

## As Per NEP 2020

# University of Mumbai



| Syllabus for<br>Basket of minor        |              |
|----------------------------------------|--------------|
| Board of Studies in Zoology            |              |
| UG First Year Programme                |              |
| Semester - II                          |              |
| Title of Paper                         | Credits 2/ 4 |
| I) MN1: Zoology- Common Human Diseases | 2            |
| II)                                    |              |
| III)                                   |              |
| From the Academic Year                 | 2024-25      |

## MN1: Zoology- Common Human Diseases

| Sr. No. | Heading                                                                                                                                                                                                                                                                                                                                                                                 | Particulars                                                                                                               |
|---------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------|
| 1       | <b>Description the course:</b>                                                                                                                                                                                                                                                                                                                                                          | This course delves into developing basic understanding of common human diseases, its diagnosis and management.            |
| 2       | <b>Vertical :</b>                                                                                                                                                                                                                                                                                                                                                                       | <del>Major/ Minor ✓ /Open Elective /Skill Enhancement / Ability Enhancement/Indian Knowledge System</del> ( Choose By ✓ ) |
| 3       | <b>Type :</b>                                                                                                                                                                                                                                                                                                                                                                           | Theory                                                                                                                    |
| 4       | <b>Credit:</b>                                                                                                                                                                                                                                                                                                                                                                          | 2 credits (1 credit = 15 Hours for Theory in a semester )                                                                 |
| 5       | <b>Hours Allotted :</b>                                                                                                                                                                                                                                                                                                                                                                 | 30 Hours                                                                                                                  |
| 6       | <b>Marks Allotted:</b>                                                                                                                                                                                                                                                                                                                                                                  | 50 Marks                                                                                                                  |
| 7       | <b>Course Objectives:</b><br>The objectives of this course are to:<br>CO 1. Foster in learners a comprehensive understanding of the common human diseases, their causes, symptoms and precautions.<br>CO 2. Equip learners with the knowledge of prevention and management of common diseases.<br>CO 3. Acquaint learners to the concept of hygiene and its role in disease prevention. |                                                                                                                           |
| 8       | <b>Course Outcomes:</b><br>Upon completion of the course, the learners should be able to:<br>OC 1. Comprehend the causes, symptoms and precautions of common human diseases.<br>OC 2. Develop skill for prevention and management of common diseases.<br>OC 3. Analyze the connection between hygiene and common diseases.                                                              |                                                                                                                           |

## MN1: Zoology-Common Human Diseases

|   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |             |
|---|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|
| 9 | <b>Module 1: Communicable and noncommunicable diseases</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | <b>15hr</b> |
|   | <b>1.1 General introduction:</b> Disease: Definition, classification (infectious vs non-infectious, chronic vs acute), Importance of studying common human diseases.                                                                                                                                                                                                                                                                                                                                                                                                                                                | <b>01hr</b> |
|   | <b>1.2 Communicable/ Infectious Diseases: (Mode of transmission, diagnosis / symptoms and preventions)</b><br>1.2.1 Bacterial: Cholera, Tuberculosis<br>1.2.2 Viral: Influenza (flu), COVID-19, Dengue<br>1.2.3 Fungal: Candidiasis<br>1.2.4 Protozoan: Malaria, Entamoeba<br>1.2.5 Helminthes: Ascariasis<br>1.2.6 Sexually transmitted infections: Gonorrhea, HIV/AIDS                                                                                                                                                                                                                                            | <b>07hr</b> |
|   | <b>1.3 Non-Communicable Diseases: (causes, signs / symptoms, and prevention and management)</b><br>1.3.1 Cardiovascular diseases: Stroke, hypertension and hypotension.<br>1.3.2 Anaemia: Definition and types<br>1.3.4 Cancers: Breast cancer, Lung cancer and Colon cancer.<br>1.3.5 Chronic respiratory diseases: Asthma<br>1.3.6 Diabetes: Type 1 and type 2                                                                                                                                                                                                                                                    | <b>07hr</b> |
|   | <b>Module 2: Concept of hygiene and prevention of common diseases</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | <b>15hr</b> |
|   | <b>2.1 Concept of hygiene</b><br>2.1.1 Role of hygiene in prevention of communicable diseases.<br>2.1.2 The importance of hand washing in disease prevention.<br>2.1.3 Personal hygiene (bathing, showering, oral hygiene)<br>2.1.4 Cough and sneeze etiquette (covering your mouth and nose)<br>2.1.5 Food hygiene (safe food handling and storage)<br>2.1.6 Hygiene in public places (using public restrooms, handling money)                                                                                                                                                                                     | <b>07hr</b> |
|   | <b>2.2 Risk factors and lifestyle changes for prevention</b><br>2.2.1 Healthy habits for disease prevention (physical activity, healthy eating)<br>2.2.2 Strengthening immune system through healthy habits (sleep, diet, exercise)<br>2.3 Emerging and Re-emerging Diseases<br>2.3.1 New diseases or existing diseases with increased incidence<br>2.3.2 Factors contributing to emergence/re-emergence (travel, climate change, antibiotic resistance)<br>Examples (SARS, Zika virus, antibiotic-resistant bacteria)<br>2.4 Vaccinations and its role in disease prevention (importance of vaccination schedules) | <b>08hr</b> |
|   | <b>Suggested assignments for internal assessment:</b> Submission of project report on pulse rate or BMI or any topic related to the human diseases. Submission of project report on vital lung capacity of 20 volunteers.                                                                                                                                                                                                                                                                                                                                                                                           |             |

|     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|-----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 10. | <b>Text Books:</b><br>--                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| 11. | <b>Reference Books:</b> <ol style="list-style-type: none"> <li>1. Bean, W. B. (1961). The Merck Manual of Diagnosis and Therapy. Archives of Internal Medicine, 108(6), 968-969.</li> <li>2. Topol, E. J., &amp; Teirstein, P. S. (2015). Textbook of interventional cardiology E-Book. Elsevier Health Sciences.</li> <li>3. Fry, J. (2012). Common diseases: their nature incidence and care. Springer Science &amp; Business Media.</li> <li>4. Litin, S. C. (Ed.). (2015). Mayo Clinic A to Z Health Guide: Everything You Need to Know about Signs, Symptoms, Diagnosis, Treatment and Prevention. Time Home Entertainment, Incorporated.</li> <li>5. Tamparo, C. D. (2016). Diseases of the human body. FA Davis.</li> <li>6. Thakur, J. S. (2015). Public health approaches to non-communicable diseases. Wolters kluwer india Pvt Ltd.</li> <li>7. Puri, A. S. (2007). How to Prevent Common Diseases: A Comprehensive Guide to Detect, Prevent and Combat Common Fatal Diseases. Sterling Publishers Pvt. Ltd.</li> <li>8. Jamison, D. T., Breman, J. G., Measham, A. R., Alleyne, G., Claeson, M., Evans, D. B., ... &amp; Musgrove, P. (Eds.). (2006). Disease control priorities in developing countries.</li> <li>9. Gleeson, M. (2020). Eat, Move, Sleep, Repeat: Diet &amp; Fitness for Living Long &amp; Healthy. Meyer &amp; Meyer Sport.</li> <li>10. Mayo Clinic Healthy Heart for Life! The Mayo Clinic Plan for Preventing and Conquering Heart Disease. (2012). United States: Time Home Entertainment Incorporated.</li> <li>11. Nutrition and Immunity. (2019). Germany: Springer International Publishing.</li> </ol> |

|           |                                                                                                                                                                                                                                |                                                                                                                    |
|-----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------|
| <b>12</b> | <b>Internal Continuous Assessment: 40% (20 marks)</b>                                                                                                                                                                          | <b>External, Semester End Examination : 60% Individual Passing in Internal and External Examination (30 marks)</b> |
| <b>13</b> | <b>Continuous Evaluation through:</b><br>Quizzes, Class Tests, presentation, project, role play, creative writing, assignment etc.( at least 3 )                                                                               | As per paper pattern      01.00 hour                                                                               |
| <b>14</b> | <b>Format of Question Paper:</b> for the final examination                                                                                                                                                                     |                                                                                                                    |
|           | <b>Time 1.0 Hr</b>                                                                                                                                                                                                             | <b>Max. Marks 30</b>                                                                                               |
|           | Q.1. Questions in the form of MCQ and answer in one sentence. (Overall equal weightage for both modules I & II)<br><br>Q1a. Five questions in the form of MCQ (5 marks)<br>Q1b. Five questions of answer in one line (5 marks) | <b>10</b>                                                                                                          |
|           | Q.2 Answer any one of the following (based on Module I)<br>a.<br>b.                                                                                                                                                            | <b>06</b>                                                                                                          |
|           | Q.3. Answer any one of the following (based on Module II)<br>a.<br>b.                                                                                                                                                          | <b>06</b>                                                                                                          |
|           | Q4. Write short note any two of the four from module I and II (equal weightage)<br>a.<br>b.<br>c.<br>d.                                                                                                                        | <b>08</b>                                                                                                          |

**Sign of the BOS  
Coordinator  
Dr. Vaishali Somani  
BOS in Zoology**

**Sign of the  
Offg. Associate Dean  
Dr. Madhav R. Rajwade  
Faculty of Science &  
Technology**

**Sign of the  
Offg. Dean  
Prof. Shivram S. Garje  
Faculty of Science &  
Technology**