



**NAVRACHANA
UNIVERSITY**

a UGC recognized University

School: School of Science
Program/s: M.Sc Life Science
Year: 2nd **Semester:** 3rd
Examination: End Semester Examination
Examination year: December-2021

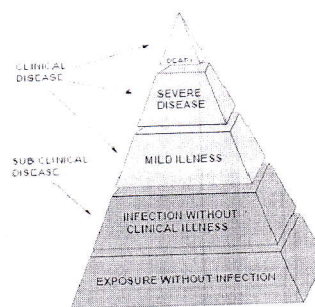
Course Code: LS-209 **Course Name:** Animal Nutrition and Health Management **Total Marks:** 40
Date: 02/12/2021 **Total Pages:** 02
Time: 08:30 am to 10:30 am

Instructions:

- There are total 6 questions in the paper. Necessary options are given in the paper.
- Read the questions carefully before answering
- Draw diagrams wherever necessary

Q. No.	Details	Marks	COs*	BTL#
Q.1	<p>Choose the correct option.</p> <p>1. Which is NOT TRUE about the proximate analysis?</p> <ol style="list-style-type: none"> 1. The Kjeldahl process is used to determine nitrogen content of crude carbohydrate. 2. In the dry matter determination water is removed from the sample whereas in ash determination the organic matter is removed from the dried sample. 3. Nitrogen-free extract (NFE) is an estimate of the non-structural carbohydrate content of the feed 4. Ether extract (EE) is a measure of fat content of the feed. <p>2. Fermented Forage plants relates to:</p> <ol style="list-style-type: none"> 1. Flash Grazing 2. Strip grazing 3. Hay 4. Silage 	2	CO1	B11, B12, B13
Q.2	<p>Fill in the blanks</p> <ol style="list-style-type: none"> 1. _____ is the second stomach compartment of a ruminant. 2. _____ is the first feed to newborn calf containing high amount of protein, immunoglobulins, antibodies etc. 3. _____ important role in the transport of iron ions from transferrin, found in the plasma, to ferritin, which acts as a store of iron in the bone marrow, liver and spleen. 	3	CO1	B11, B12, B13
Q.3	<p>True or False with justification</p> <ol style="list-style-type: none"> 1. Methanogenesis is an aerobic process which utilizes carbon as the terminal electron acceptor. 2. Ruminants diet mainly consist of cellulose and fiber which are subsequently digested by the enzymes secreted by the micro-organisms. 	3	CO1, CO2	B11, B12

	3. Cyclozooses required no invertebrate host for the completion of their life-cycle.			
Q.4	<p>Answer the question in brief</p> <p>1. What are concentrates and state examples of concentrates? 2. What is silage?</p>	4	CO1	B11, B12, B13
Q.5	<p>Answer the question in detail</p> <p>1. Write a note on Rumen development. 2. Differentiate between a calf nutrition and Heifer Nutrition.</p>	8	CO1	B11, B12, B13
Q.6	<p>Long answer type questions</p> <p>1. Explain in brief the digestive system of ruminants and the role of micro-organism in digestion of the feed with one example. OR Explain about microbial protein synthesis with special reference to RDP and UDP.</p> <p>2. Identify the given figure and explain in brief the model of epidemiology. OR What is epidemiology in context of veterinary science.</p> <p>3. Explain how ruminants are responsible for increasing the global greenhouse gas. OR What is methanogenesis and explain its different types.</p> <p>4. Describe three methods of disposal of cadavers. OR What is parasitology and explain different types of host-parasite interactions.</p>	20	CO1, CO2	B11, B12



*****End of Question Paper*****