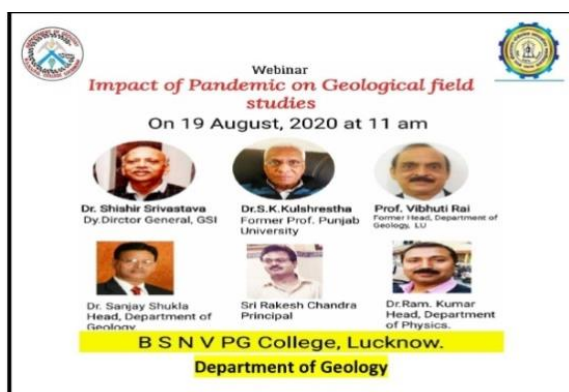


## ACTIVITIES OF GEOLOGY DEPARTMENT IN SESSION 2020-21.

### Dr. Sanjay Shukla, Head, Department of Geology

The continued COVID-19 pandemic has adversely affected the academic environment of every institution, and we have to find some alternative solution. Students have been promoted to next semesters and new session started with online classes.

1. Department Organized National Webinar on **Impact of Pandemic on Geological field studies** on 19th August 2020. **Dr. Shishir Srivastava (Dy. Director General)**, Geological Survey of India, **Prof. S. K. Kulshrestha** (Punjab University, Chandigarh), **Prof. Vibhuti Rai** Lucknow University, **Dr. Sanjay Shukla** and others put forward their views regarding the safe field work of geoscientists. A large number of professors, geoscientists, research scholars and students from GSI, Wadia Institute of Himalayan Geology, BSIP, BHU, HNB, Allahabad, Agra, Saagar, Kumaon, Mumbai, Jodhpur, Udaipur and Kerala Universities attended.



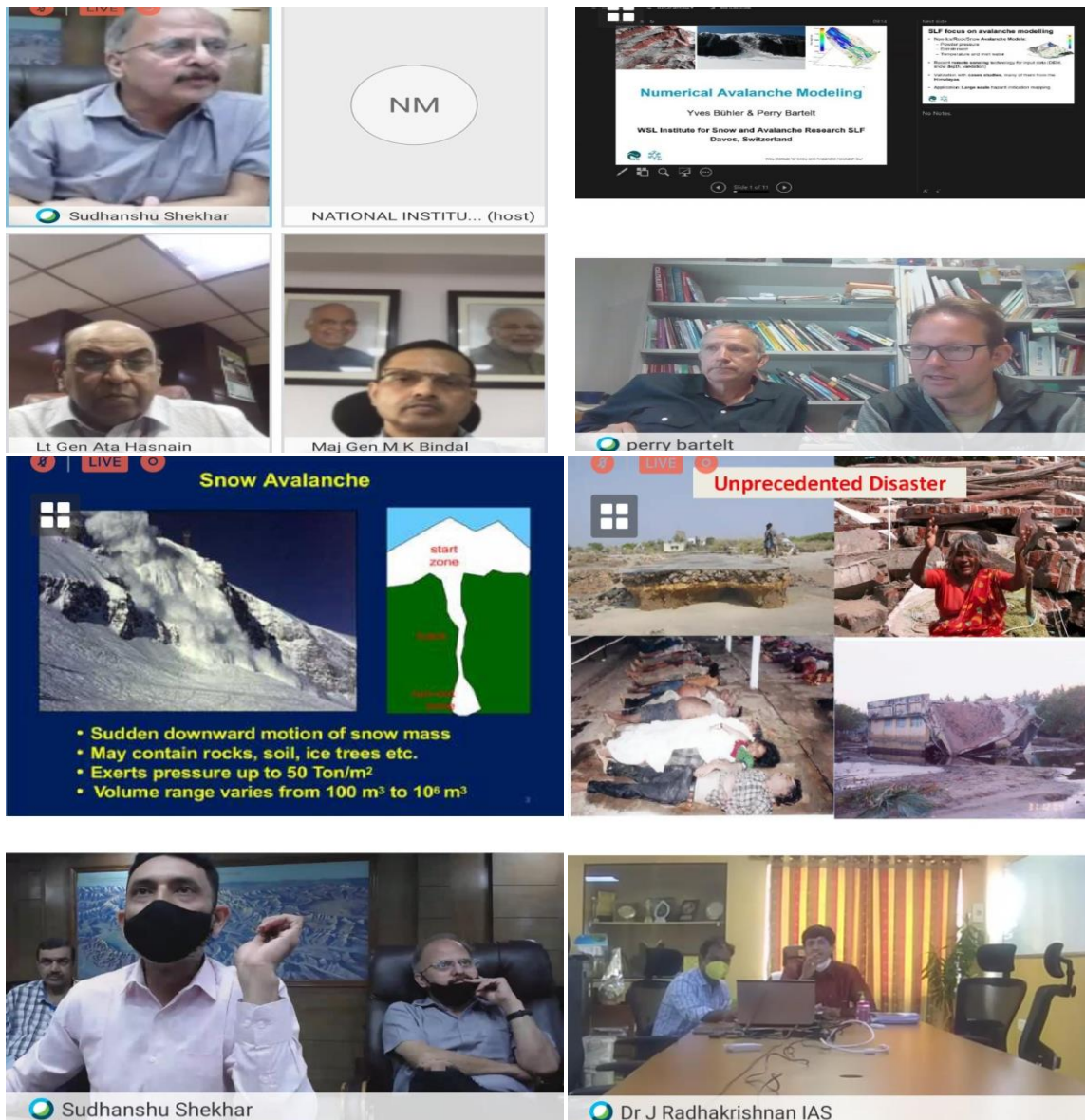
2. Attended National Institute of Disaster Management (NIDM) Ministry of Home Affairs, Govt of India's **International Webinar on Snow and Avalanche Risk management** collaboratively with Snow and Avalanche Study Establishment (SASE) and Swiss Agency for Development and Cooperation (SDC) on 25 August 2020, on NIDM CISCO WebEx platform.

Distinguished speakers were Lt Gen Syed Ata Hasnain, PVSM, UYSM, AVSM, SM, VSM, BAR and member NDMA, Maj. Gen. Manoj Kumar Bindal, ED, NIDM, Naresh Kumar, Director (SASE) Ms. Coinne Demenge, Head Cooperation, (SDC), Dr. Perry Bartelt, (SDC), Dr. Yves Buhler (SDC) (Swiss Agency for Development

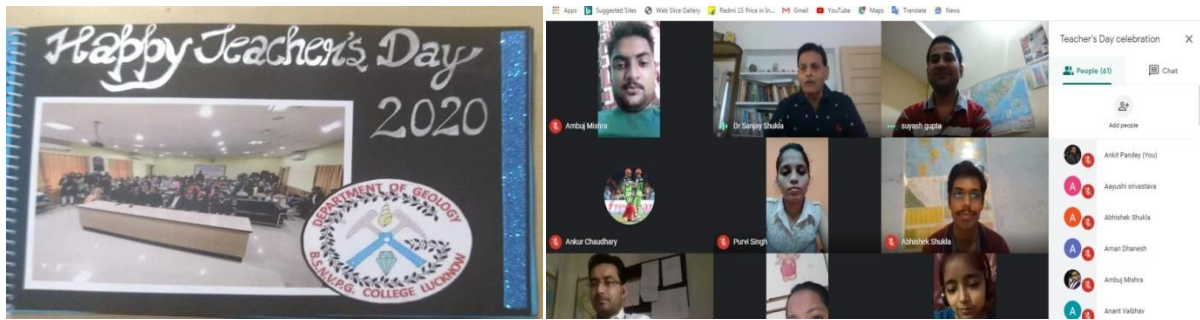
and Cooperation), Prof. Surya Prakash, Head, GMR Div. NIDM and Dr Sudhanshu Shekhar (SASE).

3. Attended another National Institute of Disaster management (NIDM), Ministry of Home affairs, Govt. of India's International webinar on **Tsunami Risk reduction and Resilience**, collaboratively with Indian national Centre for Ocean Information Service (INCOIS) on 1st September 2020.

4. The new students in department were welcomed by the seniors by arranging a get to gather and introduction function.

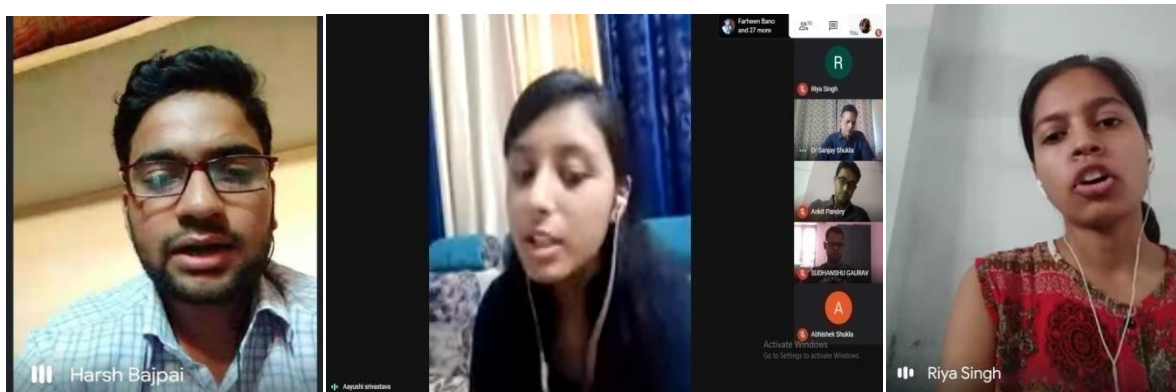


5. COVID 19 pandemic has changed our ways of celebration but not the enthusiasm and excitement of students. On **5<sup>th</sup> September 2020**, **Virtual Teachers day function was organized on Google Meet App**. Students of the department along with the teachers and alumni joined the function, shared their experience and wished the teachers with the poetry, speech, singing, presentations etc. skills. Students presented a very beautifully crafted and drafted Scrap book with around 50 photographs.



6. On 16<sup>th</sup> October 2020, **International Fossil Day** was celebrated in department (on Virtual Mode).The theme of discussion/presentation was “**Significance of Fossils**”. Large number of students participated and also won prizes for best presentation. All the teachers and guests were present.

7. On January 9<sup>th</sup> 2021 **Extempore by students** was organised on topics given to them. More than 20 students participated and shared their thought. Four students were selected for best presentation and given prizes.



**Pictures of International Fossil Day function (Virtual mode)**



Few pictures of extempore participants in department

8. **B.Sc. Semester III and Semester V practical examinations were held on February 2<sup>nd</sup> and 3<sup>rd</sup> 2021 respectively.**

9. The continued corona infection in various parts of the country and parent not allowing their wards to go outside the state for a week restricted our **fieldwork to nearby areas of Ganga plains, in and around Lucknow, Sitapur, Unnao and Kanpur**. The students learned the use of different geological instruments. To take bearing, plotting and calculation of width/distance etc. was done. Various features of fluvial system and sedimentary structures were also studied on river deposits of Ganga and Gomati Rivers on **March 8 and 12, 2021**.





Few Glimpses of Fieldwork in Ganga Plains

10. On 22 March 2021, **International Water Day** department organized many activities including a lecture/ presentation on “**Sustainable management of Water Resources**” by Dr. Sanjay Shukla. Many practices were discussed to save and minimum wastage of water in crises areas especially in cities, which play a major role in wastage of drinking quality water..

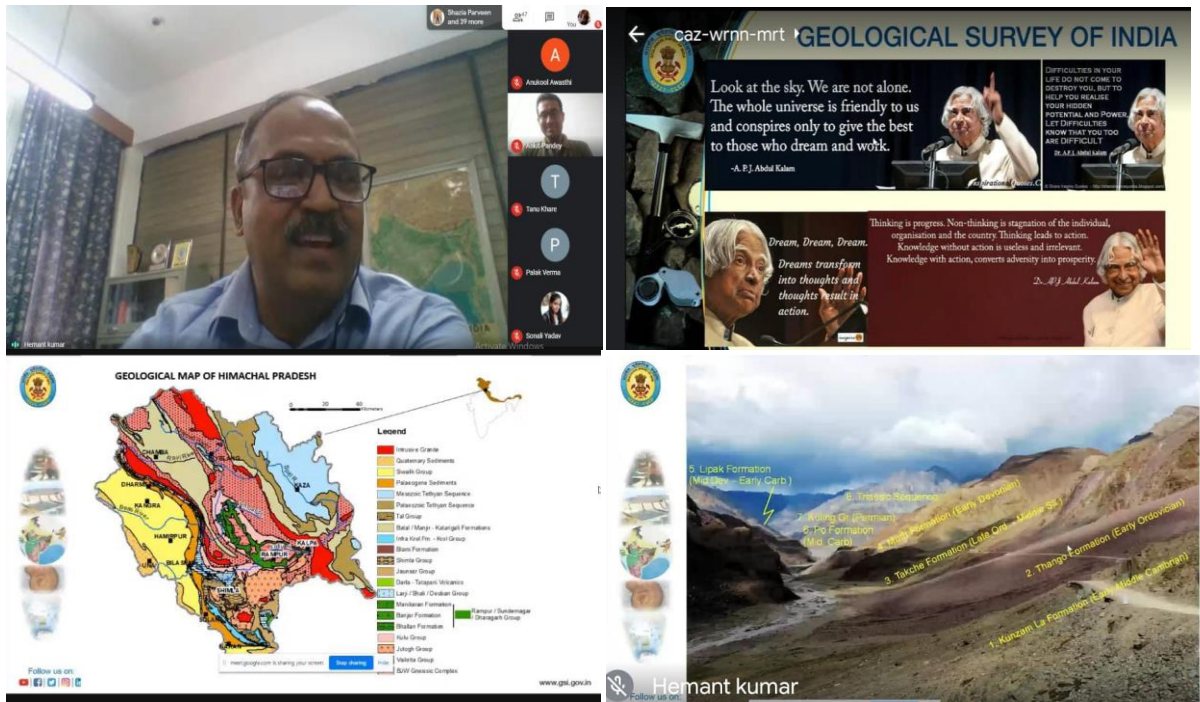


Related to the theme 18 oral and 16 poster presentations were done by students. Among them presentations of Urvashi Tewari, Arpita Shanker, Nakul Shukla, Harsh Bajpai, Purvi, Ria Singh, Deepti Gaur, Nilotpal Gautam, Mavish, Muskan Maurya, Anupriya, Shazia, Muskan Sharma, HariOm Bajpai, Abhinav Pandey and Shivam were good. Prof. S.K. Kulshrestha and all faculty members were present.

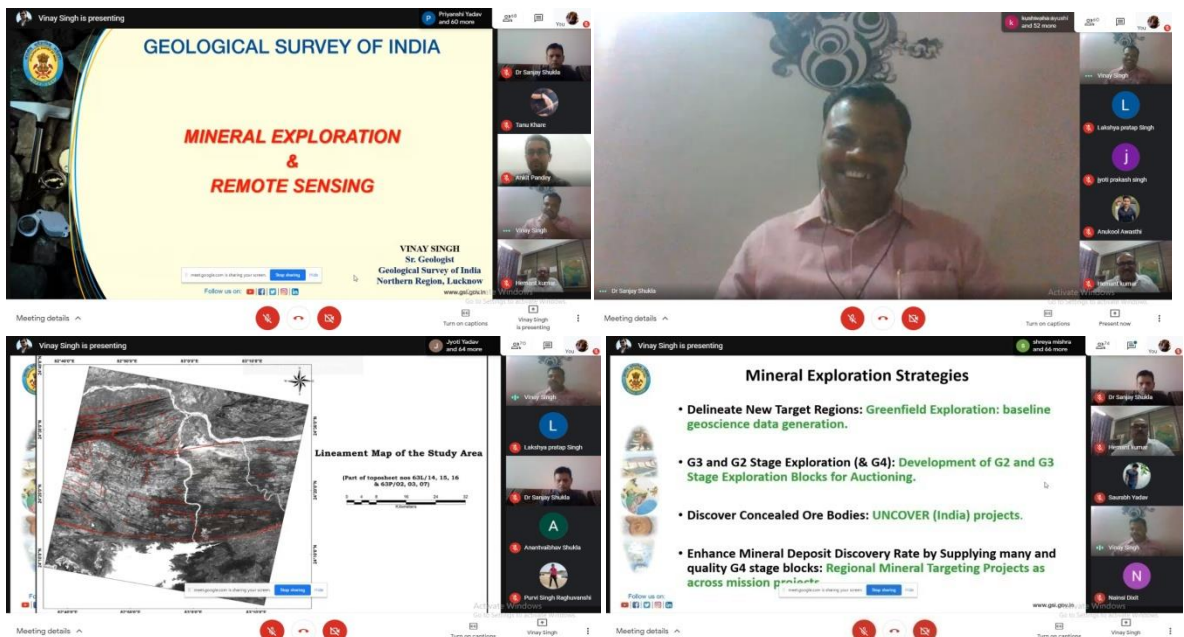


11. On 7<sup>th</sup> April 2021 an online invited lecture on **Geological Architecture of North western Himalaya** by **Mr. Hemant Kumar, Director, Geological Survey of India**, was

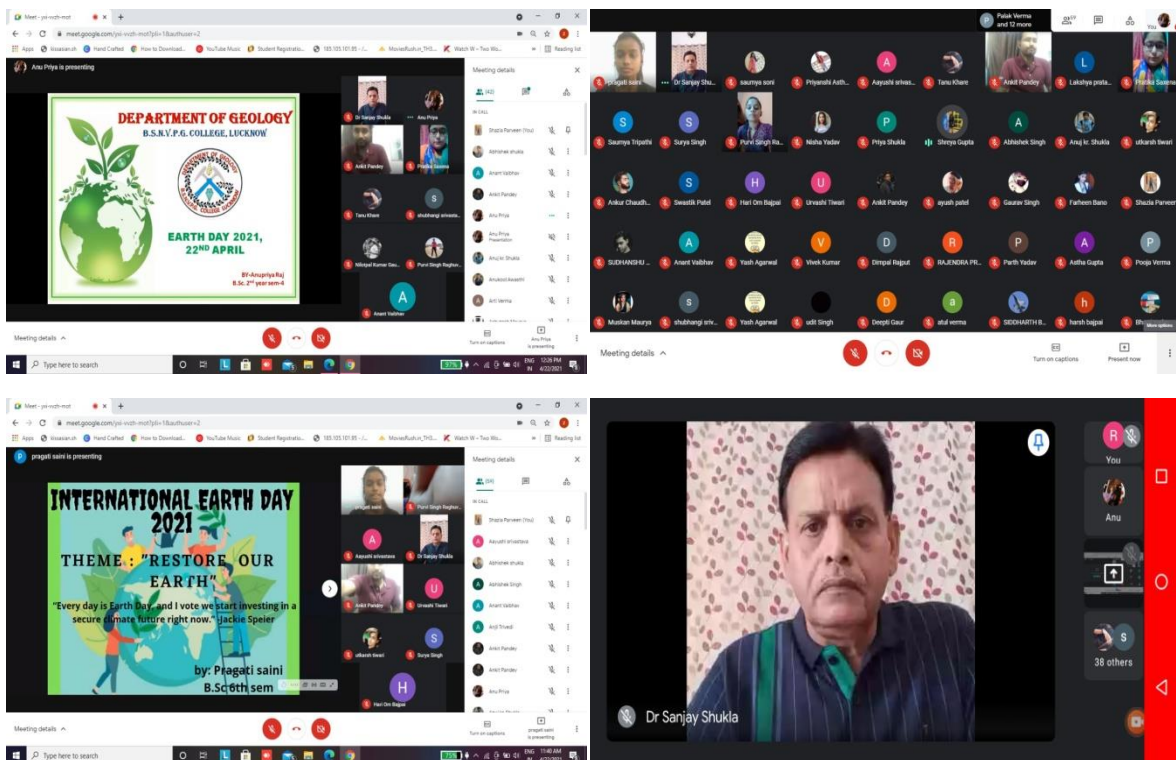
organised by the department. This lecture was scheduled earlier but due to COVID 19, colleges were closed and physical gathering was avoided. All the geology students and teachers attended and took part in interaction. Mr. Hemant Kumar, alumni of this department took this opportunity to guide the young students.



12. On 9<sup>th</sup> April 2021 another online lecture was organised on **Mineral Exploration and Remote Sensing** by **Dr. Vinay Kumar Singh, Senior Geologist, Geological Survey of India**. Dr. Singh very precisely explained why, where and how these techniques are used. Students took keen interest in lecture and freely interacted.

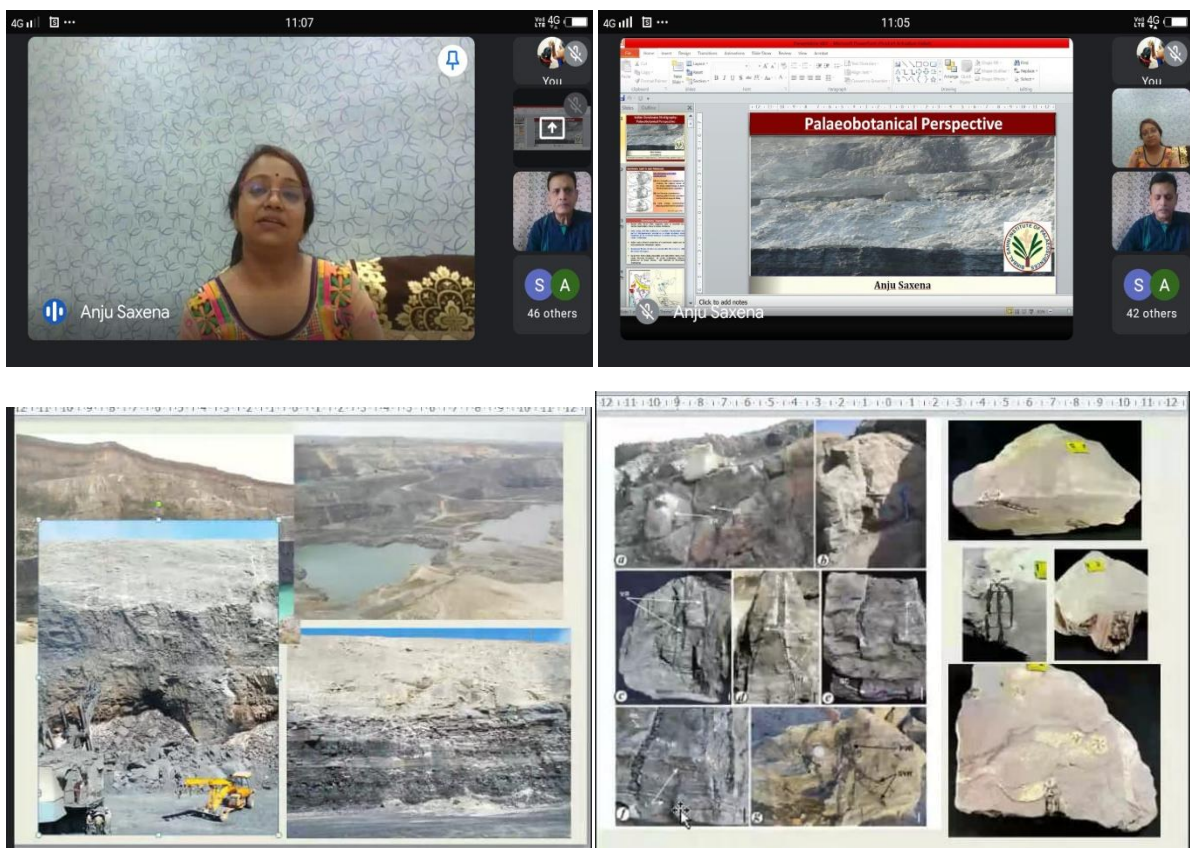


13. On **22 April 2021**, Online **International Earth Day** was celebrated in Department. Starting with the plantation at home, speeches on protection of earth and its resources, educating society to come forward and join hand for this noble cause, poetry and power point presentations. Stop use of harmful plastic products, proper disposal of waste materials, conservation of natural resources and strict action on violators were the main points of deliberations. The function was very well conducted by Purvi Singh, Anupriya Raj and Tanu Khare. All the teachers, students of Geology and many former students were present. At last Dr. Sanjay Shukla summarised the key points and concluded the function.



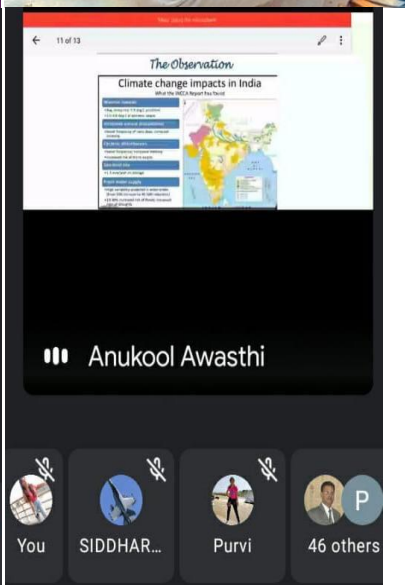
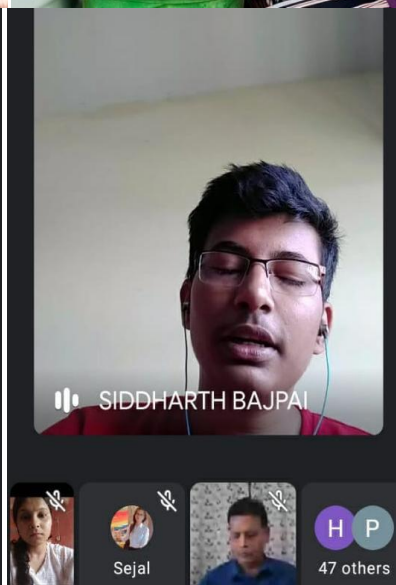
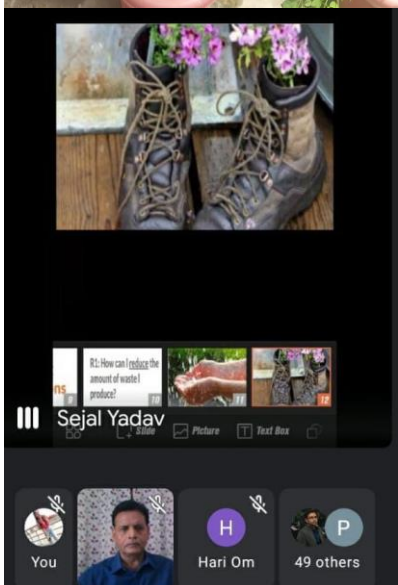


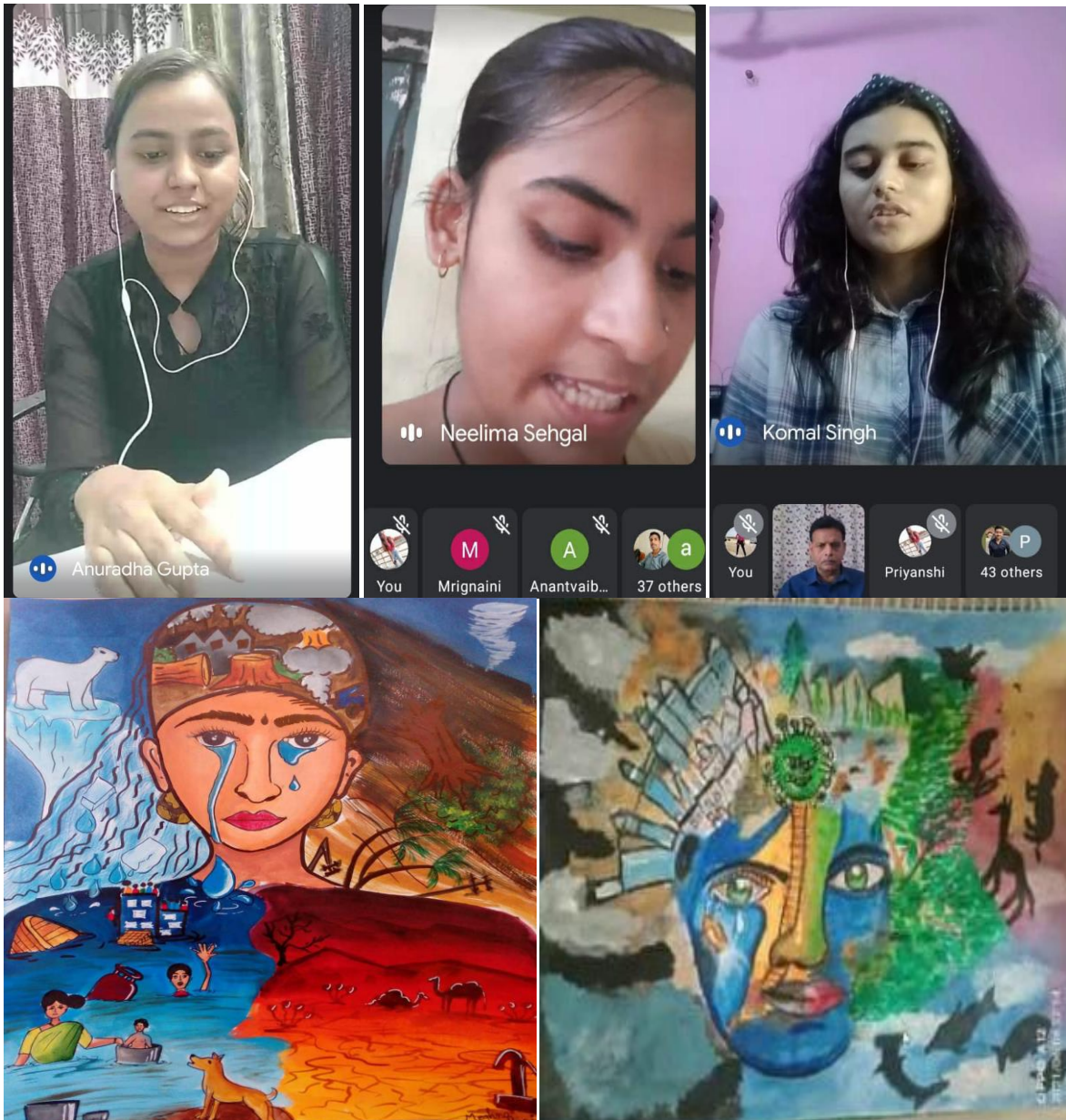
14. On May 15, 2021, A lecture on “**Indian Gondwana Stratigraphy: palaeobotanical perspective**” by **Dr (Mrs) Anju Saxena**, scientist D at BSIP, Lucknow was organized. The Gondwana Super Group is an important group to study the tectonics, sedimentary sequences, plant fossils, stratigraphy, coal deposits of India from late Palaeozoic to Cretaceous period. Earth witnessed major changes in land/ ocean distribution, climatic conditions, land animals and plants. Diversification of flora both qualitative and quantitatively has given rise to the coal seams of peninsular India. Dr. Anju a renowned scientist and researcher delivered an excellent, elaborate and informative lecture with the help of numerous slides from field to laboratory.



15. On **June 5, 2021 International World Environment Day** was celebrated virtually but due to poor connectivity on Google meet it was again organised on **June 07, 2021**. The plantation was done by students at their houses/places. Many students participated in speeches, case studies of environmental problems, power point presentations, posters and poems. Global warming, water, land, air pollutions, waste disposal, reduce, reuse and recycle, conservation of natural resources, biodiversity, irregular seasonal changes, spread of environmental awareness etc. were the main topics. Students are very energetic and enthusiastic and need guidance in right direction, so that they can give their best towards the

society and environment. Apart from teachers of the department, Priyanshi Asthana and Tanu Khare helped in organising the function. Few glimpses of the event.





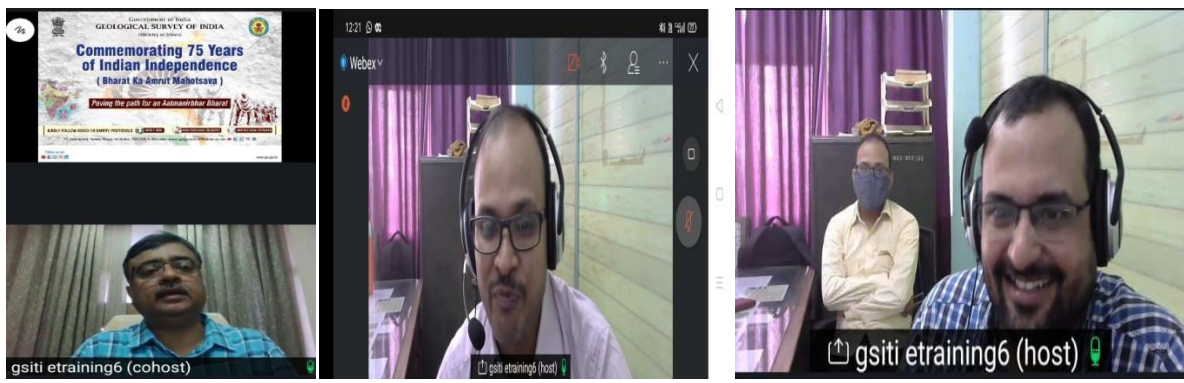
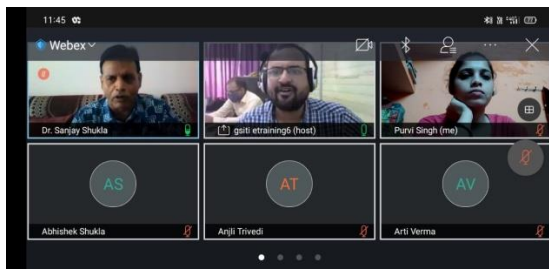
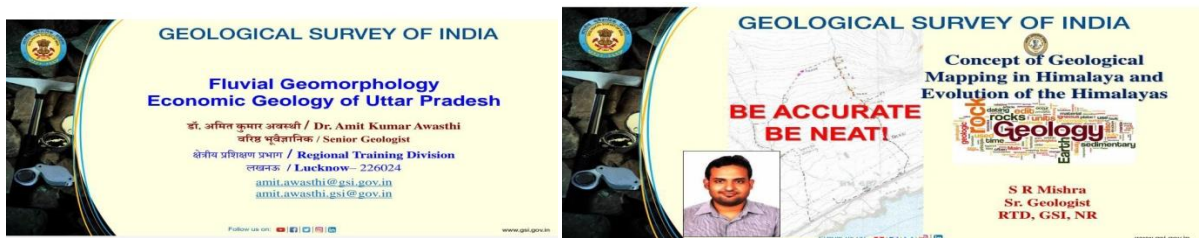
16. On June 12, 2021 an invited lecture on “**Ground Water Contamination**” by **Dr. P.K.Singh, Director, GSI, NR**, was organized by geology department. Dr. Singh is an alumni of BHU and an expert in mapping , special data handling and ground water contamination studies. Studies on sources, types and causes of water contamination in different areas of U P were discussed with their remedial measures. Drinking water parameters and permissible limits of Arsenic, Fluoride, Lead, Chromium, Mercury and Cadmium etc elements in water by WHO, BIS and UPEPA were presented and discussed with faculty and students. Few pics.

Metal	Sources
Chromium	Mining, industrial coolants, chromium salts, leather tanning, paint
Lead	Batteries, paints, E-waste, Smelting operations, coal-based thermal power plants, ceramics, bangle industry
Mercury	Thermal power plants, fluorescent lamps, hospital waste, electrical appliances etc.
Arsenic	Geogenic processes, smelting operations, thermal power plants, fuel burning
Copper	Mining, electroplating, smelting operations
Vanadium	Catalyst, sulphuric acid plant
Nickel	Smelting operations, thermal power plants, battery industry
Cadmium	Zinc smelting, waste batteries, e-waste, paint, fuel combustion, pulp, electroplating, Tobacco
Zinc	Smelting, electroplating

17. On June 27, 2021, we attended a webinar on **India's Deep Sea Mission** organized by **Centre for contemporary research ,Dona Paula ,Goa**, the eminent speaker was **Dr. Sathesh C Sheno**i, former Director INCOIS, Hyderabad. A huge amount of mineral wealth is present under the oceans. Its extraction and execution need not only specialised research and technology but also clearance from Government and huge funds . Scientists from many fields and organizations are involved in this endeavour. **Dr. Sheno**i explained the various steps taken in this regard. Dr. Rajiv Nigam former Director, National Institute of Oceanography, Goa, Prof D.M. Banerjee, Dr. Pinakpani, Mr. Rasik Ravindra and many geoscientists from india and abroad were involved in the deliberations. Many students also attended the lecture.

18. On June 29 and 30, 2021, we had opportunity to organize lectures from GSI under “**Commemorating 75 years of Indian Independence (Bharat ka Amrut Mahotsav )** for

our students. Lectures on Basic concept in mapping, Evolution of Himalayas, Fluvial geomorphology and Economic wealth of Uttar Pradesh were organised. **Mr. Prakash Srivastava, Director, Regional Training Division, GSI NR** addressed the sessions and interacted with us. Lectures were presented by **Dr. Amit Awasthi, Senior Geologist**, alumni from our department, and **Dr. S.R. Misra, Senior Geologist** in GSI NR training division in Lucknow. They shared the systematic and detailed description of geological studies in their respective lectures and had question answer session. Students also took part in conversation with experts.



Few pictures of the interactive sessions with GSI (JUNE 29 and 30, 2021).