

SCHEDULE OF ONLINE TESTS FOR GATE 2010.Gate Exam Date 14.02.2010. (Second Sunday of February 2010.)**I. FOR TS9 OPTION** (students taking all 9 Tests)

Sl.no	(Proposed dates) (All Sundays)	
1.	06.12.2009	Part Syllabus Test – 1
2.	13.12.2009	Full Syllabus Test - 1
3.	20.12.2009	Full Syllabus Test - 2
4.	27.12.2009	Full Syllabus Test - 3
5.	03.01.2009	Full Syllabus Test - 4
6.	10.01.2010	Part Syllabus Test - 2
7.	17.01.2010	Full Syllabus Test - 5
8.	24.01.2010	Full Syllabus Test - 6
9.	31.01.2010	Full Syllabus Test - 7

II. FOR TS5 OPTION (students taking 5 Tests)

1.	06.12.2009	Part Syllabus Tests - 1
2.	10.01.2010	Part Syllabus Tests - 2
3.	17.01.2010	Full Syllabus Tests - 5
4.	24.01.2010	Full Syllabus Tests - 6
5.	31.01.2010	Full Syllabus Tests - 7

You should take these Tests after thoroughly studying each topic. You can take the Tests any day, anytime after scheduled dates at your convenience when you feel you are sufficiently prepared in that Chapter.

- While taking the Test, if you are interrupted due to power failure or if there is a connectivity problem while submitting your answers, close the Test and resume after sometime. You will be able to resume taking the Test from where you left but only up to the remaining time.
- After logging in, if you are unable to open the Test, please check that the Pop-Up blockers on your browser are turned off. You can do this on the tool bar of whichever browser you are using - Yahoo/Google/MSN/Mozilla Firefox. You should then be able to proceed.
- Please view your Test Results 24 hours after the Test.
- For any other problem or question you may have with these Tests please send an email quoting your Enrolment Number to support@brilliant-tutorials.com describing the problem you are experiencing and we will get back to you as soon as we can.
- You can also contact Brilliant Tutorials for help through the following Numbers. 044-24342099 ,044-24343308 ,044-24343785.

Thank you and our best wishes to you.

System Requirements

Hardware Requirements

128 MB of RAM or more
Minimum 100 MB of free Hard Disk space
LAN Port or Dial-up modem
Color Monitor
Resolution (Best viewed in 1024 x 768 compatible)

Software Requirements

Windows operating system – Win 98 or above
Browsers supported on Windows
Internet Explorer 6.0 and 7.0
Mozilla Firefox 2.0
Netscape Navigator 8.1
Flash Player 8 or above

Syllabus for the On-line Tests

All the full syllabus tests will cover the entire syllabus for Gate 2010 as prescribed in the Gate Information Brochure, including General Aptitude, The Part Syllabus Tests 1 to 2 will cover the following topics of the syllabus.

The topics are as listed in Gate 2010 Syllabus. For those who are enrolled for our study material also, Sets 1 to 4 Cover PST –1 and 2 Sets 5 to 8 Cover PST –2.

(1). CS & IT. (CS)

Part Syllabus Test: 1

- 1&2. Engg. Maths,
3. Computer Hardware-Digital Logic, Computer Organization,
4. Theory of Computation.

Part Syllabus Test: 2

5. Software Systems – Data structure,
6. Operating System,
7. Data Bases, including information systems & software Engineering,
8. Computer Networks, including HTML, Network Security

(2). ECE. (EC)

Part Syllabus Test: 1

1. Networks,
- 1A. Engg Maths,
2. Control Systems,
3. Electronic Devices,
4. Analog Circuits,

Part Syllabus Test: 2

5. Digital Circuits,
6. Communications,
7. Electromagnetics,
8. Signals and systems Solutions to recent.



(3). **Electrical Engineering. (EE)**

Part Syllabus Test: 1.

1. Electrical Circuits,
- 1A. Engg Maths,
2. Control Systems,
3. Analog and Digital Electronics,
4. Electrical and Electronic measurements,

Part Syllabus Test: 2.

5. Electrical Fields,
6. Electrical Machines,
7. Power Systems
8. Power Electronics and Electric Drives; Solutions to recent.

(4). **Mechanical Engineering (ME)**

Part Syllabus Test:1.

1. Fluid Mechanics; Engineering Materials.
2. Engineering Mechanics; Metal Casting, Forming Processes; Joining Processes.
3. Heat Transfer; Machining & Machine Tool operations; Metrology & Inspection.
4. Strength of Materials.

Part Syllabus Test:2.

5. Thermodynamics & Applications.
6. Theory of Machines, Vibrations & Designs.
7. Production planning & Control; Computer Integrated Manufacturing; Test Papers, Supplements, if any.
8. Inventory Control; Operations Research Test Papers, Supplements, if any.

(5). **Production and Industrial Engineering. (PI)**

Part Syllabus Test:1.

1. Engineering Materials, Thermal Engineering.
2. Applied Mechanics, Theory of Machines and Design.
3. Metal Casting, Metal Forming, Metal Joining Processes, Machining and Machine Tool Operations.
4. Metrology and Inspection, Processing of Plastics, Powder Metallurgy.



Part Syllabus Test: 2.

5. Tool Engineering, Manufacturing Analysis, Computer Integrated Manufacturing, Product Design and Development.
6. Engineering Economy and Costing, Work System Design.
7. Logistics and facility Design, Production Planning and Inventory Control.
8. Operations Research, Quality Control, Reliability and Maintenance, Management Information System, Intellectual

(5). BIOTECHNOLOGY (BT)

Part Syllabus Test: 1.

- (1). Biotechnology: An overview. Advanced techniques in gene expression and analysis
- (2). Architecture of plant genome and plant tissue culture techniques
- (3). Animal cell metabolism and regulation – I
- (4). Animal cell metabolism and regulation – II
- (5). Engineering Maths for BT.

Part Syllabus Test: 2.

- (5). Industrial bio processes
- (6). Microbial growth kinetics – I
- (7). Microbial growth kinetics – II
- (8). Bio - informatics
- (PLUS ALL OTHER TOPICS OF NEW BT SYLLABUS).

LIFE SCIENCES (XL)

(A). Chemistry (H) (Optional)

Part Syllabus Test:1.

1. Atomic Structure and Periodicity
Structure and Bonding
2. Structure and Bonding (Solid state)
Thermodynamics

3. Chemical Equilibria

Reaction Kinetics (Equilibrium Constants)

4. Electrochemistry

Reaction kinetics (Order of Reactions K_c, K_p and K_x discussed under Thermodynamics in Set 3)

Part Syllabus Test: 2.

5. s, p and d Block Elements

6. s, p and d Block Elements

7. Structure-Reactivity Correlations

8. Mechanisms of Organic Reactions

(B). Biochemistry (I) (Optional)

Part Syllabus Test: 1.

1. organization of Life – Importance of water – Cell structure and organelles.

Structure and function of biomolecules: Carbohydrates, Lipids, Proteins, Amino acids and Nucleic acids.

2. (A). Biochemical separation techniques and characterization : Ion exchange, size exclusion and affinity chromatography, electrophoresis, U.V – visible, fluorescence and Mass spectroscopy.

(B). Protein structure, folding and function: myoglobin, Hemoglobin, Lysozyme, Ribonuclease A, Carboxypeptidase and chymotrypsin

(C). Enzyme kinetics including its regulation and inhibition

(D). Vitamins and Coenzymes

(E). Metabolism and bioenergetic generation and utilization of ATP

3. (A). Photosynthesis

(B). Metabolic pathways and their regulation: Glycolysis, TCA cycle, pentose Phosphate pathway, Oxidative phosphorylation, Gluconeogenesis, Glycogen and fatty acids and metabolism.

(C). Metabolism of Nitrogen containing compounds: Nitrogen fixation, Amino acids and nucleotides.

(D). Biological membranes, Transport across membranes, Signal transduction.

4. (A). Hormones and neurotransmitters

(B). DNA replication



- (C). Transcription and Translation
- (D). Biochemical regulation of gene expression

Part Syllabus Test: 2.

- 5. Recombinant DNA technology and application: PCR, Site directed mutagenesis and DNA microarray.
- 6. (A). Immune system – Active and passive immunity – complement system
(B). Antibody structure, function and diversity
- 7. (A). Cells of immune system: T,B and macrophages.
(B). T and B cell activation, Major histocompatibility complex.
- 8. (A). T- cell receptor.
(B). Immunological techniques:
 - (i). Immuno diffusion
 - (ii). Immuno electrophoresis
 - (iii). RIA and
 - (iv). ELISA

(C). Microbiology (L) (Optional)

Part Syllabus Test: 1.

- (1). Historical Perspective - Methods in Microbiology
- (2). Microbial taxonomy and diversity
- (3). Prokaryotic and Eukaryotic cells - Structure and Function
- (4). Microbial growth - Microbial Ecology

Part Syllabus Test: 2.

- (5). Microbial Metabolism
- (6). Microbial Diseases and Host pathogen Interaction
- (7). Chemotherapy / Antibiotics
- (8). Microbial Genetics