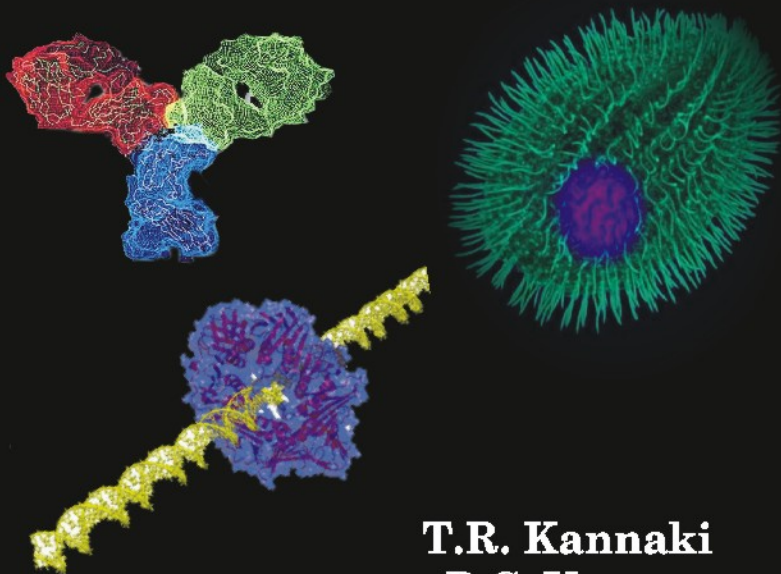


Objective type questions and answers in

Veterinary Immunology



T.R. Kannaki
P.C. Verma

Objective type questions and answers in
Veterinary Immunology

Dr. T.R. Kannaki, M.V.Sc.

Immunology Section,
I.V.R.I.

and

Dr. P.C. Verma, M.V.Sc., Ph.D.

Pr. Scientist,
I.V.R.I.



SCIENTIFIC PUBLISHERS (INDIA)

P.O. Box 91

JODHPUR

Published by:

Pawan Kumar

Scientific Publishers (India)

5-A, New Pali Road, P.O. Box 91

Jodhpur - 342 001 (Raj.)

Tel.: +91-291-2433323

Fax.: + 91-291-2512580

E-mail: info@scientificpub.com

www.scientificpub.com

© Kannaki & Verma, 2008

ISBN: 978-81-7233-521-2

eISBN: 978-93-87913-21-9

Laser typeset : Rajesh Ojha

Printed in India

Preface

Now a days students are in tough situation of tackling competitive environment. With the advances in educational system, the evaluation pattern has also been changed over time from traditional pattern to analytical pattern which needs deeper understanding and the ability to analyse. To cope up with system, students need more practice on their subject.

In an attempt to help the present situation we prepared the objective type questions and answers in Veterinary immunology covering essential aspects as well as wider areas. We prepared this book by keeping in mind about the competitive exams like ICAR-JRF, ICMR, CSIR-JRF and also semester exams of various Institutes.

We hope this book will be helpful for students as well as for teachers, we eagerly expect your comments and valuable suggestions to improve our work.

T.R. Kannaki
P.C. Verma

Contents

Preface

iii

1	Overview of immune system	1
2	Cells and organs of immune system	4
3	Antigens	11
4	Antigen processing and presentation	15
5	Structure and function of antibodies	26
6	Major histocompatibility complex	42
7	Immunoglobulin gene rearrangement	51
8	Lymphocytes	60
9	T and B cell maturation, activation and differentiation	78
10	Cell mediated effector responses	83
11	Complement system	96
12	Cytokines	102
13	Microbial immunity	109
14	Vaccines	113
15	Mucosal Immunity	118
16	Tolerance/ Immuno regulation	124
17	Clinical immunology	128
18	Immunomodulation	132
19	Immunodeficiency disease	135

20	Hypersensitivity	139
21	Autoimmunity	145
22	Transplantation immunology	149
23	Tumor immunology	160
24	Evolution of immune system	165
	Appendix	168