BZYCT-143

ASSIGNMENT BOOKLET

Bachelor's Degree Programme

(BSCG)
INSECT VECTORS AND VECTOR BORNE DISEASES

Valid from 1st January, 2024 to 31st December, 2024

School of Sciences
Indira Gandhi National Open University
Maidan Garhi
New Delhi-110068

(2024)

Dear Student,

Please read the section on assignments in the Programme Guide for Core Courses that we sent you after your enrolment. A weightage of 30 per cent, as you are aware, has been earmarked for continuous evaluation, **which would consist of one tutor-marked assignment** for this course. The assignment is in this booklet, and it consists of three parts, Part A and B. The total marks of all the parts are 100, of which 35% are needed to pass it.

Instructions for Formatting Your Assignments

Before attempting the assignment please read the following instructions carefully:

1) On top of the first page of your answer sheet, please write the details exactly in the following format:

ROLL NO.: ……

NAME: ……

ADDRESS: ……

……

……

COURSE CODE: …….

COURSE TITLE: …….

ASSIGNMENT NO.: ……..…

STUDY CENTRE: ……..….. **DATE:** …….……...

PLEASE FOLLOW THE ABOVE FORMAT STRICTLY TO FACILITATE EVALUATION AND TO AVOID DELAY.

2) Use only foolscap size writing paper (but not of very thin variety) for writing your answers.

3) Leave 4 cm margin on the left, top and bottom of your answer sheet.

4) Your answers should be precise.

5) Complete each of Part A and Part B of this assignment separately, and **submit them together.**

6) The assignment answer sheets are to be submitted to your Study Centre as per the schedule made by the study centre. **Answer sheets received after the due date shall not be accepted.**

   We strongly suggest that you retain a copy of your answer sheets.

7) This assignment is **valid from 1st January, 2024 to 31st December, 2024**. If you have failed in this assignment or fail to submit it by December, 2023, then you need to get the assignment for the year 2024, and submit it as per the instructions given in the Programme Guide.

8) **You cannot fill the exam form for this course** till you have submitted this assignment.

We wish you good luck.

ASSIGNMENT

INSECT VECTORS AND VECTOR BORNE DISEASES

Course Code: BZYET-143
Assignment Code: BZYET-143/TMA/2024
Maximum Marks: 100

Note: Attempt all questions. The marks for each question are indicated against it.

1. i) Give two examples of insects for each of the following types of metamorphosis: (6)
   a) No metamorphosis: ……
   b) Incomplete metamorphosis: ……..
   c) Complete metamorphosis: …….

   ii) Give the different developmental stages in the following insects: (4)
   a) Silver fish: ……..
   b) Grass hopper: ……

2. a) Differentiate between: (5)
   i) Propagative Transmission and Cyclopropagative Transmission
   ii) Cyclodevelopmental Transmission and Vertical Transmission

   b) Answer the following questions: (5)
   i) Name the reduced hindwings of diptera and write their functions.
   ii) How do mosquitoes detect their host for sucking of blood?

3. a) Name a hemimetabolous order which is exclusively parasitic. Explain its morphological features in brief. (5)

   b) Write the important features of Order Siphonaptera which make them important disease vectors. (5)

4. Write short notes on the following: (10)
   a) Prevention /control measures of fleas.
   b) Typhus fever
   c) *Tunga penetrans*
   d) *Yersinia pestis* transmission

5. a) Distinguish between the following: (5)
   i) *Pediculus humanus corporis* and *Pediculus humanus capitis*
   ii) Male and Female body louse

   b) Explain the role of Reduviid bug as a biological vector in the transmission of Chagas disease. (5)

6. a) Explain the epidemiology of malarial parasite. (5)

b) Discuss the preventive and control measures of *Anopheles* mosquito. (5)

7. Draw a labeled diagram of: (10)

   a) Life cycle of JE

   b) Filarial worm transmission Cycle

8. Give difference between the following: (10)

   a) Extrinsic incubation period and intrinsic incubation period

   b) Transverse and vertical transmission

   c) Urban cycle and sylvatic cycle

9. Write short notes on: (10)

   a) Traps used for controlling houseflies

   b) Cultural control of *Musca*

   c) Chemical control of housefly

   d) Myiasis

10. a) Explain the concept of Integrated Vector Management. (5)

    b) How can the disease vectors be genetically manipulated to reduce their population? (5)