

development programmes were initiated by the Government for the use of Hindi in computers. A Graphics and Intelligence based Script Technology (GIST) which provide facilities for transliteration among different Indian languages, has been transferred to industry for productionising.

Turnover of Indian Computer Companies

4825. SHRI RAMDAS SINGH: Will the PRIME MINISTER be pleased to state:

(a) whether some Indian Computer companies have achieved a turnover of rupees one hundred crore each; and

(b) if so, the names of these companies and the details of their production during 1988-89, 1989-90 and projection for 1990-91?

THE MINISTER OF STATE IN THE MINISTRY OF SCIENCE AND TECHNOLOGY AND MINISTER OF STATE IN THE DEPARTMENT OF EDUCATION IN THE MINISTRY OF HUMAN RESOURCE DEVELOPMENT (PROF. M.G.K. MENON): (a) and (b). Yes, Sir. These companies are CMC Limited, Hindustan Computer Limited (HCL) and Wipro Information Technology Limited.

CMC Limited is involved in the maintenance of imported as well as indigenous computers, software development for the domestic as well as export market, system engineering and turn-key solutions to computer based applications, computer networking services and education and training in the areas of computers.

HCL Limited is engaged in the manufacturing of computer systems which includes personal minis, work stations, software development, production of test and measuring instruments, tele-communication products, reprographic systems, photocopiers etc. and in marketing the imported instruments, computer systems, communication products and software.

WIPRO Information Technology Limited (WITL) is engaged in the manufacture of computer systems which include micros, minis, work stations and computer peripherals like printers, software development both for indigenous and export marketing, marketing of imported computer systems, software, medical instruments.

The turnover figures for 1988-89 and the estimated ones for 1989-90 and 1990-91 for the three companies are as follows:

(Figures in Rs. Crores)

<i>Year</i>	<i>CMC</i>	<i>HCL*</i>	<i>WIPRO</i>
1988-89	105	177	94
1989-90	120	300	115
1990-91	152	375	150

* Financial Year for HCL is from July to June.

Value of Import of Electronic Goods

4826. SHRI RAMESHWAR PRASAD: Will the PRIME MINISTER be pleased to state:

(a) the total value of electronic goods imported and manufactured each year in the country during the period 1st January 1986 to 31st December, 1989;

(b) the value of electronic goods exported each year during the same period; and

(c) the comparative figures in regard to the value of these goods for the period 1984-85 and 1989-90?

THE MINISTER OF STATE IN THE

<i>Year</i>	<i>Production (Rs. Crores)</i>	<i>Export (Rs. Crores)</i>
1984-85	2081	155
1985-86	2880	178
1986-87	3855	258
1987-88	5285	343
1988-89	7030	520
1989-90	9210	850

Since foreign trade data is maintained only for broad commodity group, data for import of electronic components/good is not separately available.

Research and Development Programmes of Centre for advanced Technology, Indore

4827. SHRI M.M. PALLAM RAJU: Will the PRIME MINISTER be pleased to state:

(a) whether the Centre for Advanced Technology at Indore has come up with any innovative applications for industry and medicine, using laser and accelerator technology;

(b) if so, the details reflecting direct benefits to industry and medicine; and

MINISTRY OF SCIENCE AND TECHNOLOGY AND MINISTER OF STATE IN THE DEPARTMENT OF EDUCATION IN THE MINISTRY OF HUMAN RESOURCE DEVELOPMENT (PROF. M.G.K. MENON): (a) to (c). The total value of production and export of electronics during the period from 1984-85 to 1989-90 is as under:

(c) the annual amount spent so far on research and development by the Centre since its inception?

THE MINISTER OF STATE IN THE MINISTRY OF SCIENCE AND TECHNOLOGY AND MINISTER OF STATE IN THE DEPARTMENT OF EDUCATION IN THE MINISTRY OF HUMAN RESOURCE DEVELOPMENT (PROF. M.G.K. MENON): (a) and (b). Centre for Advanced Technology (CAT) has been set up to take up major programmes in the areas of accelerators and lasers. The main programme in the area of accelerators is to construct two synchrotron radiation sources, INDUS-1 and INDUS-2. These synchrotron radiation sources will emit intense vacuum ultraviolet radiation and X-ray which will find wide applications in basic research, medicine, and industry. CAT is also developing industrial electron accel-