# National and Endorsed Certificates in Biology

THE Institute of Biology reports that there was a substantial increase this year in the number of candidates taking the National and Endorsed Certificates in Biology. In England and Northern Ireland 143 candidates took the Ordinary Endorsed Certificate, while 40 sat for the Ordinary National Certificate in Scotland. There were 70 candidates for the Higher Certificate in Applied Biology in England and Northern Ireland, and 22 for the Higher National Certificate in Scotland. Technical colleges partici-pating were: Acton, Belfast, Brighton, Bristol, Brunel, Cambridgeshire, Ewell, Guildford, High Wycombe, Liverpool, Nottingham, Oxford, Salisbury, South-East Essex, and Stockport. In Scotland the colleges were Heriot-Watt College, Edinburgh, and Paisley Technical College. New courses for the Ordinary Endorsed Certificate are likely to be available for 1962 at Bromley, Llandaff, Mid-Essex, Slough, and Watford Technical Colleges. A leaflet describing the scheme for Endorsed Certificates is available from the Institute of Biology, 41 Queens Gate, London, S.W.7.

## Guide to University Entrance

FIRST published two years ago, the National Union of Teachers' University Entrance: The Basic Facts now appears in a much enlarged, third edition. It contains full and up-to-date details of the entrance requirements of all universities in the United Kingdom, including the new University of Sussex, as well as comprehensive information on grants, student activities and living costs, and an authoritative survey of university development as a whole. The guide appears at an opportune time for the many thousands of young men and women now making preparations to secure a university place for the 1962-63 session, and the teachers and others who advise them. Each secondary school providing courses leading to university entrance will receive one free copy. Other copies are obtainable from the National Union of Teachers, Hamilton House, Mabledon Place, London, W.C.1, price 4s. 6d.

#### The Vision of Nature

THE fifteenth Arthur Stanley Eddington Memorial Lecture was delivered on November 10, 1961, by Sir Cyril Hinshelwood. Sir Cyril's subject was "The Vision of Nature" and his theme emerged from his own words, "To deny the reality of the inner world is a flat negation of all that is immediate in existence: to minimize its significance is to depreciate the very purposes of living and to explain it away as a product of natural selection is a plain fallacy. At some point man reveals himself the artist, the urge to depict and represent being in great measure the desire to break down the barriers between the inner self and the external world, to grasp, understand, enjoy, create all in one: to achieve in a primitive way the identification of the subjective and the objective parts of existence." Art and science, Sir Cyril believes, have similar roots. He also discusses the inter-relationship of poetry, science and theology and concludes that scientists, artists, poets and theologians all form their images of the world. These are all incomplete, partial, relative, neither wholly true nor wholly false, but, in any ultimate reality, all must be comprehended, subsumed and transcended. Sir Cyril's discerning and penetrating lecture has been published under the title of The Vision of Nature (Pp. 33. Cambridge: At the University Press, 1961. 3s. 6d. net).

THE fourth annual report of the Royal Society Committee on Scientific Research in Schools shows that continuing interest by science teachers wishing to undertake research in schools has resulted in seven new projects either begun or now in the planning stage. Sixty-three separate scientific investigations are being administered by the Committee, involving fifty-six schools. During 1961 the Council of the Royal Society provided  $\pounds 2,000$  for grants to be made for special apparatus necessary for research to be undertaken. The scheme, whereby all projects administered by the Committee are carried out with the specialist advice and assistance of Fellows of the Society and by others, has proved its success, and the Committee gratefully acknowledges the valuable help given by these advisers. The Committee has been much stimulated by the continued and growing response to this scheme, and it is hoped that further requests will be received from schoolmasters and schoolmistresses, and that continued support of the Fellows of the Royal Society and others in acting as advisers and assistants in the extension of its activities will be provided. Four papers have already been published by schoolmasters in learned publications. Most of the schools where research is being carried out belong to the Headmasters' Conference and indicate more leisure and better laboratory facilities by the teachers concerned. It is gratifying, however, to see that Mr. R. M. J. Thomas, of a secondary modern school in Wales, is carrying out an investigation involving the measurement of ionosphere drifts.

### Wool Research in Australia

THE annual report for the year ended June 30, 1961, of the Wool Research Laboratories of the Commonwealth of Australia Scientific and Industrial Research Organization provides a readable illustrated account of the work of the three divisions of Protein Chemistry (Melbourne), Textile Physics (Sydney) and Textile Industry (Geelong) (Pp. i+41. Melbourne and Canberra: Commonwealth Scientific and Indus-trial Research Organization, 1961). It is the first such report to be issued separately, and for scientific details readers are referred to the list of scientific papers published during the year given at the end of the report. Among the studies mentioned are those by electron microscopy and X-ray diffraction on the intact wool film; chemical studies on wool and on proteins extracted from wool; research on the dyeing and felting of wool and on wool products such as hospital blankets; studies on the physics of wool, including set, recovery, and wool structure, wool staple strength, drying, relaxation shrinkage and the control of drafting by twist. Other work has been concerned with solvent degreasing, carding, combing, yarn sizing, the effect of fleece properties on processing and the mechanism of shrink-proofing.

### Paracypris siliqua

In spite of the wide geographical and statistical range formerly assigned to *Paracypris siliqua*, careful study by J. W. Neale, of the University of Hull, indicates that this Senonian ostracod has not yet been shown to occur outside the Upper Senonian of England and Northern Ireland (*Annals and Magazine* of Natural History, 4, No. 40; April 1961). Most of the forms referred to this species come from horizons well down in the Cretaceous and only the Senonian