### COLLEGE OF VETERINARY SCIENCE & A.H. JABALPUR

# Introduction of Parasitology & its importance in Veterinary Curriculum

#### Introduction

 Parasitology is a branch of biology which deals with the study of parasitism, i.e. a phenomenon of dependence of one living organism on the other.

•In other words, it can also be defined as the study of parasites and their relationship to their host.

 This discipline actually includes several approaches to the study of parasite and parasitism viz. ecological, taxonomy, morphology including histology and ultra structures, biology including life cycles, host parasite relation-ship, pathological, physiological, chemotherapy, diagnosis including serological, immunological and other methods - nutritional, biochemical and biotechnology and other aspects of the parasites.

#### Veterinary Parasitology

 It is the branch of science which deals with the study of parasites and parasitism including classification, habit and habitat, salient morphological characters of parasites to identify the species, life-history including developmental stages found outside or inside of the host, pathogenesis including symptoms seen in host, methods of diagnosis (parasitological, serological immunological) of the disease (s) produced by parasites or group of parasites, treatment and control (chemoprophylaxis, immunoprophylaxis, general management, etc.) of domesticated animals and birds.

#### Veterinary Parasitology

• It is the branch of science which deals with the study of parasites and parasitism of domesticated animals and birds.

### Importance of Parasitology in Veterinary Curriculum

• Domesticated animals and birds, like their feral cousins, are parasitized by a vast array of different parasites like helminths, protozoa and arthropods, many of which are fairly harmless, but others are lethal. This means, that the impact of a parasitic infection varies considerably according to the species of the parasites involved.

 Some groups of parasites such as adult tapeworms are relatively harmless, but certain blood or tissue feeding species of nematodes are highly pathogenic. Mostly it is due to invasion with the larval stages rather than adult parasites that is responsible for outbreaks of clinical diseases and deaths of animals and birds.

 This holds true for the migrating larvae of Ascaris in pigs, many Strongyles larvae in horses and ruminants, the larval cysts of tapeworms and the highly destructive juvenile of liver flukes of some animals.

- By and large we can say that parasites are responsible for heavy economic losses to the livestock industry.
- These losses are partly due to deaths, but even more due to illness, reduced growth rate, decreased meat, milk, egg and wool production and due to loss of working energy in working animals.

## Thank you