| | Reg. No. | | | | | | | | | <u> </u> | • |
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II Semester M.Sc. Degree (CBCS) Examination, September/October 2022 FOOD SCIENCE AND NUTRITION Minerals in Human Nutrition

Time: 3 Hours Max. Marks: 70

- Write short notes on any five of the following (not exceeding 2 pages each): (5×3=15)
 - a) Functions of Selenium.
 - b) Definition of microelements with four examples.
 - c) Calcium phosphorus ratio and its importance.
 - d) Hypokalemia and its causes.
 - e) Functions of iodine.
 - f) Physiological requirement and RDA of calcium for growing children.
 - g) Food sources and importance of cobalt.
 - h) Iron overload.
- 2. Write explanatory notes on **any five** of the following (**not** exceeding **3** pages **each**). (5×5=25)
 - a) Absorption and metabolism of zinc.
 - b) Functions and deficiency of fluorine.
 - c) Disorders associated with iodine deficiency.
 - d) Electrolyte imbalance.
 - e) Role of minerals in electrolyte balance.
 - f) Factors affecting the absorption of calcium.
 - g) Role of sulphur in nutrition and its toxicity.
 - h) Role of minerals in enzyme action with suitable examples.
- 3. Answer any three of the following (not exceeding 5 pages each). (3×10=30)
 - a) The normal serum calcium level and its hormonal regulation.
 - b) Describe the sources, functions and deficiency of phosphorus.
 - c) Discuss the absorption of iron and consequences of anemia in various stages of life.
 - d) Describe the drug mineral interaction with suitable examples.
 - e) Elaborate the importance of sodium and its relation in renal conditions.
