GOVERNMENT OF INDIA
MINISTRY OF EDUCATION
DEPARTMENT OF SCHOOL EDUCATION & LITERACY

LOK SABHA
UNSTARRED QUESTION No.1090
TO BE ANSWERED ON 08.02.2021

Engineering Solutions

†1090. **SHRI ANIL FIROJIYA:**
     SHRI DIPSINH SHANKARSINH RATHOD:
     SHRI MOHANBHAI KALYANJI KUNDARIYA:

Will the Minister of EDUCATION be pleased to state:

(a)   whether any scheme has been formulated to provide complete engineering solution to the students and teachers of the N.I.C. and C.B.S.E. Engineering Graphic Syllabus;

(b)   if so, the details thereof;

(c)   the scheme being formulated to facilitate free flow of creativity and imagination in the students across the country;

(d)   if so, the details thereof; and

(e)   if not, the reasons therefor?

ANSWER
MINISTER OF EDUCATION
(SHRI RAMESH POKHRIYAL 'NISHANK')

(a) and (b): No scheme has been formulated by Central Board of Secondary Education (CBSE) to provide complete engineering solution to the students and teachers of the National Informatics Center (NIC) and CBSE. However CBSE and NIC have signed a MoU on 14th January 2021 to provide CollabCAD software support and training for students and faculty of Engineering Graphics in CBSE affiliated schools.

(c) and (d): The Central Board of Secondary Education (CBSE) has informed that the Board has taken the following measures to promote creativity among students in the schools affiliated to it:

    (A)   **Curriculum:**

    (i).   In addition to major curricular areas, the curriculum of CBSE incorporate creative areas such as Music, Dance, Fine Arts and subjects like design thinking, coding, artificial intelligence etc.

(ii). CBSE has adopted Competency Based Education by making Learning Outcomes compulsory and places premium on application of creative and critical thinking skills in real life contexts.

(B) **Pedagogy:**

CBSE advocates creativity in pedagogy and teachers in CBSE schools, through annual pedagogical plans, use Context Based Learning Experiential Learning, Art and sport integrated education, toy-based learning and gaming etc. wherein they encourage critical and creative skill.

(C) **Assessment:**

(i). CBSE has started modifying design of its question papers to align them more towards testing understanding rather than content by adding 10 percent higher order application oriented Source/Case based Questions on real life contexts in each successive year till the year 2025. This will shift the education system from the rote learning to context based learning.

(ii). To enhance critical and creative thinking and generate curiosity among students by connecting learning with real-life situations, CBSE has started providing Critical and Creative Thinking (CCT) exercises on weekly and monthly bases in English, Mathematics and Science. Seven editions of monthly practice assessment and 46 weekly editions have been published on DIKSHA.

(D) **Student Enrichment Activities:**

CBSE conducts plethora of Student Enrichment activities to support the formal teaching and learning and promote creativity. Some of the major activities are Eik Bharat Shreshth Bharat, Heritage India Quiz, CBSE Expression Series for Students, Āryabhaṭa Ganit Challenge, Reading Challenge, Science Exhibition, Celebration of Constitution Day, Swachhta Pakhwada, Fit India Movement, CBSE Storytelling Competition, Celebration of 150th Birth Anniversary of Mahatma Gandhi and Eco Clubs.

(E) **Resource Material:**

CBSE has made available training manual/handbooks for teachers on Creative and Critical Thinking Skills and 21st Century Skills.

(e): In view of inputs mentioned in the part (d) above, question does not arise.

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