Lucknow University Studies.

(Faculty of Science.)

WE have received eight neatly bound booklets from the Registrar of the Lucknow University, containing lectures delivered under the auspices of the faculty of science by professors belonging not only to Lucknow, but also to the Universities of Allahabad and Nagpur. These addresses have been published under the Editorial supervision of Professor B. Sahni, F.R.S., Dean of the Faculty, to whose zeal and initiative, this new feature of extra-mural intellectual activities of the University owes its inception. The addresses cover practically all the departments of knowledge embraced by the faculty of science, and they constitute an impressive record of knowledge useful alike to advanced students and to the junior members of the staff. A complete list of reference works is appended to each series of lectures, which must necessarily enhance their value for students engaged in post-graduate studies.

It is one of the legitimate functions of the Universities to portray the part which they play in representing internationally the intellectual activities of their professors and, in furnishing such a picture, the University of Lucknow has, through its "Studies", made an attempt at an organized means, of co-operation, whose results, though premature to assess, may have a far-reaching importance. The subjects which have been selected for the "Studies" include "The Theory and Constructure of Non-differentiable Functions (A. N. Singh); Recent Advances in Indian Palæobotany (B. Sahni); Nitrogen Fixation and Alkali Soil Reclamation (N. R. Dhar); The General Field Theory of Schouten and Van Dantzig (N. G. Shabde)" and others equally important. The scope of these studies is indicated in the preface attached to each series of lectures, and the subjects selected by the authors have been treated comprehensively. Each author has his own individual plan of presenting his topic, but all conform to the general principle underlying the scheme. The reader will find in these studies an ample banquet, and after tasting its sweets, will rise with an appetite.

"Vitaminised" Foods.

WITH the increasing realisation of the fact, that India suffers from an appalling degree of vitamin deficiency, it becomes imperative that the vitamin resources of the country should be fully and systematically explored and a means found to increase their production. The most economical way of achieving this object would be to improve the "quality" of foods—both vegetable and animal—with respect to their vitamin content. Attempts which have been made in this direction, elsewhere, have yielded highly promising results and should constitute the starting point for planning a more comprehensive scheme of investigation.

Feeding cows with irradiated yeast increases the vitamin D content of milk and this observation has been fully utilised in the production of 'vitaminised' milk, which has proved effective in the cure and prevention of rickets in children. A similar enrichment of the vitamin D has been effected in the case of eggs by feeding poultry with irradiated yeast. It is said that one of these eggs contains as much vitamin D as three teaspoonfuls of cod-liver oil.

The pigmentation of the yolk of eggs has been found to intensify by feeding hens with certain types of foods. Hens maintained on a diet of *paprika* lay eggs with intense colour and a remarkably high carotene content. Experiments with unicellular organisms, like yeast, have shown that the composition of the nutrient medium influences the formation of the ribo-flavin, aneurin and other components of the vitamin B complex. The vitamin content of the food forage crops is influenced by the fertility of the soil and particularly by the presence of certain catalytic elements like manganese and boron.