Give detail account on functional anatomy of kidney.  | <b>16</b> |
|           | <b>OR</b>   |           |
|           | Write notes on  | <b>8</b>  |
|           | a) Counter current system   |           |
|           | b) Nephron  | <b>8</b>  |
| <b>4.</b> | Give detailed account on renin----- angiotensin system in renal physiology.                               | <b>16</b> |
|           | <b>OR</b>   |           |
|           | Write notes on...   |           |
|           | a) Renal clearance  |           |
|           | b) Renal Failure  |           |
| <b>5.</b> | Attempt the following.  | <b>16</b> |
|           | a) Functions of saliva.   |           |
|           | b) Control of intestinal bacteria   |           |
|           | c) Abnormal & normal constituents of urine  |           |
|           | d) Hormonal mechanism of antidiuretic hormone.  |           |

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