GOVERNMENT OF INDIA MINISTRY OF EARTH SCIENCES RAJYA SABHA UNSTARRED QUESTION No. 1309 ANSWERED ON 11/12/2025

DEEP OCEAN MISSION

1309. SHRI BHUBANESWAR KALITA:

Will the Minister of Earth Sciences be pleased to state:

- (a) the manner in which the Deep Ocean Mission contributes towards advancing the country's scientific capabilities and bolstering the blue economy;
- (b) what is the role of the Mission in understanding of deep-sea ecosystems, contributing to sustainable fisheries and biodiversity conservation;
- (c) whether any important deep sea discovery has been made since the launch of the Mission; and
- (d) the details of current projects sanctioned under the Mission along with their projected cost?

ANSWER

THE MINISTER OF STATE (INDEPENDENT CHARGE) FOR MINISTRY OF SCIENCE AND TECHNOLOGY AND EARTH SCIENCES (DR. JITENDRA SINGH)

- (a) Deep Ocean Mission (DOM), a pilot initiative comprises of six verticals was launched in 2021 to unlock the blue economy and sustainably managing ocean resources. These six verticals focus on a) Development of Technologies for Deep Sea Mining, Manned Submersible and Underwater Robotics, b) Development of Ocean Climate Change Advisory Services, c) Technological Innovations for Exploration and Conservation of Deep-Sea Biodiversity, d) Deep Ocean Survey and Exploration, e) Energy and Fresh water from the Ocean, and f) Advanced Marine Station for Ocean Biology. The mission envisages expanding the country's scientific research and technological capabilities, with immediate spin-offs in underwater engineering innovations, asset inspection and the promotion of ocean literacy and human resource development.
- (b) DOM helps expand scientific knowledge of deep-sea biodiversity and its ecosystems. Under the Mission, surveys of nearly 25 seamounts (biodiversity hotspots) in the Arabian Sea and the Bay of Bengal have been conducted. These surveys help understand species' distribution, population connectivity, and habitat associations, which can be utilised to improve efforts in sustainable fisheries and strengthen biodiversity conservation.
- (c) Yes Sir. Around 39 potentially new-to-science species have been discovered. The geophysical surveys have identified sites of two active and two inactive hydrothermal vents (which are potential sites of multi-mineral deposits).
- (d) A total of 138 research projects to various national institutions across the country have been sanctioned under the Deep Ocean Mission as of date, at a total projected cost of Rs. 358.56 Cr.
