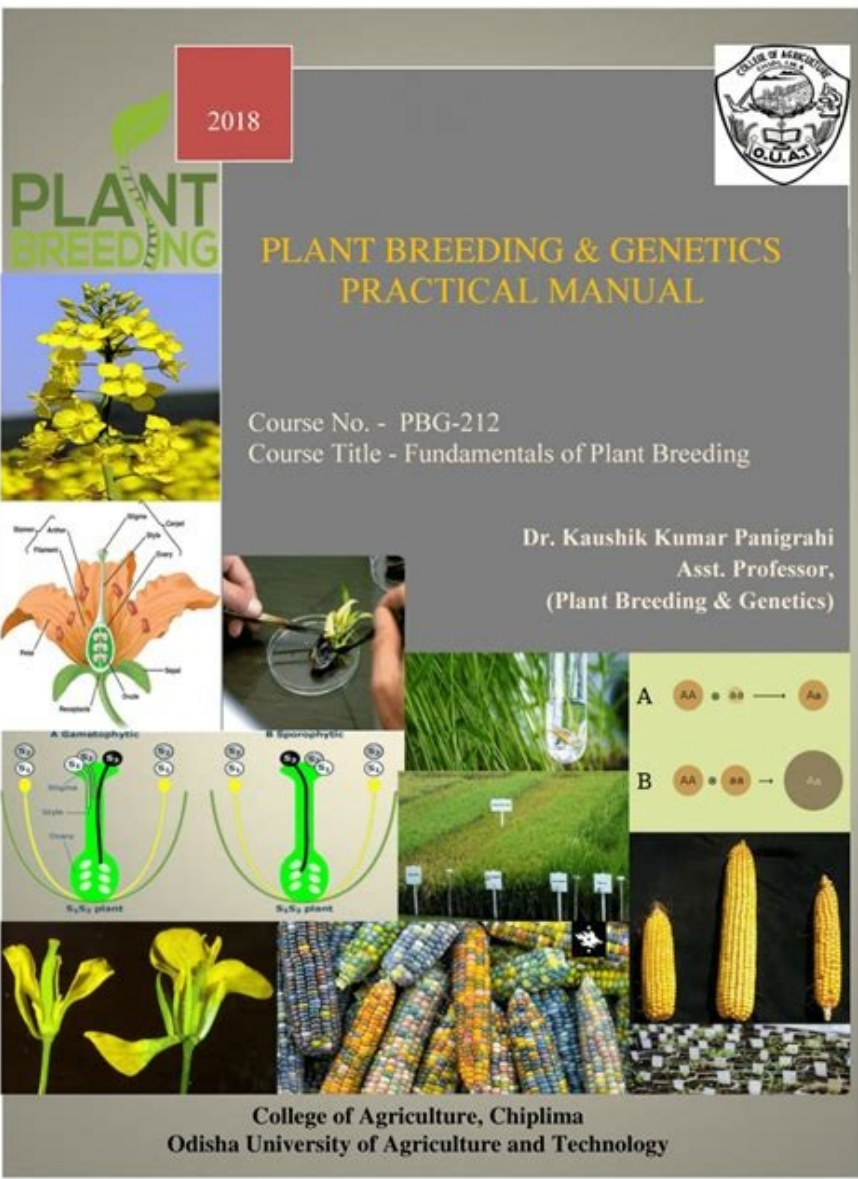


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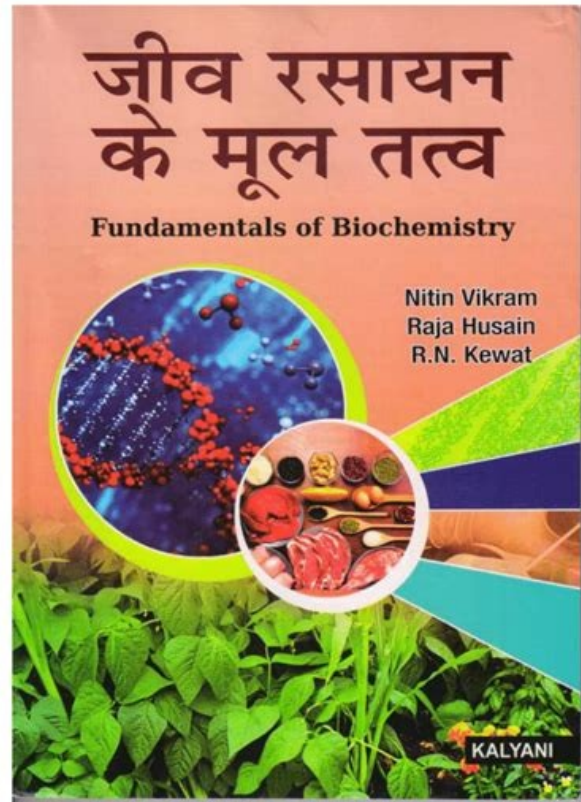
REGIONAL MSU PROGRAM ON:
AGRICULTURAL INFORMATION AND COMMUNICATION MANAGEMENT (AICM)

MODULE ON:
FUNDAMENTALS OF AGRICULTURAL INFORMATION AND COMMUNICATION
MANAGEMENT (AICM 101)

BY:
YASOD KUMAR (PhD)
ASSISTANT PROFESSOR

NOVEMBER 2014
Chapter One

1



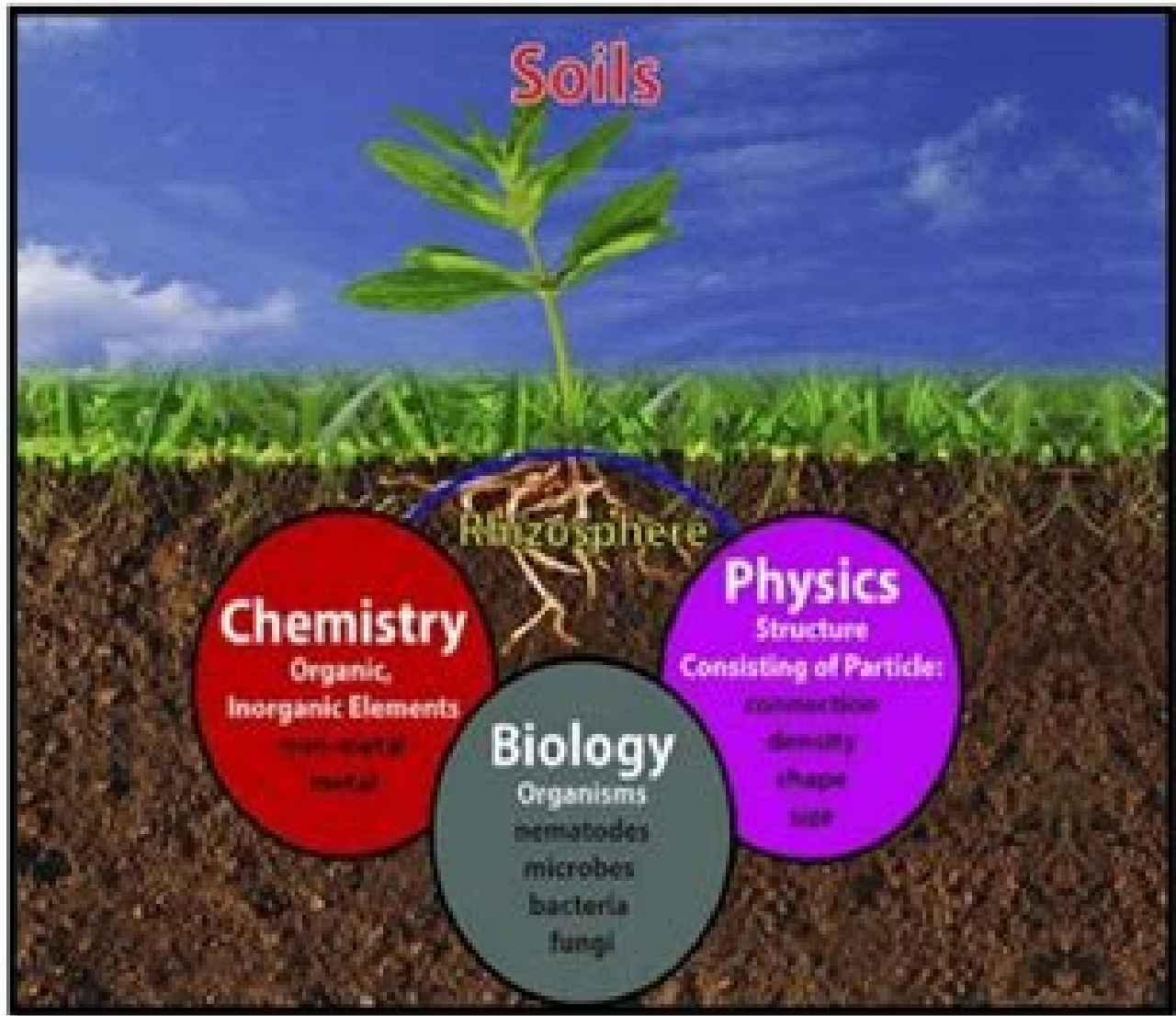
SAC 101

QUICK REVISION NOTES FOR

SAC 101 FUNDAMENTALS OF SOIL SCIENCE (2+1)

1st SEMESTER - B.Sc. AGRICULTURE (Hons.)

(TAMIL NADU AGRICULTURAL UNIVERSITY)



COMPILED BY

Ms. Keerthana G, Assistant Professor
Soil Science & Agricultural Chemistry
J.K.K. Munirajah College of Agricultural Science - Erode

Dr. M. Manimaran & Dr. R. Elangovan, Asst. Prof
Soil Science & Agricultural Chemistry
College of Agricultural Technology - Theni

BOOK REVIEWS

students. The contents have been chosen carefully to enable a good foundation for further studies in physics. The text is written in a coherent manner and the treatment of the topics chosen carries a flavour of the old style of teaching. The author introduction shows that he has a long academic experience, and this comes out in the book.

However, there are some issues to be addressed by the publisher or the author which would help in making the book a better resource.

1. The foreword and layout of the book should be improved to make it more appealing. In the present format it looks like a locally produced book, even though it has a rich content.

2. The author introduction is too detailed and should be cut down to one-third of its present size. In addition, it appears in two places – once inside and once on the back cover – one of them should be removed.

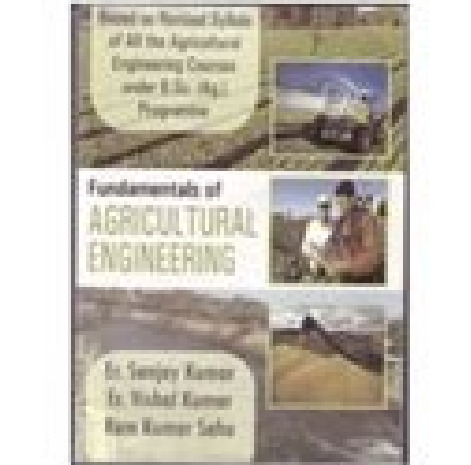
3. A photograph of Acharya Vinoba Bhave for the dedication is completely inappropriate in a science textbook. Physics is one of the most fundamental disciplines of human knowledge, and has nothing to do with the kind of spiritualism exemplified by Vinoba Bhave.

4. The preface is too long and elaborate, containing details of every chapter which is just a repetition of the table of contents. The preface should only mention facts like motivation for the book and acknowledgements. If any details of each chapter have to be included, they should be in the introduction to that chapter.

5. A better title for the book would be *Quantum Mechanics for Atomic Physics*, since the atomic physics part is only discussed in the last few chapters.

VASANT NATARAJAN

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Fundamentals of Agricultural Engineering. Er. Sanjay Kumar, Er. Vishal Kumar and Ram Kumar Sahu. Kalyani Publishers, New Delhi. 2013. 567 pp. Price: Rs 350.00, ISBN: 978-93-272-2168-8

This book is a good compilation of topics written by experienced authors and in many ways meets the present need of undergraduate agricultural engineering students. The book consists of five parts. Part one covers farm power, including thermodynamics, IC engine, combustion and fuel system, ignition system, cooling system, lubrication system and governing systems.

Part two comprises of farm machinery, including primary and secondary tillage equipment, sowing and planting equipment, weeding, interculturing and plant protection equipment, harvesting and threshing equipment, land development and horticultural equipment.

Part three deals with renewable energy, including energy resources, solar radiation, power cycle, solar collector, solar appliances, solar-photo voltaics, biomass, biomass gasification, briquetting of biomass, wind energy and liquid bio-fuel.

Part four covers food processing, including greenhouse technology, threshing, winnowing, decorticator/sheller, grain drying and storage structures, fruit and vegetable cleaning and grading, size reduction, evaporators and food safety standards.

Part five discusses soil and water conservation engineering, including surveying, levelling, irrigation, hydrology and soil and water conservation.

Overall, the book is a detailed and useful compilation of the basics in the field useful specifically for agricultural students.

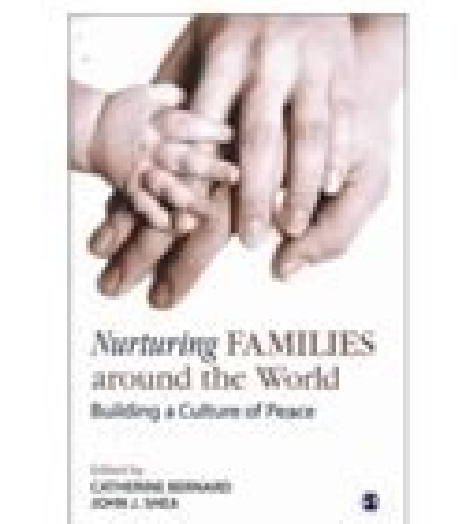
However, there are a few minor drawbacks. First, the book should have been arranged subject-wise, which would directly help the students. More figures and photographs are needed to explain a particular aspect practically. Need arises for more numerical and MCQ for individual parts, which will be useful for students taking competitive exams.

A second major concern is related to practical guidelines which will help the students to learn more about practical aspects. ICAR had laid emphasis on practical aspects like RAWE and experiential learning programmes in agricultural engineering.

In spite of these shortcomings, the book will be useful for B.Sc (Agricult) students. Figures and photographs are also nicely presented.

RAVIV YADAV

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Nurturing Families Around the World: Building a Culture of Peace. Catherine Bernard and John J. Shea (eds). SAGE Publications India Pvt Ltd, B1/1 Mohan Cooperative Industrial Area, Mathura Road, New Delhi 110 044. 2014. xxiv + 121 pp. Price: Rs 550.

The cover of this book translates the message the book aims to share with its readers. It speaks about the need of having secure and stable relationships within the family. At the time when the world is

SRB 99-02 Updates SRB 94-5 September 1999. Livestock Science, pp. 133-144. (1995) Agroecology: The science of sustainable agriculture. (2006) Strategies for Sustainable Land Management in the East African Highlands Pollan M. doi:10.1016/j.memsci.2012.05.016. (2007) The Omnivore's Dilemma: A Natural History of Four Meals Roberts W. "Beyond 'Inherit It or Marry It': Exploring How Women Engaged in Sustainable Agriculture." *Access Farmland*. The National Center for Sustainable Agriculture. Research and Education Program (PDF). She... health and well-being, and at the same time to increase the EU's competitiveness and resilience. doi:10.1016/j.geoforum.2007.01.002. "Pandemics result from destruction of nature, say UN and WHO". ^ a b Plant relationships. ^ Marks, Paul (15 January 2014). University of New England. 363 (1491): 447-465. ^ Reff, David. doi:10.5194/se-6-857-2015. PMID 30670643. CRC Press. ^ Mahmud, Kishan; Makaju, Shiva; Ibrahim, Razi; Missouai, Ali (2020). Retrieved 29 October 2019. ^ Matthew, Bossons. At the turn of the twenty-first century, experts questioned the industry's ability to keep up with population growth.[175] This debate led to concerns over global food insecurity and "solving hunger"[177] A common consensus is that sustainable farming is the most realistic way to feed growing populations. "Effects of land-use changes and soil conservation intervention on soil properties as indicators for land degradation under a Mediterranean climate". Food Security Act of 1985 continued commodity loan programs.[162][163] These policies incentivized profit over sustainability because the US government was promoting farms to maximize their production output instead of placing checks.[163] This meant that farms were being turned into food factories as they became bigger in size and grew more commodity crops like corn, wheat, and cotton. Retrieved 2021-03-03. ^ Rosane, Olivia (8 November 2021). This method is extremely productive and has recently been utilized by indigenous groups in the area and the nearby Amazon Basin to make use of lands that have been historically hard to cultivate. ^ Renting, H.; Rossing, W.A.H.; Groot, J.C.J.; Van der Ploeg, J.D.; Laurent, C.; Perraud, D.; Stobbehaar, D.J.; Van Itersum, M.K. (2009-05-01). "Indigenous Agriculture and Sustainable Foodways: A Review of the Potential for Sustainable Food Systems". *Indigenous Agriculture and Sustainable Foodways: A Review of the Potential for Sustainable Food Systems*. doi:10.1111/j.1467-9566.2011.01340.x. To obtain food.[146] Standards for Certification Certification systems are important to the agriculture community and to consumers as these standards determine the sustainability of products. Special Reference Briefs Series no. Retrieved 26 April 2022. Regeneration International. Journal of Membrane Science. doi:10.1111/j.1467-9566.2011.01340.x. ^ a b Carolan, Michael (2006). Or, when looking at a "problem", such as brushy vegetation, one considers how removing or altering it will affect soil and wildlife, and how these interacting forces would evolve over time and space. ^ "FAO - News Article: Food systems account for more than one third of global greenhouse gas emissions". U.S. Geological Survey. A sustainable future can be feasible if growth in material consumption and population is slowed down and if there is a drastic increase in the efficiency of material and energy use. National Academies of Sciences, Engineering, and Medicine (2019) Negative Emissions Technologies and Reliable Sequestration: A Research Agenda. ^ Stacey, Neil; Fox, James; Hildebrandt, Diane (2018-02-14). Bibcode:2007SciAm.297b..82G. ^ "Regenerative Organic Agriculture | ORGANIC INDIA". VSS are mostly designed and marketed by non-governmental organizations (NGOs) or private firms and they are adopted by actors up and down the value chain, from farmers to retailers. doi:10.1038/543016-021-00225-9. Often, the remaining ash from these burns would be used to fertilize their crops. The requirements can refer to product quality or attributes, but also to production and processing methods, as well as transportation. "Does Land Degradation Increase Poverty in Developing Countries?". Recent work in irrigated rice production system of east Asia has suggested that - in relation to pest management at least - promoting the ecosystem service of biological control using nectar plants can reduce the need for insecticides by 70% whilst delivering a 5% yield advantage compared with standard practice.[83] Vertical farming is a concept with the potential advantages of year-round production, isolation from pests and diseases, controllable resource recycling and more efficient transportation costs.[84] Water Waten efficiency can be improved by reducing the need for irrigation and using alternative methods. By improving the conditions of the forest, the local wildlife populations are increased, since there is no grass, no large grass. CITEREFHag1991 (help) ^ b Birnbaum Fox, Juliana (9 June 2010). "Sustainability through intervention: a case study of guerrilla gardening in Kingston, Ontario". Plants, Genes, and Agriculture. 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