TECHNICAL ACTIVITY CARRIED OUT BY CENTRES

Name of Centre M	leerut Local Centre
Title of Activity: Royal Charter Day	(Deve
Activity under Divisional BoardStatutoryDate:09-09-2022Venue:	Webinar from own place
(Insert photo)	(Insert photo) Key Possibilities of 6G Wireless Networks (ITM-2030)
The Institution of Engineers (India) Meerut Local Centre ROYAL CHARTER DAY 2022 Presentation on ROYAL CHARTER by Er. Rajneesh Kumar, FIE on 09-09-2022	 A peak data take of all Table (100 times of 5G) A later experienced data rank of 1 Gb/s (10 times of 5G) THz hequency large: 0.1 – 10 THz Spectrum efficiency of 5–10 times of 5G Energy efficiency of 10–100 times of 5G The times the connectivity idensity of 5G High throughputinumber of data packets processed) Lisency of 10–100 µs (time taken by packets processed) High mobility Enhanced data security Al integrated communication Experimentation A integrated communication
Title of photo : Presentation on Royal Charter	Title of photo: Presentation on 6G Potential Technologies and Challenges

Brief Report :-

Royal Charter Day was celebrated by organizing a webinar on Google Meet. Er. M.L. Jain, Chairman, Meerut Local Centre welcomed the guests and members of IEI. Er. Rajneesh Kumar, FIE gave a presentation on Royal Charter. He told about the Royal Charter, brief history and background of IEI Royal Charter and sequence of events which took place during the process of award of Royal Charter. Er. Rajneesh Kumar also explained the objectives of IEI as incorporated in the Royal Charter and action to be taken to achieve these objectives. He stressed on what is not allowed to be done. Er. Rajneesh Kumar concluded the lecture by explaining how the institution is run.

On this occasion there was a presentation on '6 G-Potential Technologies and Challenges' by Dr.Pragati Sharma, Head, Deptt. of ECE, SD College of Engineering & Technology. Muzaffarnagar (Keynote Speaker). Dr. Pragati Sharma discussed the key possibilities of 6G Wireless Networks, Design considerations, Potential Technologies and Architecture of 6G. She told about the emerging trends in 6G and cell free cellular communication. She explained the applications and features of 6G and also the research opportunities in it. Dr. Sharma shared some interesting information about 6G such as- peak data rate 100 times of 5G, user-experienced data rate 10 times of 5G, much much higher frequency range, spectrum efficiency, energy efficiency, high mobility and enhanced data security. She also discussed Terahertz communication, its challenges and opportunities.

Er. R.P. Agrawal, Hony. Secretary, IEI, Meerut Local Centre presented the vote of thanks. Er. S.C. Mittal, FIE was the convener of the event.