

MAY 2011

[KY 026]

Sub. Code: 9126

M.Sc MOLECULAR VIROLOGY EXAMINATION

FIRST YEAR

(for Candidates admitted from 2009-2010 onwards)

PAPER II – EPIDEMIOLOGY, BIOSTATISTIC AND ENTOMOLOGY

Q.P. Code : 289126

Time : Three hours

Maximum :100marks

Answer All questions.

I. Elaborate on :

(2 x 20 = 40)

1. Describe the types of epidemiological methods in detail. Write the advantage and disadvantage of each study design.
2. What is meant by sampling? Describe the various methods of sampling in detail.

II. Write notes on :

(10 x 6 = 60)

1. Population attributable risk.
2. Types of variables.
3. Interim Analysis.
4. Describe various multiple range test used in statistical analysis.
5. Relationship between odds ratio and relative risk.
6. Receiver Operating Characteristics (ROC curve) curve.
7. Methods of Randomization.
8. Distinguish Anopheline Culicine mosquitoes.
9. Method of collecting ectoparasites from mammals.
10. Write a note on allergic and toxic reactions to insect venome.

[KZ 1011]

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M.Sc MOLECULAR VIROLOGY DEGREE EXAMINATION

(for Candidates admitted from 2009-2010 onwards)

PAPER II – EPIDEMIOLOGY, BIostatISTICS AND ENTOMOLOGY

Q.P. Code : 289126

**Time : 3 hours
(180 Min)**

Maximum : 100 marks

Answer ALL questions in the same order.

I. Elaborate on :

	Pages (Max.)	Time (Max.)	Marks (Max.)
1. Discuss in detail how the data can be represented in different ways.	17	40	20
2. Classification of Mosquito. Describe the life cycle of mosquito and its role in the transmission of Dengue, Malaria and Chikunguniya.	17	40	20

II. Write notes on :

1. What is meant by power of the test and level of significance?	4	10	6
2. Types of descriptive studies.	4	10	6
3. Define the term range, standard deviation and normal distribution.	4	10	6
4. Strength and weakness of cluster sampling.	4	10	6
5. Merits and demerits of case control study.	4	10	6
6. Discuss various steps involved in testing of hypothesis.	4	10	6
7. Define Random error and bias.	4	10	6
8. Larval biology of mosquito.	4	10	6
9. Role of mosquitoes in transmission of dengue and malaria.	4	10	6
10. Prevention and control of Arthropod borne diseases.	4	10	6

[LA 0412]

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FIRST YEAR

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PAPER II – EPIDEMIOLOGY, BIostatISTICS AND ENTOMOLOGY

Q.P. Code : 289126

Time : Three hours

Maximum :100marks

Answer All questions.

I. Elaborate on :

**Pages Time Marks
(Max.) (Max.) (Max.)**

- | | | | |
|--|----|----|----|
| 1. Describe the collection, preservation, mounting and transportation of Arthropods? | 17 | 40 | 20 |
| 2. What are the different types of Epidemiological studies? Explain in detail the steps in Descriptive studies with suitable examples? | 17 | 40 | 20 |

II. Write notes on :

- | | | | |
|---|---|----|---|
| 1. Co-efficient of variation and its significance. | 4 | 10 | 6 |
| 2. Advantages and disadvantages of case control studies. | 4 | 10 | 6 |
| 3. Differences between Anopheles and Culex mosquito. | 4 | 10 | 6 |
| 4. Prevention and control of Japanese Encephalitis. | 4 | 10 | 6 |
| 5. Application and uses of percentiles. | 4 | 10 | 6 |
| 6. Types of data and its significance. | 4 | 10 | 6 |
| 7. Probability sampling methods. | 4 | 10 | 6 |
| 8. Bias in epidemiological studies. | 4 | 10 | 6 |
| 9. Proportional mortality rate and its significance. | 4 | 10 | 6 |
| 10. Public health importance of ticks and its control measures. | 4 | 10 | 6 |

[LD 1013]

OCTOBER 2013

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FIRST YEAR**

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PAPER II – EPIDEMIOLOGY BIostatISTICS AND ENTOMOLOGY

Q.P. Code : 289126

Time : 3 hours

Maximum : 100 marks

Answer ALL questions

I. Elaborate on :

(2X20=40)

1. Medical importance of mites and fleas
2. Epidemiological study designs; Their objectives, key features and relative advantages and disadvantages

II. Writes notes on:

(10X6=60)

1. Non-parametric tests
2. Sampling methods
3. Measures of association
4. Steps of test of significance
5. Types of probability sampling
6. Incidence and prevalence with examples
7. Outbreak investigation
8. Bio-ecology of KFD
9. Blood feeding and gonotrophic cycle with diagram
10. New World and Old World sand flies and their importance
