# GOVERNMENT OF INDIA MINISTRY OF EDUCATION <br> DEPARTMENT OF HIGHER EDUCATION 

LOK SABHA
UNSTARRED QUESTION NO. 1047
TO BE ANSWERED ON 26.07.2021

Reshuffling of subjects in Engineering Courses
1047. SHRI LAVU SRI KRISHNA DEVARAYALU:

## Will the Minister of EDUCATION be pleased to state:

(a) whether the All India Council for Technical Education (AICTE) has proposed to make Mathematics and Physics optional in Class XII for admission into engineering courses;
(b) if so, the details thereof;
(c) whether the AICTE has assessed the number of teachers required to offer bridge courses to engineering students who have not studied these subjects;
(d) if so, the details thereof;
(c) the other steps taken or proposed to be taken by the AICTE in this regard?

## ANSWER <br> MINISTER OF EDUCATION

## (SHRI DHARMENDRA PRADHAN)

(a) \& (b):Yes Sir. There are 14 options of subjects provided in All India Council for Technical Education (AICTE) Approval Process Handbook (APH) 2021-22 for admission in Engineering and Technology. Out of 14 subjects at class XI \& XII, if a student has not done a certain subject which is essential for the study of a specific discipline of engineering, then student shall be required to take pre-requisite additional course (s) either on Massive Open Online Courses (MOOCs) before joining the degree programme or at least in the very first year of engineering before proceeding to learn advanced courses in Mathematics, Physics, Chemistry and Biology which are part of Model curriculum of AICTE for different engineering courses.
(c) to (e): APH has a provision for the universities to offer suitable bridge courses such as Mathematics, Physics, Engineering drawing, etc for the students coming from diverse backgrounds to achieve desired learning outcome. Further, most of the bridge courses are available on MOOCs and therefore students can take benefit of this arrangement. The existing faculty of the institutes can hold the bridge classes.

