1. Name of the Activity: Expert Lecture on "Grid Operation Challenges with Low Inertia Generations"

Name of department/ Section/ cell conducting the activity	Department of Electrical Engineering
In coordination with (if any)	----
Date of conduct	4th November,2022
Activity Coordinator	Dr. Sakshi Kalra & Ms. Rachna ,Department of Electrical Engg. JCBUST, YMCA, Faridabad
Amount Spent	6000+T.A
Funding/ grant from (University/ Industry/ UGC/ AICTE/ DST/ TEQIP/ Outside Society/ agency/others (mention)	JCBOSEUST, YMCA
Target audience:	UG/PG students, Research Scholars and faculties of the department.
No. of beneficiaries	60
Outside guests/ Details of Experts	Dr. Manohar Singh, Engineering Officer Grade-4. at Central Power Research Institute, Bengaluru, Karnataka, India
Brief Description of the event	With increasing penetration of Renewable Energy Sources (RES), power system operators face new challenges to ensure grid stability, resilience and reliability. In traditional power systems, synchronous generators (e.g., hydro or steam turbines) provided rotational inertia through stored kinetic energy in their rotating mass (turbine system and rotor). This energy is important to stabilize the system as it ensures slower and more controlled frequency dynamics in case of a generation-demand imbalance. In the future, with more generation coming from wind and solar power, the ability of the system to maintain frequency within the acceptable range is diminished. Photovoltaic generation systems are connected to the grid through inverters, which do not exhibit rotational inertia; and, even in the case of inverter-interfaced wind generators, the inverter electrically decouples the rotor's rotational inertia from the system.
Attach Brochure of the event	

attach two/ three good quality photographs		

Attach certificate of the event	
Any other information	