

The Minister of Scientific Research and Cultural Affairs (Shri Humayun Kabir): (a) and (b). Government have no official information.

(c) No, Sir.

Civil Servants joining Commercial Firms

182. { **Shri Bade:**
Shri Buta Singh:

Will the Minister of Home Affairs be pleased to state:

(a) the number of retired civil servants (I.C.S., I.A.S. and I.P.S.) who applied to Government for permission to accept jobs in commercial firms during 1963 so far;

(b) the number out of them who were given permission; and

(c) the number employed by foreign and Indian firms and on what salaries?

The Minister of State in the Ministry of Home Affairs (Shri Hajarnavis):

(a) to (c). A statement is laid on the Table of the House. [Placed in Library, Sec No. LT-1851/63]

Exploitation of Coal at Talcher

183. **Shri Surendranath Dwivedy:** Will the Minister of Mines and Fuel be pleased to state:

(a) whether the survey mission of the overseas Technical Cooperation Agency of Japan has suggested more exploitation of coal at Talcher; and

(b) whether any special projects are under consideration for mechanising the existing coal mines and new ones at Talcher?

The Minister of Mines and Fuel (Shri Alagesan): (a) No.

(b) Besides the three existing collieries viz. Talcher, Durlbera and South Balanda, which are already mechanised, the National Coal Development Corporation has plans to open two other mines, Jagannath and

Nandira, in the Talcher coalfield. The Jagannath mine, with a capacity of 1 million tonnes, will be an open cast mine using modern draglines and shovels. Nandira, an underground mine with a capacity of 0.6 million tonnes, will be developed with Polish assistance by adopting the mechanised "long-wall with caving" method.

Processing Industrial Waste

184. { **Shri Surendra Pal Singh:**
Shrimati Savitri Nagam:

Will the Minister of Scientific Research and Cultural Affairs be pleased to state:

(a) whether it is a fact that the Central Building Research Institute in Roorkee has evolved new methods of processing industrial waste such as blast furnace slag and furnace residues into useful building materials, which can be used as substitutes for the conventional type of building materials which are in short supply these days; and

(b) if so, the types of building materials that are being made from industrial waste at this institute, and how the cost of these materials compare with the cost of conventional type of materials already in use these days?

The Minister of Scientific Research and Cultural Affairs (Shri Humayun Kabir): (a) Work on some industrial wastes has been carried out at the Central Building Research Institute, Roorkee.

(b) The following types of useful material have been tried in the laboratory and also on pilot plant scale:

(i) Fly Ash for the production of portland pozzolana cement; as a mix to partly replace cement in concrete; and for manufacturing sintered light weight aggregate.

(ii) Blast Furnace Slag in the manufacture of portland blast furnace cement; foamed or expanded slag as light weight aggregate; and lime-slag-sand mortars in place of conventional mixes.

(iii) Cinder (or Clinker) of certain grades in making plain light weight concrete. It is reported that cost of all these concrete favourably both in terms of money and saving of conventional building materials.

Gauhati Refinery

185. { Shri P. C. Borooah:
Shri Swell:
Shrimati Jyotsna Chanda:
Shri Rishang Keishing:

Will the Minister of Mines and Fuel be pleased to state:

(a) how far Gauhati Refinery has been working to its rated capacity and whether any of the units developed any trouble during the last three months;

(b) the total production of the refinery from the different units during each of the past three months, and

(c) how much of gas from the refinery has been burnt out as waste during each of these months?

The Minister of Mines and Fuel (Shri Anigesan): (a) The refinery has been working on full or near full throughout since August 1963. The Units have also operated satisfactorily except the Kerosene Refining Unit which was restarted after major overhauls and repairs with effect from 25th August 1963. The refinery was shut down from 26th October, 1963 due to the water supply crisis occasioned by the Brahmaputra river changing its course thereby entailing difficulty in pumping water to the Pumping Station maintained by the refinery. The Coking and the Distillation Units restart-

ed operation on 15th and 16th November 1963 respectively.

The Kerosene Refining Unit is likely to be restarted soon.

	Tonnes
(b) August 1963	42,693
September, 1963	44,913
October, 1963	56,847
(c) August, 1963	863
September 1963	69
October	00

Part-Time Engineering Courses

186. { Shri P. C. Borooah:
Shri Maheshwar Naik:
Shrimati Savitri Nigam:
Shri Sidheshwar Prasad:
Shri P. R. Chakraverti:
Shri N. R. Laskar:

Will the Minister of Scientific Research and Cultural Affairs be pleased to state:

(a) whether a scheme has been drawn out for providing part-time engineering courses for people working in industry;

(b) if so, the salient features thereof; and

(c) the financial implications of the scheme?

The Minister of Scientific Research and Cultural Affairs (Shri Humayun Kabir): (a) to (c). In addition to the earlier schemes for part-time National Diploma and National Certificate courses and part-time instruction for preparing students for the examinations conducted by various recognised professional bodies, the following schemes have recently been formulated:—

(i) *Scheme of part-time courses for State Diplomas in Engineering;*

It is a 4-year part-time course for preparing students for State Diplomas examinations in engineering. This course is specially meant for people working in the industry and other technical establishments for advancement in their respective occupations. It is proposed to start 25 centres in