

(c) if so, the details thereof and if not, the reasons therefor?

THE PRIME MINISTER (SHRI VISHWANATH PRATAP SINGH): (a) Gratuity and Family Pension are based on the pay last drawn. Leave encashment is based on the pay plus D.A. last drawn by the retiring employee. Pension is calculated with reference to average emoluments drawn during 10 months preceding retirement.

(b) No, Sir.

(c) The Fourth Central Pay Commission has very recently reviewed the pension structure of Central Government employees in depth and has specifically recommended that the existing scheme under which pension is calculated with reference to average emoluments drawn during the last 10 months of service should continue. This recommendation has been accepted by Government. Hence the question of changing the rule to calculate pension on the basis of last pay drawn does not arise.

Language Based Research in India Languages

4979. **SHRI PYARELAL KHANDELWAL:** Will the PRIME MINISTER be pleased to state:

(a) whether Government are aware of the growing interest of computer scientists in USA to use Sanskrit Grammar for developing Machine Translation programmes:

(b) whether there is any scheme to promote the use of computers in language education and language based research in Indian languages, such as translation, text understanding, text generation and phonetics;

(c) if so, the targets, budget, and esti-

mated achievements during the Eighth Plan of the scheme; and

(d) if not, the reasons therefor?

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) Yes, Sir. Research papers published in USA during 1985 and 1986 have examined the possibility of using Sanskrit grammar to evolve an appropriate knowledge representation scheme. However, their application in developing practical machine translation system is yet to be established.

(b) Department of Electronics has drawn up a programme, namely, Technology Development for Indian Languages (TDIL) for implementation during the Eighth Plan with the thrust areas, namely, Development of Learning Systems, Machine translation Systems and Human Machine Interface Systems. The activities relating to use of computers in language education and language based research such as translation, text understanding, text generation and phonetics are included under the above thrust areas.

(c) The main targets and estimated achievements of the programme include development of authoring systems; language learning systems, especially for slow learners, speech and hearing impaired; limited domain computer assisted translation systems; human-machine interface systems, such as shorthand and character recognition systems; multi-lingual information display systems; limited vocabulary speech input-output systems etc.

An amount of Rs. 17 crores is estimated for this programme during the 8th Plan but this is yet to be finalised.