

## SGPGIMS Syllabus 2021 (Group B and C)

### SGPGIMS Exam Pattern 2021

Name Of The Subjects	Number Of Questions	Maximum Marks
General English	10	10 Marks
General Knowledge	10	10 Marks
Reasoning	10	10 Marks
Mathematical Aptitude	10	10 Marks
Concerned Subjects	60	60 Marks

### SGPGIMS Syllabus 2021 - (Subject Wise)

#### Mechanical

- Engineering Mechanics
- Engineering Materials
- Mechanisms and Machines
- Fluid Mechanics
- IC Engines, Refrigeration and Air conditioning
- Turbo Machinery
- Thermodynamics and Heat transfer
- Power Plant Engineering
- Renewable Sources of Energy
- Design of Machine Elements
- Manufacturing
- Industrial and Maintenance Engineering
- Mechatronics and Robotics

#### Electrical

- Analog and Digital Electronics
- Systems and Signal Processing
- Control Systems
- Electrical Machines
- Electrical and Electronic Measurements
- Engineering Mathematics
- Electric Circuits and Fields

- Computer Fundamentals
- Basic Electronics Engineering
- Electrical Materials
- Power Systems
- Power Electronics and Drives

## **Electronics**

- Analog and Digital Communication Systems
- Control Systems
- Computer Organization and Architecture
- Electro Magnetics
- Advanced Electronics Topics
- Basic Electrical Engineering
- Materials Science
- Advanced Communication Topics
- Basic Electronics Engineering
- Electronic Measurements and Instrumentation
- Network Theory
- Analog and Digital Circuits

## **Civil**

- The flow of Fluids, Hydraulic Machines and Hydro Power
- Fluid Mechanics, Open Channel Flow, Pipe Flow
- Hydraulic Machines and Hydropower
- Hydrology and Water Resources Engineering
- Environmental Engineering
- Water Supply Engineering
- Building Materials
- Structural Analysis
- Design of Steel Structures
- Design of Concrete and Masonry structures
- Construction Practice
- Planning and Management
- Waste Water Engineering
- Solid Mechanics
- Solid Waste Management
- Air, Noise pollution, and Ecology
- Geotechnical Engineering and Foundation Engineering
- Surveying and Geology
- Transportation Engineering
- Highways

- Tunneling
- Railways Systems
- Harbors
- Airports

### **General English**

- Spellings/ Detecting Mis-spelt words
- Antonyms and their correct usage
- Common Error
- Active/ Passive Voice of Verbs
- Comprehension Passage
- Spot the Error
- Cloze Passage
- Fill in the Blanks
- Shuffling of Sentence parts
- Conversions
- Sentence Rearrangement
- Grammar
- Shuffling of Sentences in a passage
- Improvement of Sentences
- Synonyms/ Homonyms
- Antonyms
- Vocabulary
- Idioms & Phrases
- One word substitution

### **General Knowledge**

- Awards
- Authors
- Flower
- Defense
- Culture
- Religion
- Languages
- Capitals
- Wars and
- Neighbors
- Current Affairs
- History
- Anthem
- Important National Facts

- Heritage and Arts
- Dance
- Currencies
- Bird
- Animal
- Abbreviations
- Discoveries
- Diseases and Nutrition
- Song
- Flag
- Monuments
- Personalities
- Freedom Movement
- Championships
- Winners
- Terms
- Common Names
- Full forms
- Soil
- Rivers
- Mountains
- Ports
- Inland Harbours
- Number of Players
- Culture
- Religion
- Dance
- Heritage and Arts

### **Reasoning**

- Mirror Images
- Grouping Identical Figures
- Figure Matrix Questions
- Problem on Age Calculation
- Decision Making
- Inference
- Analogy
- NonVerbal Series
- Test of Direction Sense
- Number Series
- Alphabet Series

- Arguments
- Ven Diagram
- Blood Relations
- Coding and Decoding
- Number Ranking
- Arithmetical Reasoning

### **Mathematical Aptitude**

- Relations and Functions
- Logarithms
- Complex Numbers
- Quadratic Equations
- Sequences and Series
- Trigonometry
- Cartesian System of Rectangular Coordinates
- Statistics
- Differentiation
- Introduction to Three Dimensional Geometry
- Straight Lines
- Circles
- Conic Sections
- Permutations and Combinations
- Vectors
- Exponential and Logarithmic Series
- Sets and Set Theory
- Probability Function
- Limits and Continuity
- Applications of Derivatives
- Indefinite Integrals Binomial Theorem
- Matrices
- Determinants
- Definite Integrals