PARUL UNIVERSITY
FACULTY OF APPLIED SCIENCE
M.Sc. Winter 2018-19 Examination

Semester:1   **Date: 07/12/2018**
Subject Code: 11209104   **Time: 10:30am to 01:00pm**
Subject Name: Nutritional Epidemiology   **Total Marks: 60**

Instructions:
1. All questions are compulsory.
2. Figures to the right indicate full marks.
3. Make suitable assumptions wherever necessary.
4. Start new question on new page.

Q.1. A) Essay type/ Brief note (Each of 04 marks)   **(08)**
   (a) Importance of epidemiology studies and how it is important for improving health.
   (b) Explain – How mothers education influences her children's nutrition?

Q.1. B) Answer the following questions (Any two)
   (a) Short note/ Brief note   **(04)**
      1.   Define – Prevalence, Nutritional Epidemiology, Incidence, morbidity
      2.   Define - Underweight and Severe underweight in children with its cut offs.
   (b) Short note - Measures of micronutrients-food and nutrient intake.   **(04)**
   (c) What is prevalence of Anemia in children according to NFHS-4 data? (tabular form)   **(04)**

Q.2. A) Answer the following questions.
   (a) Fill in the blanks. (Each of 02 marks)   **(04)**
      1.   _____ is a cause of Anemia
      2.   Xerophthalmia, night blindness is caused by _____ deficiency.
   (b) Explain the causes of iodine deficiency disorder along with its signs and symptoms   **(04)**

Q.2. B) Answer the following questions (Any two)
   (a) Multiple choice questions.   (Each of 01 marks)   **(03)**
   1.   Incidence refers to _____ cases of disease during a specified period of time.
         a)   Old
         b)   New
         c)   Long term
         d)   Short term
    2. Prevalence refers to number of _____ cases of disease at a given point of _____
         a)   Past, time
         b)   Existing, Time
         c)   Old, period
         d)   Future, period
    3.   IDA stands for ?
         a)   Iron deficiency anemia
         b)   Iodine deficiency anemia
         c)   Iodine deficiency Assessment
         d)   A & B both
   (b) Short note - Explain the causes of vitamin A deficiency with signs and symptoms   **(03)**
   b)   Short note - MUAC- definition and its cut off's.   **(03)**

Q.3. A) Essay type/ Brief note (4x2) (Each of 04 marks)   **(08)**
   (a) Food and nutrition security(FNS)
   (b) Compare NFHS 3 and NFHS – 4 data relating to prevalence of undernutrition in children (0-59 months).

Q.3. B) Answer the following questions (Any two)
   (a) Brief note (Each of 02 marks)   **(04)**
      1.   Define Death rate and Birth rate.
      2.   Explain briefly how and why agriculture is important for promoting nutrition

b) Short note- Nutritional and health surveys in epidemiological studies **(04)**

(c) Give formulas - MMR, IMR, NMR , PMR,U5MR **(04)**

Q.4. A) Answer the following questions.

(a) Fill in the blanks. (Each of 02 marks) **(04)**

1. IDD is caused by _____ deficiency.

2. Anemia is more prevalent in which _____and_____ age group.

(b) Difference between incidence and prevelance. **(04)**

Q.4. B) Answer the following questions (Any two)

(a) Multiple choice questions.   (Each of 01 marks) **(03)**

1. Full form of ORS
    a) Oral Resistant Solution
    b) Oral Rehydration Solution
    c) Optimal Rehydration Solution
    d) Oral Rehydration Sachet

2. Scurvy is a result from severe____ deficiency
   a) Vitamin B
   b) Vitamin C
   c) PEM
   d) Vitamin A

3. Rate of occurrence of new cases is there in ____.
    a) Prevalence
    b) Incidence
    c) Both A& C
    d) None

(b) Short note - Compare NFHS 3 and NFHS – 4 data relating to anemia in children **(03)**

(c) Compare NFHS 3 and NFHS-4 prevalence of nutritional status of mothers / women (15-49 years) **(03)**