University and Educational Intelligence.

Mysore University.

1. *Personnel.*—Mr. J. C. Rollo, M.A., J.P., Principal, Maharaja's College, Mysore, was deputed as the representative of the University to attend the annual meeting of the Inter-University Board, India, held at Aligarh.

2. *Extension Lectures.*—The following extension lectures were delivered :—

M. R. Ry. Vaidyaratna G. Srinivasamurti Avl., Principal, Government Indian Medical School, Madras,—(in English) on "Principles of Ayurveda" at Mysore and Bangalore.

3. *Special Lectures.*—Six lectures on "The Rôle of Chromosomes in Inheritance" were delivered by Dr. Eileen J. Macfarlane, PH.D., D.SC.(Lond.), at Bangalore. The following is a synopsis of the lectures.

LECTURE I. *Mitosis, Meiosis and Variation.*—The chromosome theory of heredity and the cytological method of attack on genetical problems made possible by it. Cytological conclusions have been arrived at from genetical data and *vice versa*. The work of Newton, Darlington and Belling in interpreting karyokinesis according to the rule that the pairing of chromosomes is a criterion of their homology. The introduction of the statistical and inductive methods into cytology by Darlington. Our present knowledge of chromosome structure and the controversy as to the time of occurrence of the longitudinal split. An outline of chromosome behaviour during the course of vegetative and sexual reproduction in mitosis and meiosis, and the effect on variation in each instance.

LECTURE II. *Cytogenetics.*—Variation as an essential in genetical study, and the importance of choosing favourable material. The characteristics required in an organism by the geneticist, and an appraisal of the relative merits of *Pisum*, *Drosophila* and *Zea*. The value of Mendel's work and the cytological mechanism for his laws. Linkage and crossing-over correlated with chromosome number and chiasma-formation. Mutation of genes and its frequency. How linkage groups were identified with specific chromosomes in *Drosophila* and *Zea*. The work of Morgan, Bridges *et al.*, of Emerson, Anderson, McClintok *et al.* Double cross-overs, compensating chiasmata and "three-point tests". The linear arrangement of the genes. *Zea:* linkage testers; multiple allelomorphs; dicecious strains. The effect of X-rays on mutation (Mullur).

LECTURE III. *Hybrids or Heterozygotes.*—The Mendelian-hybrid and the Taxonomic-hybrid. Permanent heterozygotes. Sterility and irregularities of meiosis. Non-disjunction, asynapsis, fragmentation, deficiency and restitution nuclei. Similar irregularities caused by single genes, as shown by Gowans and Beadle, and by X-rays. The work of Blakeslee and Belling on Trisomic *Datura*. The universality of parasynapsis and meiotic prophase chiasmata as a necessity of pairing at first metaphase. Hybrids classified cytologically. Genic unbalance. Fertile interspecific hybrids indicate that the parents differ in minor genetic factors, and retain their identity only by isolation. Fertility of human hybrids.

LECTURE IV. *The Origin and Development of Polyploids and Structural Hybrids.*—An-euploids and euploids. Tetraploids. Auto-polyploids and somatic doubling with reduction of fertility. Allopolyploids or amphidiploids as a source of new fertile races in sterile hybrids of *Triticum*, *Primula*, *Nicotiana*, *Crepis* and *Brassica*. Where this work was done and by whom. Parthenogenesis in polyploid animals and plants. Structural hybrids in which there has been a re-arrangement of genic sequence. Reciprocal translocation is the cause of ring-formation in meiosis, and of semi-sterility. *Œnothera:* non-conformity of genetic data; inheritance of ring-formation; lethal combinations; Twin hybrids; normal pairing; the mutations of DeVries. Chiasma-frequency, structural hybridity and sterility in *Rosa*. (Illustrated.)

LECTURE V. *Cyto-Taxonomy.*—The experimental production of wild Linnean species, (*a*) directly by crossing two species (*Rosa*), (*b*) indirectly through amphidiploidy in a sterile species hybrid (*Æsculus*, *Galeopsis*, *Nicotiana*, *Gramineæ* and *Pomoideæ*). Outstanding work of Babcock, *et al.*, on *Crepis*; the most frequent chromosome number = 4, the most primitive number = 5. Identification of five types of chromosomes by Navashin. Transplant experiments of Hall, *et al.* Reduction of the redundancy of species of *Rosa* in North America through cytological and cultural studies by Erlanson. Parallel variation in *Rosa* and how the species in the section Caninæ are perpetuated sexually as permanent numerical hybrids. The contributions of Boulenger, Hurst and Tackholm.

Andhra University.

Professor Sir Saravapalli Radhakrishnan has been elected to the newly-founded Spalding Professorship of Eastern Religions and Ethics at Oxford. Sir S. Radhakrishnan is the first Indian to be elected to a professorial chair in the University of Oxford. The election is for five years from October 1, 1936.