

- (b) if so, the details thereof;
- (c) whether there are similar schemes in technical departments of Electronics, Space, Non-conventional Energy sources, Oceanography, Atomic Energy etc. if so, the details thereof; and
- (d) if not, by when such a scheme is likely to be introduced in a uniform manner?

THE MINISTER OF STATE IN THE MINISTRY OF SCIENCE AND TECHNOLOGY (PROF. M. G. K. MENON): (a) and (b) Yes Sir, Department of Science and Technology (DST) has such scheme. The objective of the scheme is to improve the work efficiency, performance quality and Productivity of the various officials, including scientists, working in DST. As per this scheme, an awardee is given a cash award of Rs. 1500 This award is normally given to a maximum of three persons once in two months. There is also a scheme in DST to award Cash prizes to various officials, including scientists, for doing their official work in Hindi as per the guidelines issued by the Department of Official Languages. Hindi week is celebrated each year and Hindi competitions are organised; prizes are given to the winner.

- (c) and (d) Information is being collected and will be laid on the Table of the House.

Use of Sanskrit/Vedic Mathematics for Computer Based Systems

3032. SHRI KAILASH NARAIN SARANG; Will the PRIME MINISTER be pleased to state:

- (a) whether it is a fact that Sanskrit provides clues to design computer based systems for natural language understanding and translation and that vedic mathematics provides clues for designing graphic software and basic processing units, and if so, the details thereof;

- (b) what are the conclusions of various workshops held on these topics and the programmes identified for this purpose;

- (c) whether there is any status report on these topics and if so, the details thereof;

- (d) if no, the reasons therefor; and

- (e) by when it would be prepared and made available?

THE MINISTER OF STATE IN THE MINISTRY OF SCIENCE AND TECHNOLOGY (PROF. M. G. K. MENON): (a) and (b) The Workshop on Sanskrit and natural language understanding held in Bangalore in 1986 had considered the investigations on Sanskrit for natural language understanding in computers. As a sequel to this, projects on Sanskrit Tutoring system are currently under way at Centre for Development of Advanced Computing (C-DAC), Pune and Jawaharlal Nehru University, New Delhi, which are expected to provide clues to the natural language understanding and translation.

There is no project at present on the use of Vedic Mathematics for designing graphics software and basic processing units.

- (c) The following reports have been prepared on this topic.

- (i) Synthesis of advanced computing technology and Sanskrit.

- (ii) Sanskrit and Computers.

- (iii) Paninian model for intelligent natural language processing.

- (iv) Role of Sanskrit-Pratyayas in natural languages processing.

- (v) Sanskrit sentence parser.

- (vi) Paninian Grammar Platform.

- (d) and (e) Do not arise.

Distribution of Electronic Industry in the Country

3033. SHRI KAILASH NARAIN SARANG: Will the PRIME MINISTER be pleased to state:

(a) what have been the distribution of electronic industry during last 5 years, State-wise;

(b) whether there is a disparity in this regard;

(c) if so, what are the reasons of sustained disparity;

(d) what are the time bound targets to equalize the State-wise distribution of electronic industry; and

(e) what is the success rate of attempts of the Deptt. of Electronics towards ensuring quality of electronic products in market?

THE MINISTER OF STATE IN THE MINISTRY OF SCIENCE AND TECHNOLOGY (PROF. M. G. K. MENON): (a) Statewise production of electronic items during last 5 years is given in the Annexure. (See Appendix CLV, Annexure No. 103.)

(b) Yes, Sir.

(c) and (d) Union Government encourages the setting up of electronics industries throughout the country. The State Governments provide facilities and create conditions conducive for setting up such industries in the State, and the Department of Electronics gives necessary guidance and processes the issue of approvals. However, the actual setting up and performance of the electronic units depend upon the promoters of industry and the other factors affecting the industry. This may result in disparities in the levels of development of the electronic industry in different States. Special efforts are being made by the Department of Electronics to promote electronics industry in States/areas which are at present lagging behind. However, it is not possible to have a time bound programme to equalize the distribution of electronic industry.

(e) Department of Electronics, (STQC Directorate) have set up a chain of Laboratories throughout the country for providing testing facilities & Quality Advisory services etc. to the

industry with a view to render assistance to the industry for manufacture of Quality products in the area of Electronics. The testing of electronic products in India as per national, international standards is not obligatory. However, the Department of Electronics have introduced an International Certificate Scheme for components (IECQ) under which the manufacturer can avail of the facilities of testing and certification for export of their products by STQC Laboratories which have international recognition. Department of Electronics have in addition also started certifying electronic products like CTV receivers which are given IS quality mark in collaboration with BIS.

Sale of Computers by Kendriya Phandar and Super Bazar

3034. SHRI KAILASH NARAIN SARANG: Will the PRIME MINISTER be pleased to state:

(a) whether it is a fact that Kendriya Bhandar and Super Bazar sell computers;

(b) if so, whether it is mandatory that such computers have bilingual processing facility; if so, the details thereof;

(c) if not, what corrective measures are proposed to be taken to ensure sale of only bilingual computer systems;

(d) whether the Department of Electronics are aware of the difference in prices of computers being sold by Kendriya Bhandar and Super Bazar; and

(e) what steps have been taken to ensure sale of only bilingual computers at uniform prices?

THE MINISTER OF STATE IN THE MINISTRY OF SCIENCE AND TECHNOLOGY (PROF. M. G. K. MENON): (a) Yes, Sir.

(b) These Computers have options for bilingual processing facility. However, it is not mandatory, at present.