BIRLA INSTITUTE OF TECHNOLOGY

(A Deemed to be University u/s 3 of UGC Act)

MESRA: RANCHI

CE553: Earth and Rockfill Dam

End Semester Examination

Time: 2 hours Marks: 50

Answer all the questions. All questions carry equal marks.

- 1. What is the importance of geology in selection of a suitable site for dam?
- 2. Briefly discuss the laboratory compaction test for cohesive soils.
- 3. With the help of a sketch, show different components of a zoned dam.
- 4. Briefly discuss the deformation of earth dams due to dead loads.
- 5. What is freeboard? How do you decide the freeboard in an earth dam?
- 6. Briefly discuss the filters in earth dam. How do you find the dimension of filters?
- 7. Describe the placing and compaction of natural construction materials during construction of earth dams.
- 8. What are embankment defects?
- 9. How do you determine the capacity of reservoir?
- 10. Describe the role of instrumentation in the safety of a dam.

25/04/2022 E