

Technology Transfer; National Research Development Corporation (NRDC); Central Electronics Limited (CEL); National Information System for Science and Technology (NISSAT).

Marine Archaeological Studies at Dwaraka

1175. SHRIMATI KISHORI SINHA : Will the PRIME MINISTER be pleased to state :

(a) whether marine archaeological studies at Dwaraka have established an ancient city that went under water many centuries ago;

(b) if so, the details thereof;

(c) whether further studies in marine archaeology regarding several coastal cities of the ancient days which went under the sea have been conducted; and

(d) if so, the outcome thereof ?

THE MINISTER OF STATE IN THE MINISTRY OF SCIENCE AND TECHNOLOGY AND MINISTER OF STATE IN THE DEPARTMENTS OF OCEAN DEVELOPMENT, ATOMIC ENERGY, ELECTRONICS AND SPACE (SHRI K. R. NARAYANAN) : (a) Marine archaeological studies have established that the ancient city of Dwaraka went under water some 3500 years ago.

(b) Under water explorations undertaken during 1982-88 in the Arabian Sea off Dwaraka and in the Gulf of Kutch near Bet Dwaraka revealed the following :

— Stone fortification walls, gateways, pillars and other architectural features of a temple and a jetty.

— The thermo luminescence date of distinct pottery from Bet Dwaraka, also found in Dwaraka, is 3520 years before present.

— Perforated stone anchors found are reported to be similar to those in use in Syria and Cyprus during 14th to 12th century B.C.

— Earthen jar inscribed in the evolved late Indus script of 14th—15th Century B.C. provides an important

link between the Indus valley writing and Ashokan Brahmi script.

— The antiquities include iron anchors, copper and bronze objects and wooden hull of a wrecked ship.

(c) No further studies regarding cities of ancient days which went under the sea have been conducted.

(d) Does not arise.

Time Capsule for Preserving the Constitutional Documents

1176. SHRIMATI KISHORI SINHA : Will the PRIME MINISTER be pleased to state :

(a) whether the scientists of National Physical Laboratory have developed a time capsule for preserving the Constitutional documents; and

(b) if so, the details thereof ?

THE MINISTER OF STATE IN THE MINISTRY OF SCIENCE AND TECHNOLOGY AND MINISTER OF STATE IN THE DEPARTMENTS OF OCEAN DEVELOPMENT, ATOMIC ENERGY, ELECTRONICS AND SPACE (SHRI K.R. NARAYANAN) : (a) The scientists of the National Physical Laboratory (NPL) New Delhi are in the process of developing a system for preserving the Constitutional documents of India.

(b) In this programme, NPL is developing a suitable receptacle for the Constitution of India. This receptacle will contain an inert helium gas (instead of air) with optimum moisture content. Any small ingress of air into the receptacle which implies start of deterioration is detected automatically. A suitable monitoring device of his kind, thus, is expected to ensure a strict control on the air content in the receptacle and hence the state of health of the Constitutional documents.

Capacity Increase by BEL

1177. SHRI Y.S. MAHAJAN : Will the Minister of DEFENCE be pleased to state :

(a) whether Government propose to increase the capacity for manufacture of