

(b) if so, where and since how long and the present position thereof?

THE MINISTER OF STATE IN THE MINISTRY OF HEALTH AND FAMILY WELFARE (KUMARI SAROJ KHAPARDE) (a) and (b) Hepatitis-B Vaccine is no more under development in research as plasma derived recombinant DNA Hepatitis-B Vaccine (Yeast Derived) have already been produced and marketed in Western countries Presently Hepatitis-B Vaccine is imported in our country for use in high risk group Production of Hepatitis-B Vaccine in India is under consideration

**Development of Computer for Blind by Indian Institute of Science, Bangalore**

9796 DR G VIJAYA RAMA RAO Will the Minister of HUMAN RESOURCE DEVELOPMENT be pleased to state

(a) whether a computer for blind has been developed at the Indian Institute of Science, Bangalore,

(b) if so, the details thereof and the results of field trials,

(c) the cost of each unit and the number of units manufactured and sold in the country so far, and

(d) whether Government propose to provide the above computer to various organisations in the country engaged in the task of providing relief and training to the blind?

THE MINISTER OF STATE IN THE DEPARTMENTS OF EDUCATION AND CULTURE IN THE MINISTRY OF HUMAN RESOURCE DEVELOPMENT (SHRI L.P. SHAHI) (a) and (b) A Braille trainer computer to facilitate self-learning of Braille has been developed by a student of the Institute This equipment is organised to teach blind people typing using a conventional key-board and a Braille type-writer Only a laboratory model has so far been made and the preliminary results are encouraging.

(c) and (d). Since a prototype to enable mass production is yet to be developed, these questions do not arise.

**Suggestion to Discontinue Mass Inoculation against Cholera**

9797 SHRI SRI HARI RAO  
SHRI PRAKASH CHANDRA.  
SHRI SUBASH YADAV  
SHRI M RAGHUMA REDDY

Will the Minister of HEALTH AND FAMILY WELFARE be pleased to state

(a) whether an expert Committee of immunologists and other medical scientists has recommended discontinuation of mass inoculation against cholera,

(b) if so, the details of the recommendations made, and

(c) the alternative measures proposed to be taken to save people from this dreaded disease?

THE MINISTER OF STATE IN THE MINISTRY OF HEALTH AND FAMILY WELFARE (KUMARI SAROJ KHAPARDE) (a) and (b) A meeting of the Group of Experts was held at New Delhi on 29.1.1988 to review the efficacy of cholera vaccine and its use in natural calamities such as floods and drought and routine public health practices The Group recommended as under;

-- routine anticipatory cholera inoculation in public health practice is of little use and be discontinued

-- Cholera vaccination is not recommended to combat the epidemic it had occurred since it neither contains the spread of disease nor saves the lives of affected persons and distracts the attention and resources of health authorities from much needed and effective environmental control measures including health education,

-- cholera vaccination facilities can continue to be provided on demand on a voluntary basis at all hospitals and health centres;

-- as an adjunct to the other important