

List of Experiments and Demonstrations @ Open Day 2018

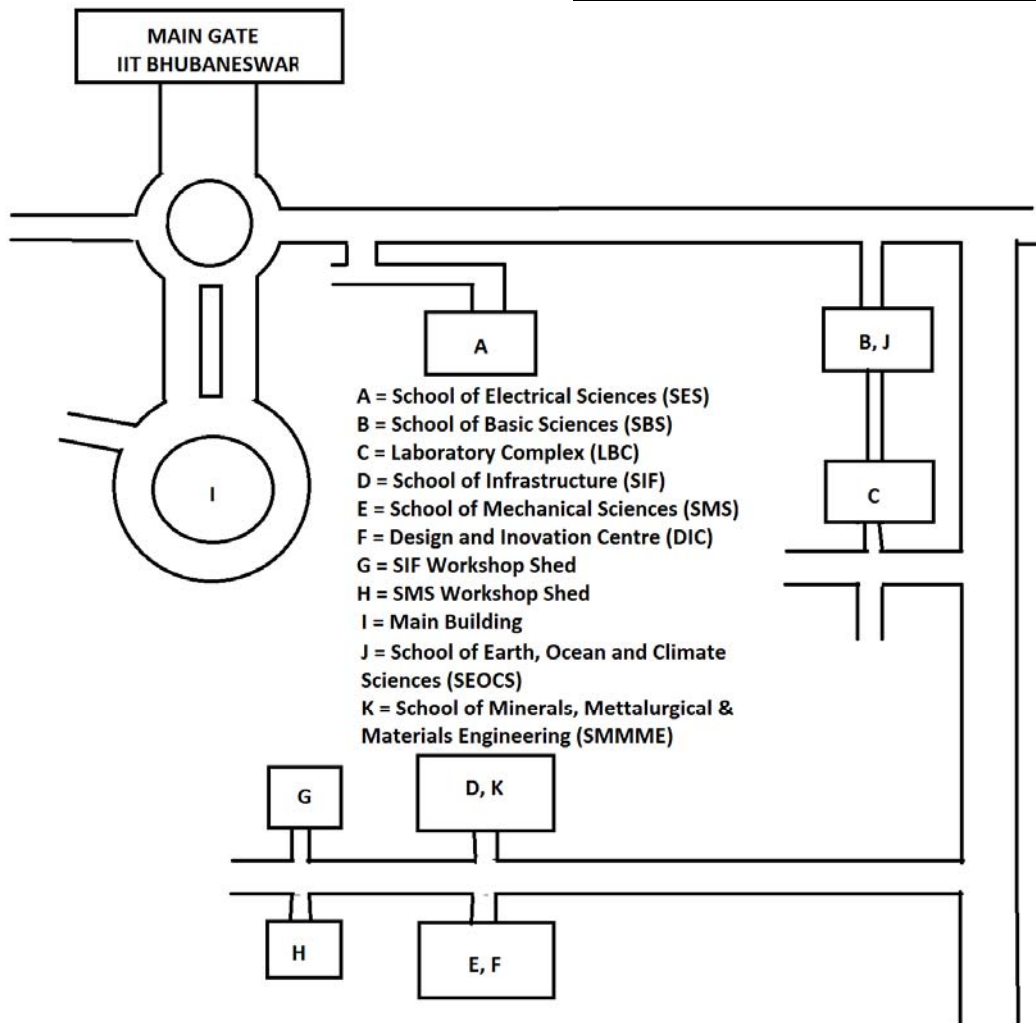
School of Electrical Sciences (SES)	
Electrical	
1	Light bulb plasma globe and lighting a fluorescent lamp from a distance (SES 011)
2	Generation of Electricity from Hydrogen (SES010)
3	Solar Photovoltaic Powered Traffic Light System (SES010)
4	Rotary Servo with Double Inverted Pendulum System (SES202)
5	Magnetic Levitation System (SES202)
6	Demonstration of Working Principle of Fluorescent Lamp (LBC 001)
7	Demonstration of Magnetic Coupling (LBC 001)
8	Constant Speed Motor (LBC 001)
9	Flying Drone (SES 202)
10	Kickoff Robot (SES 202)
11	Line follower Robot (SES 202)
Electronics and Communication	
1	Communication system demonstration (SES109)
2	ECG Monitoring (SES 111)
3	Multi parameter Monitoring (SES 111)
4	Pulse Rate Monitoring (SES 111)
5	EEG Monitoring (SES 111)
6	Snake game on FPGA (SES 204)
7	Video processing on FPGA (SES 204)
Computer Science	
1	Computer can understand your body language (SES 204)
2	Learning your lessons through computer games (SES 204)
3	Yoga and exercise learning using computer (SES 204)
4	Cyber threats and save your computer (SES 204)
5	Visualization of data transfer through computer networks (SES 204)
6	How chat servers work? (SES 204)
7	Encryption-no one is allowed to see your files (SES 204)
8	Let's open-up the brain of a computer. (SES 204)
School of Earth, Ocean and Climate Sciences (SEOCS)	
1	Understanding Cyclones (SBS 004)
2	Monsoon and Extreme Events (SBS 004)
3	Ocean Circulations (SBS 004)
4	Remote Sensing and GIS (SBS 004)
5	Aerosol and Climate Change (SBS 004)
6	Fossils, Rock & Mineral Pavilion (SBS 004)
7	Seismometer for recording Earthquakes (SBS 004)

School of Infrastructure (SIF)	
1	Corrosion setup
2	Compression testing apparatus
3	Waste water treatment using Earthworms
4	Tapping of electricity from waste water
5	Sunlight energy for treating waste water
6	Centrifuge (SIF005)
7	Total station demonstration (SIF305)
8	Shake table (SIF Workshop)
9	Testing Strength of Materials using UTM (SIF Workshop)
10	Wind tunnel (SIF Workshop)
11	Roller compactor & wheel tracking machine (SIF 006,007)
12	Demonstration on Acoustic Doppler velocimeter (SIF, workshop)
13	Sub-bottom profiler (SIF, workshop)
School of Minerals, Metallurgical and Materials Engineering (SMMME)	
1	Know Your Metals (SIF 304)
2	Green Energy: Fuel Cell In Action (SIF 204)
3	Make your Lithium Battery (SIF 204)
Design and Innovation Centre (DIC)	
1	Drone Show and Aircraft Show (DIC @ SMS)
2	Snake Bot – A snake-like robot (DIC @ SMS)
3	Can machine detect colours?(DIC @ SMS)
4	How fast a container be emptied? (DIC @ SMS)
5	Distance from a Distance – Ultrasonic Sensors (DIC @ SMS)
6	Tilt measurement (DIC @ SMS)
7	Frequency Counter (DIC @ SMS)
8	How does a Digital Thermometer Work (DIC @ SMS)
9	Hall Effect (DIC @ SMS)
10	Voltage-Resistance (DIC @ SMS)
11	How much is a Pascal? (DIC @ SMS)
12	Vibration Generator (DIC @ SMS)
13	Humidity Measurement (DIC @ SMS)
14	Robotic Hand (DIC @ SMS)
School of Mechanical Sciences (SMS)	
1	Robotics Laboratory- a few Demonstration (303 SMS)
2	Thermo Fluid Laboratory- a few Demonstration (202 SMS)
3	Workshop Technology- Manufacturing Equipments
4	Mechanism Laboratory- a few Demonstrations (203 SMS)
5	Thermo Fluid Laboratory – a few Demonstrations
6	Materials Testing Laboratory- a few Demonstrations

School of Basic Sciences (SBS)

Physics	
1	Van de graff generator, Faraday cage (Physics Lab, LBC)
2	Young's modulus
3	Simple pendulum and determination of gravitational constant (Physics Lab, LBC)
4	Concept of resonance and Beat (Physics Lab, LBC)
5	Dispersion of white light (Physics Lab, LBC)
6	Total internal reflection and refraction (Physics Lab, LBC)
7	Polarization of light (Physics Lab, LBC)
8	G-M counter (Physics Lab, LBC)

9	Heisenberg uncertainty principle (Physics Lab, LBC)
10	Detection of particles (Physics Lab, LBC)
11	Black hole (Physics Lab, LBC)
12	DNA/protein at atomic level (Physics Lab, LBC)
Chemistry and Bioscience	
1	Metal sensor by colour change (LBC 305)
2	invisible message on paper (LBC 305)
3	Fun with liquid N ₂ (LBC 305)
4	The Gold that is not golden!!!! (LBC 305)
5	Colour says its sweet or not!!! (LBC 305)
6	Magic with egg (LBC 305)
Mathematics	
1	Documentary on life of mathematicians (LBC 203)
2	Math Movie Theatre (LBC 203)
3	Math Trivia and Puzzles (LBC 103)



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