# SEMESTER VI – ELECTIVE - III B

## **UEZOF20 – PARASITOLOGY**

Year	SEM	Course code	Title of the Course	Course Type	Course Category	H/W	Credits	Marks
III	VI	UEZOF20	Parasitology	Theory	Core Elective	5	5	100

## **Objectives:**

- To learn the life cycle, disease and treatment of various parasites of Human
- To create awareness about health and hygiene

#### **Course Outcomes:**

## On completion of the course the student will be able to...

**CO1**: Discuss about parasites.

CO2: Describe host parasite interaction.

**CO3**: Discuss pathology of protozoan parasites.

**CO4**: Describe the pathology of Helminth parasites.

**CO5**: Explain Arthropod role as parasites and vectors.

CO/PO	PSO						
	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	
CO1	Н	Н	L	M	Н	L	
CO2	Н	Н	L	M	Н	L	
CO3	Н	Н	L	M	Н	L	
CO4	Н	Н	L	M	Н	L	
CO5	Н	Н	L	M	Н	L	

CO/PO	PO						
	PO1	PO2	PO3	PO4	PO5	PO6	
CO1	Н	Н	Н	M	M	M	
CO2	Н	Н	Н	M	M	M	
CO3	Н	Н	Н	M	M	M	
CO4	Н	Н	Н	M	M	M	
CO5	Н	Н	Н	M	M	M	

# Unit 1: (15 Hours)

- 1.1: Terminology nature of Parasitism.(K1, K2, K3)
- 1.2: Parasites and food habits.(K1, K2, K3)
- 1.3: Origin of parasitism-kinds of parasitism.(K1, K2, K3)
- 1.4: General relation to hosts.(K1, K2, K3)
- 1.5: Definitive and intermediate hosts.(K1, K2, K3)
- 1.6: Parasitic adaptation.(K1, K2, K3)

## Unit 2: (15 Hours)

- 2.1: Effects of parasites on hosts.(K1, K2, K3)
- 2.2: Immunity.(K1, K2, K3)
- 2.3: Age resistance.(K1, K2, K3)
- 2.4: Tolerance to injurious effects.(K1, K2, K3)
- 2.5: Spread to new hosts.(K1, K2, K3, K4)

2.6: Community spread.(K1, K2, K3, K4)

Unit 3: (15 Hours)

- 3.1: Morphology, Life cycle, mode of infection, pathogenesis, treatment and prophylaxsis of Protozoan parasites *Plasmodium vivax*.(K1, K2, K3)
- 3.2: Entameoba histolitica.(K1, K2, K3)
- 3.3: *Balantidium*.(K1, K2, K3)
- 3.4: *Leshmania*.(K1, K2, K3)
- 3.5: *Trypanosoma*.(K1, K2, K3)
- 3.6: Giardia intestinalis. (K1, K2, K3)

Unit 4: (15 Hours)

- 4.1:Morphology, Life cycle, mode of infection, pathogenesis, treatment and prophylaxsis of Helminthes parasites- *Ascaris*.(K1, K2, K3)
- 4.2: *Ancylostoma*.(K1, K2, K3)
- 4.3: Wuchereria. (K1, K2, K3)
- 4.4: Schistoma.(K1, K2, K3)
- 4.5: *Taenia solium*.(K1, K2, K3)
- 4.6: Trichuris trichiura. (K1, K2, K3)

Unit 5: (15 Hours)

- 5.1: Parasitic Arthropods- degree of parasitism.(K1, K2, K3)
- 5.2: As vectors Indirect, direct and biological transmission.(K1,K2, K3)
- 5.3: Indirect, direct and biological transmission-Mosquitoes.(K1, K2, K3)
- 5.4: Indirect, direct and biological transmission- Flies.(K1, K2, K3)
- 5.5: Indirect, direct and biological transmission- Fleas and bugs.(K1, K2, K3)
- 5.6: Indirect, direct and biological transmission Ticks and Mites. (K1, K2, K3)

#### **Books for Study and Reference:**

#### **Textbooks:**

- 1. Panicker Textbook of Medical Parasitology, 4<sup>th</sup> edition, Jaypee Brothers, 1977.
- 2. Subhash Chandra Parija Text book of Parasitology, All India Publishers and Distributors, **2000.**

#### **Reference Books:**

- 3. Chandler C. ASA and Read C.P, Wiley Eastern University Ed, 10<sup>th</sup> edition, 1970.
- 4. Bush et al. Parasitism Cambridge University Press, 2001.
- 5. R.L.Ichhpujari, Rajesh Bhatia Medical Parasitology, Jaypee Brothers, 1994.
- 6.Clark .P Read Animal Parasitism, Prentice, Hall of India, 1977.
- 7. W. Crave- A Guide to Human Parasitology, 10<sup>th</sup> edition, the English Language Book Society and H.K.Lewis and Co, 1970.

#### **E-Resources:**

https://www.cdc.gov

https://parasite.org.au

http://www.parasitesinhumans.org

#### SKILL-BASED COURSE - I

## USZOA120/USZOA220 - PUBLIC HEALTH AND HYGIENE

Year	SEM	Course code	Title of the	Course	Course	H/W	Credits	Marks
			Course	Type	Category			
Ι	I & II	USZOA120/	Public Health	Theory	Skill	2	2	100
		USZOA220	And Hygiene		Based			
					Elective			

## **Objective:**

- To highlight the various dimensions of human health with reference to nutrition, environment and disease.
- To gain basic knowledge about health and hygiene

## **Course Outcomes:**

# On completion of the course the student will be able to...

**CO1:** Impart knowledge about health and diseases.

**CO2:** Acquire knowledge about nutrition and classification of food.

**CO3:** Analyze the interaction and impact of the environment on health.

**CO4:** Expand knowledge about communicable diseases and its prevention.

**CO5:** Improve the quality of life through prevention and treatment of non-communicable disease.

CO/PSO	PSO						
	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	
CO2	Н	Н	M	Н	Н	M	
CO3	Н	Н	M	Н	Н	M	
CO4	Н	Н	M	Н	Н	M	
CO5	Н	Н	M	Н	Н	M	

CO/PO	PO						
	PO1	PO2	PO3	PO4	PO5	PO6	
CO1	Н	Н	Н	Н	Н	M	
CO2	Н	Н	Н	Н	Н	M	
CO3	Н	Н	Н	Н	Н	M	
CO4	Н	Н	Н	Н	Н	M	
CO5	Н	Н	Н	Н	Н	M	

#### **Unit 1: (6 Hours)**

- 1.1: Introduction. (K1, K2, K3)
- 1.2: Terms and definitions. (K1, K2, K3)
- 1.3: Scope of Public Health and Hygiene. (K1, K2, K3)
- 1.4: Concepts of Health and Disease. (K1, K2, K3)
- 1.5: Sources and function of macro nutrients. (K1, K2, K3)
- 1.6: Sources and function of micro nutrients. (K1, K2, K3)

#### **Unit 2: (6 Hours)**

- 2.1: Nutrition and Health. (K1, K2, K3)
- 2.2: Classification of foods. (K1, K2, K3)
- 2.3: Carbohydrates, Proteins, fats. (K1, K2, K3)
- 2.4: Vitamins deficiency, food hygiene. (K1, K2, K3)
- 2.5: Balance diet. (K1, K2, K3)

2.6: Nutritional requirements of special groups. (K1, K2, K3, K4)

## **Unit 3: (6 Hours)**

- 3.1: Environment and Health. (K1, K2, K3)
- 3.1: Pollution effect on health- Water, Air. (K1, K2, K3)
- 3.3: Pollution effect on health- Noise. (K1, K2, K3)
- 3.4: Pollution effect on health Land. (K1, K2, K3)
- 3.5: Climate change. (K1, K2, K3)
- 3.6: Pandemic diseases. (K1, K2, K3)

#### **Unit 4:(6 Hours)**

- 4.1: Epidemiology of Communicable Diseases. (K1, K2, K3)
- 4.2: A brief account of respiratory infections. (K1, K2, K3)
- 4.3: Measles. (K1, K2, K3)
- 4.4: Intestinal infections- Amoebiasis. (K1, K2, K3)
- 4.5: Arthropod borne diseases- Malaria. (K1, K2, K3)
- 4.6: STD and AIDS. (K1, K2, K3)

## **Unit 5:(6 Hours)**

- 5.1: Non Communicable Diseases and Conditions. (K1, K2, K3)
- 5.2: Diabetes mellitus. (K1, K2, K3)
- 5.3: Obesity. (K1, K2, K3)
- 5.4: Mental health: Causes of mental ill-health. (K1, K2, K3)
- 5.5: Stress and strain. (K1, K2, K3)
- 5.6: Eating disorders. (K1, K2, K3)

## **Books for Study and Reference:**

#### **Textbooks:**

- 1. Park J.E. and Park K. A Textbook of Preventive and Social Medicine M/S. Banarsidas Bhanot Publishers, Jabalpur, 1986.
- 2. Verma S. Medical Zoology Rastogi Publications, New Delhi, 1998.

## **Reference Books:**

- 3. Group Nutrition Intervention, Management Manual Dept. of Food, Ministry of Agriculture, Govt. of India, 1982.
- 4. Raven, Peter, H. and Johnson, George B. Understanding Biology Mosby Year Book, U.S.A., 1994.
- 5. Swaminathan M. Advanced Text Book on Food and Nutrition Vol. I and Vol. II The Bangalore Printing and Publishing Co., Ltd., Bangalore, 1993.

#### **E-Resources:**

https://www.cdcfoundation.org

https://www.publichealth.pitt.edu

https://www.tnhealth.org