

P-1

S.no	Computer Science/ Tech Engineering	Civil Engineering	Electronics Engineering/ Electronics and Telecommunication / Communication Engineering	Information Technology	Electrical Engineering/ Electrical and Electronics Engineering
1	Open Source Technologies	The smart city buildup conceptualisation for aspects of urban drainage.	Medical Image processing and its significance in early diagnosis	Image enhancement in spatial domain	Power Quality
2	Internet of Things	Soil water plant and atmosphere a continuum for sustainable environment.	Importance of biometrics in identification of criminals	Strength of block ciphers	Energy Audit
3	Cloud Computing and Big Data	E- waste management and its impact Assessment.	Image doctoring and detection mechanisms	Addressing modes in 8085	Micro Grids
4	Machine Intelligence	Base isolation in buildings and Retrofitting of structures	Importance of IOT in and its security issues	Single and multi-layer perceptron	Integration of renewables in power grid
5	Network Security	Fire evaluation of industrial structures	E-waste management	Next generation networks	Intelligent control
6	Parallel Architectures and High Performance Computing	Land Use, Travel Demand and Traffic Congestion	Ransomware attacks and remedial measures	Pervasive computing	Model order reduction
7	IPv6	Analysis, Design and Maintenance of Flexible Pavements	Next generation computing	Routing algorithms	FACTS Devices
8	Software Defined Networks	Soft ground improvement using granular piles	Telemedicine infrastructure in India: prospectus and issues	Deadlock prevention and recovery	Stability of Multi Machine power systems
9	Green Computing	Reinforced Soil Engg and Constitutive Soil Modelling	Bit coin Transactions	Fading in mobile environment	Role of energy storage devices in Electrical Engineering
10	Ethical Hacking.	Earthquake microzoning, Mitigation verses highrise tall structures	Silicon On Chip design: issues and problems	Processes and threads	Power system restructuring.

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P-②

Physics	Chemistry	Mechanical Engineering	Mathematics
Magnetism	Chemical Thermodynamics	Smart Structures	Extremal properties of polynomials.
Superconductivity	Electrochemistry	Nano tribology and Nano mechanics	Bounds for the zeros of polynomials.
Carbon Nanotubes	Chemical Kinetics	Vibration and control	Integral estimates of Polynomials.
Renewable source of Energy	Synthetic and Natural Product Chemistry	High temperature heat transfer	Wavelet analysis and applications.
Magic Numbers	Isomerism	Robotics and production processes	Frames.
Angular momentum in quantum mechanics	Reaction Mechanism in Organic Chemistry	Industrial management	Infinite matrices and their transformations.
Bohr's Model	Coordination Chemistry	Optimisation of project management	Queuing theory models.
LS and JJ coupling	Environmental Chemistry	Mechanisms	Simplex techniques in linear and non linear programming.
Concept of Spins	Transition Metal Chemistry	Materials characterisation and hitech industrial application	Numerical solutions for algebraic and transcendental equations.
Dielectrics	Spectroscopy	Prototyping of human body parts	Numerical methods for ordinary and partial differential equations.

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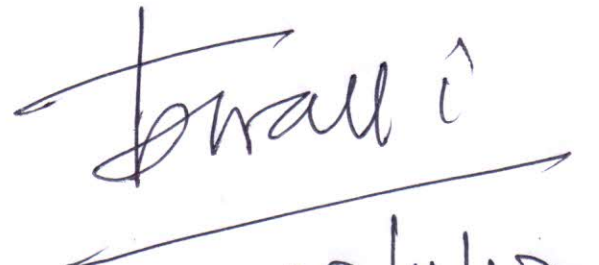
P-3

Applied Geology	Chemical Engineering	Petroleum Engineering	Food Technology
Geology applied to engineering problems such as dam sites and reservoir foundations, highway and building structures, tunnels	Contribution of Chemical Engineering in the Development of Modern Civilization	Processing of petroleum crude in petroleum refinery	Water activity and food preservation
Geophysical framework of the earth	Chemical Engineering and healthcare of a country	Reforming of petroleum products	Dehydration-Types of driers, changes in foods during dehydration
Moment tensors, Stress drop,	Significance of mass and Energy balance in chemical engineering	Biorefineries	Refrigeration-Principle, equipment.
Magmatism in relation to Tectonic Settings;	Reaction engineering and chemical engineering	Importance of cracking processes in petroleum industry.	Freezing-Freezing curve, effect of freezing on foods.
Radioactivity & dating of rocks.	Challenges and opportunities for chemical engineers	Sweetening processes in petroleum refining	Thermal processing of foods
Facies concepts and facies analysis.	Significance of process flow sheeting in chemical engineering	Energy management in refining processes.	Use of irradiation in preservation of foods
Principles and applications of stereo-net.	Computer aided design in chemical engineering	Dewaxing	Probiotics in human health
Geological hazards - vulnerability and risk assessment	Modeling and simulation of chemical engineering systems	Fossil fuels and its implications on the environment	Processing of fluid milk
Well logging and geology, Formation evaluation	Down stream processing in chemical engineering	Characterization of petroleum products	Food Additives
Evolution of the Himalayas and Indian Ocean	Down stream processing in biotechnology	Petrochemical industries are the largest users of unit operations and unit processes	Carbohydrates-Chemistry, classification and changes during processing

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## English

S.No	Topic	Description
1	<b>Sociolinguistic</b>	Relationship between language and society, language and culture, anthropology and conversational analysis.
2	<b>Words and Meaning</b>	Morphology, lexicology, semantics, pragmatics, etymology.
3	<b>Phonetics and phonology</b>	Description and classification of vowels and consonants, Transcription and its types, Cardinal vowels.
4	<b>Various methods and approaches in language learning</b>	Traditional methods and approaches, ICT in English language teaching, Language acquisition and language learning.
5	<b>Types of official correspondence</b>	Writing emails, CV, minutes of meeting, Notice, agenda, circulars and memos, letter writing- formal and informal letters.
6	<b>Communication</b>	Definition, types and models, Persuasive strategies in communication, language as a means of communication, barriers of communication.
7	<b>Learning language through literature</b>	Different genres of literature, features of literary language and teaching of literature and Objectives of teaching English to the students of Science and Technology.
8	<b>Communication skills</b>	Listening, speaking, reading, and writing, principles of effective writing.
9	<b>Grammar</b>	Articles, prepositions, clauses, tenses, modals and subject verb agreement.
10	<b>Famous Indian Writers in English.</b>	

  
 29/11/17