

# INFORMATION BROCHURE



**Organising Institute**

**Indian Institute of Technology Kharagpur**

**Kharagpur 721302, India**



IISc Bangalore



IIT Bombay



IIT Delhi



IIT Guwahati



IIT Kanpur



IIT Kharagpur



IIT Madras



IIT Roorkee

Version 1.0

Contents as on 1<sup>st</sup> August, 2021

## **Abbreviations**

**B.A.** – Bachelor of Arts

**B.Arch.** – Bachelor of Architecture

**B.Com.** – Bachelor of Commerce

**B.E.** – Bachelor of Engineering

**B.Sc.** – Bachelor of Science

**B.Tech.** – Bachelor of Technology

**CBT** – Computer Based Test

**EWS** – Economically Weaker Section

**GATE** – Graduate Aptitude Test in Engineering

**GoI** – Government of India

**IB** – Information Brochure

**ID** – Identity Document

**IISc** – Indian Institute of Science

**IIT** – Indian Institute of Technology

**MCQ** – Multiple Choice Questions

**M.E.** – Master of Engineering

**MoE** – Ministry of Education (erstwhile MHRD)

**M.Sc.** – Master of Science

**MSQ** – Multiple Select Questions

**M.Tech.** – Master of Technology

**NAT** – Numerical Answer Type

**NCB** – National Coordination Board

**OBC-NCL** – Other Backward Class- Non Creamy Layer

**OI** – Organising Institute

**Ph.D.** – Doctor of Philosophy

**PSU** – Public Sector Undertaking

**PwD** – Person with Disability

**SC** – Scheduled Caste

**ST** – Scheduled Tribe

## **Highlights of GATE 2022**

- Dates of examination: Saturday 5<sup>th</sup>, Sunday 6<sup>th</sup>, Saturday 12<sup>th</sup> and Sunday 13<sup>th</sup> February, 2022. There are two sessions (forenoon and afternoon) each day.
- Fully Computer Based Test (CBT).
- Two NEW subject papers are introduced:
  - i. Geomatics Engineering (GE)
  - ii. Naval Architecture and Marine Engineering (NM)
- Total number of subject papers: 29.
- All Test Papers of GATE 2022 examinations will be entirely of objective type. The pattern of questions will include some Multiple Choice Questions (MCQ), while the remaining questions may include Multiple Select Questions (MSQ) and/or Numerical Answer Type (NAT) questions.
- ONE or TWO subject papers allowed. TWO Paper combinations have to be chosen from the given list of combinations of papers. Final allotment of TWO papers will still be subject to availability of infrastructure and dates.
- Eligibility criteria: A candidate who is currently studying in the 3<sup>rd</sup> or higher years of any undergraduate degree program OR has already completed any government approved degree program in Engineering / Technology / Architecture / Science / Commerce / Arts is eligible to appear for GATE 2022 examination.
- There is NO age limit to appear for GATE 2022 examination.
- Applications will be accepted ONLINE only through GATE 2022 website (<https://gate.iitkgp.ac.in>). Even if a candidate is appearing for TWO papers, the candidate should fill ONLY ONE application form.
- GATE 2022 score card will remain valid for THREE years from the date of announcement of results.
- Depending on COVID-19 situation, the schedule of the GATE 2022 examination may change.
- Details are available at the official website: <https://gate.iitkgp.ac.in>
- Organising Institute: Indian Institute of Technology Kharagpur (IITKGP).

### Pattern of Examination

Particulars	Details
<b>Examination Mode</b>	Computer Based Test (CBT)
<b>Duration</b>	3 Hours
<b>Number of Subjects (Papers)</b>	29
<b>Sections</b>	General Aptitude (GA) + Candidate's Selected Subject
<b>Type of Questions</b>	(a) Multiple Choice Questions (MCQ) (b) Multiple Select Questions (MSQ) and/or Numerical Answer Type (NAT) Questions
<b>Questions for testing these abilities</b>	Recall Comprehension Application Analysis & Synthesis
<b>Number of Questions</b>	10 (GA) + 55 (subject) = 65 Questions
<b>Distribution of Marks in all Papers EXCEPT papers AR, CY, EY, GG, MA, PH, XH and XL</b>	General Aptitude: 15 Marks + Engineering Mathematics: 13 Marks + Subject Questions: 72 Marks = Total: 100 Marks
<b>Distribution of Marks in papers AR, CY, EY, GG, MA, PH, XH and XL</b>	General Aptitude: 15 Marks + Subject Questions: 85 Marks = Total: 100 Marks
<b>Marking Scheme</b>	Questions carry 1 mark and 2 marks
<b>Negative Marking</b>	For a wrong answer chosen in a MCQ, there will be negative marking. For 1-mark MCQ, 1/3 mark will be deducted for a wrong answer. Likewise, for 2-mark MCQ, 2/3 mark will be deducted for a wrong answer

Paper Code	General Aptitude (GA) Marks	Subject Marks	Total Marks	Total Time (Minutes)
AE, AG, BM, BT, CE, CH, CS, CY, EC, EE, ES, EY, IN, MA, ME, MN, MT, NM, PE, PH, PI, TF, ST	15	85	100	180
AR [Part A + Part B1 or B2 (B1: Architecture or B2: Planning)]	15	60 + 25	100	180
GE [Part A + Part B (Section I or Section II)]	15	55 + 30	100	180
GG [Part A + Part B (Section 1: Geology or Section 2: Geophysics)]	15	25 + 60	100	180
XE (Section A + Any TWO Sections)	15	15 + (2 x 35)	100	180
XH (Section B1 + Any ONE Section)	15	25 + 60	100	180
XL (Section P + Any TWO Sections)	15	25 + (2 x 30)	100	180



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*Note: Zonal GATE offices (IITs & IISc) NEVER sell or advertise any GATE examination papers or syllabus. Candidates MUST be aware about frauds in the market/fake emails/fake SMS related to this aspect. Any individual/organization claiming to sell /distribute GATE papers in the name of IITs & IISc will be subjected to appropriate legal actions.*

## 1. Introduction

Graduate Aptitude Test in Engineering (GATE) is a national examination conducted jointly by the Indian Institute of Science (IISc), Bangalore and the seven Indian Institutes of Technology (at Bombay, Delhi, Guwahati, Kanpur, Kharagpur, Madras and Roorkee) on behalf of the National Coordination Board (NCB)-GATE, Department of Higher Education, Ministry of Education (MoE), Government of India.

Qualifying in GATE is a mandatory requirement for seeking admission and/or financial assistance to: (i) Master's programs and direct Doctoral programs in Engineering/Technology/Architecture and (ii) Doctoral programs in relevant branches of Arts and Science, in the institutions supported by the MoE and other Government agencies. Even in some colleges and institutions, which admit students without MoE scholarship/assistantship, the GATE qualification is mandatory. Further, many Public Sector Undertakings (PSUs) have been using the GATE score in their recruitment process.

The information in this brochure is mainly categorized into Pre-Examination (Eligibility, Application Submission, Examination Centres, etc.), Examination (Pattern, Marks / Score, etc.) and Post-Examination (Answers, Contests, Results, Scorecard, etc.) sections.

**Note:** Candidates opting to appear in TWO subject papers must have a primary choice of paper, which will be their default choice and second choice of paper, which has to be chosen from the allowed combinations given in Table 4.3. Combinations other than the listed ones are NOT allowed. Under unforeseen circumstances, GATE 2022 committee has the right to remove certain combinations listed in Table 4.3 at a later date. In such cases, the fee paid towards the second paper will be refunded to the candidates. Also note that the examination centre for candidate to appear for the second paper may be different (but in same city) from that for the first paper due to the infrastructure and scheduling constraints. GATE committee is NOT liable for any legal obligations related to this issue.

### Disclaimer:

**GATE is NOT an admission ensuring examination. Qualifying in GATE examination does NOT guarantee admission / scholarship. Admission to any institute is fully dependent on the admitting institute's criteria for educational qualification. Similarly, GATE qualification does not assure a Public Sector Undertaking (PSU) job, as it depends on the recruitment procedure of the concerned PSU. GATE committee is NOT liable for any legal obligations related to admission / job.**

## 2. About GATE

Graduate Aptitude Test in Engineering (GATE) is a national examination on the comprehensive understanding of the candidates in various undergraduate subjects in Engineering / Technology / Architecture and post-graduate level subjects in Arts, Commerce and Science. GATE 2022 will be conducted for **29 subjects** (also referred to as “papers”) and it would be distributed over **Saturday 5<sup>th</sup>, Sunday 6<sup>th</sup>, Saturday 12<sup>th</sup> and Sunday 13<sup>th</sup> of February 2022**. The GATE examination is conducted in different cities across India. The examination would be purely a Computer Based Test (CBT).



The GATE score would reflect the relative performance level of the candidate in a particular subject, which is quantified based on several years of examination data. Note that the GATE 2022 score is valid for THREE YEARS from the date of announcement of the results. **No information on the GATE 2022 score will be available after this period.**

## 2.1 Administration

GATE is administered jointly by the Indian Institute of Science (IISc), Bangalore and seven Indian Institutes of Technology (namely, IITs at Bombay, Delhi, Guwahati, Kanpur, Kharagpur, Madras and Roorkee). The GATE Committee, which comprises of representatives from the administering institutes, is the sole authority for regulating the examination and for declaring the results. For administrative purposes, the examination cities in India are segregated into eight zones. The operations related to GATE, in each of the eight zones, are managed by a Zonal GATE Office at the administering institute (IIT or IISc).

Table 2.1 gives details of the zones and the corresponding administering institutes.

One of the administering institutes is designated as the Organising Institute (OI), and it would be responsible for the end-to-end process, as well as, the overall coordination amongst the administering institutes for conducting the GATE Examination. The Organising Institute for GATE 2022 is Indian Institute of Technology Kharagpur (IITKGP).

**Table 2.1. Zones and The Corresponding Administrative Institutes for GATE 2022**

Zone	Administering Institute	Zonal Websites
Zone-1	<a href="http://gate.iisc.ac.in">Indian Institute of Science Bangalore</a>	<a href="http://gate.iisc.ac.in">http://gate.iisc.ac.in</a>
Zone-2	<a href="https://gate.iitb.ac.in/">Indian Institute of Technology Bombay</a>	<a href="https://gate.iitb.ac.in/">https://gate.iitb.ac.in/</a>
Zone-3	<a href="http://gate.iitd.ac.in">Indian Institute of Technology Delhi</a>	<a href="http://gate.iitd.ac.in">http://gate.iitd.ac.in</a>
Zone-4	<a href="http://iitg.ac.in/gate-jam">Indian Institute of Technology Guwahati</a>	<a href="http://iitg.ac.in/gate-jam">http://iitg.ac.in/gate-jam</a>
Zone-5	<a href="http://gate.iitk.ac.in">Indian Institute of Technology Kanpur</a>	<a href="http://gate.iitk.ac.in">http://gate.iitk.ac.in</a>
Zone-6	<a href="http://gate.iitkgp.ac.in">Indian Institute of Technology Kharagpur</a>	<a href="http://gate.iitkgp.ac.in">http://gate.iitkgp.ac.in</a>
Zone-7	<a href="http://gate.iitm.ac.in">Indian Institute of Technology Madras</a>	<a href="http://gate.iitm.ac.in">http://gate.iitm.ac.in</a>
Zone-8	<a href="http://gate.iitr.ac.in">Indian Institute of Technology Roorkee</a>	<a href="http://gate.iitr.ac.in">http://gate.iitr.ac.in</a>

## 2.2 Scholarship / Assistantship for Postgraduate Programs

To avail the financial assistance (scholarship/assistantship), the candidate must first secure the admission to a program in one of the central government supported institutes, by a procedure that could vary from institute to institute. Depending upon the norms adopted by a specific institute or department of the institute, the candidates may be admitted directly into a course based on their performance in GATE only; or based on their performance in GATE and an admission test/interview conducted by the department to which they have applied and/or the candidate's academic record. In

the test / interview based selection procedure, as per the MoE guidelines, a minimum of 70% weightage will be given to the performance in GATE and the remaining will be given to the candidate's performance in test/interview and/or academic record. However, the admitting institutes could prescribe a minimum passing marks in the test/interview.

Candidates are advised to seek the complete details of the admission procedures and the availability of MoE scholarship/assistantship from the corresponding admitting institutions. The criteria for postgraduate admission with scholarship/assistantship could be different for different institutions. The management of the post-graduate scholarship/assistantship is also the responsibility of the admitting institution. Similarly, reservation of the seats for different categories will be as per the policies and norms of the admitting institution and the Government of India rules.

The admitting institute may also specify the number of candidates who will be provided financial assistance (scholarship), if admission is secured. Qualification in GATE is also a minimum requirement to apply for various fellowships awarded by many Government organizations.

- Note:** 1. Call for admissions to M.Tech. / Ph.D. or any other program will be advertised separately by the respective institutions and GATE committee is NOT responsible for the admission process.
2. GATE zonal offices will NOT entertain any queries about admission, reservation of seats and/or award of scholarship/assistantship.
3. GATE committee is NOT liable for any legal obligations related to admission.

## **2.3 Use of GATE Score for Employment**

In the past, several Public Sector Undertakings (PSUs) have used GATE score to shortlist the candidates for employment. A few such organizations are: Bharat Heavy Electricals Limited (BHEL), Gas Authority of India Limited (GAIL), Hindustan Aeronautics Limited (HAL), Indian Oil Corporation Limited (IOCL), National Thermal Power Corporation (NTPC), Nuclear Power Corporation of India Limited (NPCIL), Oil and Natural Gas Corporation (ONGC) and Power Grid Corporation of India (PGCI).

Direct recruitment to Group A level posts in Central government, i.e., Senior Field Officer (Tele), Senior Research Officer (Crypto) and Senior Research Officer (S&T) in Cabinet Secretariat, Government of India, is now being carried out on the basis of GATE score. The details of the scheme of recruitment are normally published in National Newspapers / Employment News / Rozgar Samachar by the concerned authority.

Some other Government of India Organizations may also utilize GATE 2022 score for their recruitment purpose.

**Note:** GATE qualification does not assure a PSU job, as that depends on the recruitment procedure of the concerned PSU. GATE committee is NOT responsible for any employment opportunities. The qualified candidates must check newspapers and other reliable sources for any such information. GATE committee is NOT liable to any legal obligations related to jobs.

### 3. About GATE 2022

- IIT Kharagpur is the organising institute for GATE 2022.
- Information website for GATE 2022 is <https://gate.iitkgp.ac.in>
- GATE 2022 will be conducted on 29 subjects (also referred to as “papers”).
- Examination for all the 29 subjects (papers) will be conducted as ONLINE Computer Based Test (CBT).
- The online examination papers will contain some questions of (i) Multiple Choice Question (MCQ) type, where only one option out of four options is correct. Remaining questions may be of (ii) Multiple Select Question (MSQ) type, where one or more than one options out of four options is/are correct, and / or (iii) Numerical Answers Type (NAT) where answer must be keyed in by the candidate using a virtual keypad. The candidates will use ONLY an on-screen virtual calculator provided for the examination.
- A candidate can appear in ANY ONE or UP TO TWO papers of the GATE examination. However, note that the combination of TWO papers in which a candidate can appear MUST be selected from the pre-defined list as given in Table 4.3. Even if a candidate is appearing for TWO papers, the candidate should fill ONLY ONE application form.
- GATE 2022 examinations will be held during the forenoon and afternoon sessions on **Saturday 5<sup>th</sup>, Sunday 6<sup>th</sup>, Saturday 12<sup>th</sup> and Sunday 13<sup>th</sup> of February 2022.**
- Examination for some of the papers in GATE 2022 may be held in multiple sessions. However, a candidate will be required to appear for the examination in ONLY one of the multiple sessions of the same paper.
- Exact details of the complete examination schedule will be notified later on the GATE 2022 website (<https://gate.iitkgp.ac.in>).
- **Important dates for GATE 2022 are given in Table 3.1.**

**Table 3.1 Important Dates Related to GATE 2022**

Online Application Process Opens ( <a href="https://gate.iitkgp.ac.in">https://gate.iitkgp.ac.in</a> )	Monday	30 <sup>th</sup> August 2021
Closing Date of REGULAR online registration/ application process	Friday	24 <sup>th</sup> September 2021
End of Extended period for online Registration / application (with late fee)	Friday	1 <sup>st</sup> October 2021
Last Date for change of Category, Paper and Examination City (an additional fee will be applicable)	Friday	12 <sup>th</sup> November 2021
Admit Card will be available for download	Monday	3 <sup>rd</sup> January 2022
GATE 2022 Examination Forenoon: 9:00 AM to 12:00 Noon (Tentative) Afternoon: 2:30 PM to 5:30 PM (Tentative)	Saturday Sunday Saturday Sunday	5 <sup>th</sup> February 2022 6 <sup>th</sup> February 2022 12 <sup>th</sup> February 2022 13 <sup>th</sup> February 2022
Announcement of the Results in the Online Application Portal	Thursday	17 <sup>th</sup> March 2022

**Important Note: The health and safety of the candidates are of utmost priority. Due to current COVID-19 pandemic situation, dates mentioned here are subject to change. In rare cases, it may be necessary to postpone the GATE 2022 examination because of situations beyond the control of GATE committee. All updates will be available on the website.**

- Candidates have to register and fill the application via ONLINE mode ONLY at GATE 2022 website.
- The entire process of filling up of the application form and uploading of certificates / documents, etc. is in ONLINE mode only. The candidates should NOT send any hard copy of their application forms / documents etc. to IIT Kharagpur or any of the zonal GATE offices.
- The payment of application fees is through electronic mode. If a candidate wishes to appear for TWO papers, the fees to be paid by the candidate will be TWICE of that mentioned for a single paper.
- The Admit Cards for GATE 2022 would be available for download on the GATE 2022 website of IIT Kharagpur only. No printed copy of the Admit Cards will be posted to the candidates.
- The candidate has to appear at the GATE Examination Centre on the date and time specified in the Admit Card.

•No request for any changes in the Centre or Location or Date/Time specified in the Admit Card will be entertained. Similarly, this being an examination body with certain constraints, candidates needing very special or specific facility for the examination may not be entertained (except scribe facility). Hence, candidates are requested to adhere to the facilities that are possible within the ambit and resources of GATE Examination Body.

•Physical calculators, mobile phones, any other electronic/communication devices, wallets, books, papers, loose sheets, data or handbooks, tables, pen/pencil box/pouch, watches of any form etc. are strictly prohibited in exam halls and candidates possessing these (even if not using) will be disqualified.

•Biometric information (such as, Photograph, Iris scan and Fingerprints etc.) for randomly selected candidates may be captured before the start or during the examination.

•In all matters concerning GATE 2022, the decision of the GATE 2022 Committee will be final and binding on all the applicants.

•Although GATE 2022 will be held at different test centres across the country, the Indian Institute of Technology Kharagpur, being the Organising Institute, bears the overall responsibility of conducting GATE 2022. In case of any claims or disputes arising with respect to GATE 2022, it is hereby made absolutely clear that the High Court of Calcutta in Kolkata alone will have the exclusive jurisdiction to entertain and settle them.

•**TWO new papers called “Geomatics Engineering (GE)” and “Naval Architecture and Marine Engineering (NM)” are being introduced in GATE 2022.**

•For candidates appearing for Geology and Geophysics (GG) papers, separate score and ranking will be provided based on their selection of sections (Refer FAQ).

•For candidates appearing for Humanities and Social Sciences (XH) papers, separate score and ranking will be provided based on their selection of sections (Refer FAQ).

•For candidates appearing for Architecture and Planning (AR) and Geomatics Engineering (GE), papers, no separate score and ranking will be provided based on their selection of sections (Refer FAQ).

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## 4. Pre-Examination Related Information

### 4.1 Eligibility for GATE 2022

Before starting the application process, the candidate must ensure that he/she meets the educational eligibility criteria of GATE 2022.

**A candidate who is currently studying in the 3<sup>rd</sup> or higher years of any undergraduate degree program OR has already completed any government approved degree program in Engineering / Technology / Architecture / Science / Commerce / Arts is eligible for appearing in the GATE 2022 exam.**

**Disclaimer:**

**GATE is NOT an admission ensuring examination. Qualifying in GATE examination does NOT guarantee admission / scholarship. Admission to any institute is fully dependent on the admitting institute's criteria for educational qualification. Similarly, GATE qualification does not assure a Public Sector Undertaking (PSU) job, as it depends on the recruitment procedure of the concerned PSU. GATE committee is NOT liable for any legal obligations related to admission / job.**

Some of the Professional Societies/Institutions, which conduct examination in various fields of engineering, are as follows.

- The Institution of Engineers (India) (IE)
- The Institution of Civil Engineers (ICE)
- The Institution of Electronics and Telecommunication Engineers (IETE)
- The Aeronautical Society of India (AeSI)
- The Indian Institute of Chemical Engineers, including Polymer and Environmental Group (IICChemE)
- The Indian Institute of Metals (IIM)
- The Indian Institute of Industrial Engineers (IIIE)

However, the candidates who possess certification from any of the professional societies must ensure that those examinations conducted by the societies are approved by MoE/AICTE/UGC/UPSC as equivalent to B.E. / B.Tech. / B.Arch. / B.Planning, etc.

Candidates who have obtained / are pursuing their qualifying degree from countries other than India:

Must be currently in the 3<sup>rd</sup> or higher years or completed their Bachelor's degree (duration: at least 3 years) in Engineering / Technology / Science / Arts / Commerce.

Details of eligibility criteria are given in Table 4.1. However, any candidate fulfilling the above mentioned criteria is eligible to appear for GATE 2022.

Note: If a candidate is pursuing any higher degree or has already obtained a degree higher than that mentioned in the Table 4.1 the candidate will be allowed to appear in GATE 2022 examination.

**Table 4.1 Eligibility Criteria for GATE 2022**

Degree/Program	Qualifying Degree/Examination	Description of Eligible Candidates	Expected Year of Completion
B.E. / B.Tech. / B. Pharm.	Bachelor's degree in Engineering / Technology (4 years after 10+2 or 3 years after B.Sc. / Diploma in Engineering / Technology)	Currently in the 3 <sup>rd</sup> year or higher or already completed	2023
B. Arch.	Bachelor's degree of Architecture (5- year course) / Naval Architecture (4- year course) / Planning (4- year course)	Currently in the 3 <sup>rd</sup> year or higher or already completed	2024 (for 5- year program), 2023 (for 4- year program)
B.Sc. (Research) / B.S.	Bachelor's degree in Science (Post-Diploma/4 years after 10+2)	Currently in the 3 <sup>rd</sup> year or higher or already completed	2023
Pharm. D. (after 10+2)	6 years degree program, consisting of internship or residency training, during third year onwards	Currently in the 3 <sup>rd</sup> /4 <sup>th</sup> /5 <sup>th</sup> /6 <sup>th</sup> year or already completed	2025
M.B.B.S.	Degree holders of M.B.B.S. and those who are in the 5 <sup>th</sup> /6 <sup>th</sup> /7 <sup>th</sup> semester or higher semester of such programme.	5 <sup>th</sup> , 6 <sup>th</sup> , 7 <sup>th</sup> or higher semester or already completed	2023
M. Sc. / M.A. / MCA or equivalent	Master's degree in any branch of Arts/Science/Mathematics/Statistics/ Computer Applications or equivalent	Currently in the first year or higher or already Completed	2023
Int. M.E./ M.Tech. (Post-B.Sc.)	Post-B.Sc Integrated Master's degree programs in Engineering/ Technology (4-year program)	Currently in the 1 <sup>st</sup> / 2 <sup>nd</sup> /3 <sup>rd</sup> /4 <sup>th</sup> year or already completed	2025
Int. M.E./ M.Tech. or Dual Degree (after Diploma or 10+2)	Integrated Master's degree program or Dual Degree program in Engineering/Technology (5-year program)	Currently in the 3 <sup>rd</sup> /4 <sup>th</sup> /5 <sup>th</sup> year or already completed	2024
B.Sc. / B.A. / B.Com.	Bachelor degree in any branch of Science / Arts / Commerce (3 year program)	Currently in the 3 <sup>rd</sup> year or already completed	2022
Int. M.Sc. / Int. B.S. / M.S.	Integrated M.Sc. or 5-year integrated B.S.-M.S. program	Currently in the 3 <sup>rd</sup> year or higher or already completed	2024
Professional Society Examinations (equivalent to B.E. / B.Tech. / B.Arch.)	B.E./B.Tech./B.Arch. equivalent examinations of Professional Societies, recognized by MoE/UPSC/AICTE (e.g. AMIE by Institution of Engineers-India, AMICE by the Institute of Civil Engineers-India and so on)	Completed Section A or equivalent of such professional courses	NA

## 4.2 GATE 2022 Papers

GATE 2022 will be conducted on **29 subjects** (papers). Table 4.2 shows the list of papers and paper codes for GATE 2022. A candidate is allowed to appear in ANY ONE or UP TO TWO papers of the GATE examination. However, note that the combination of TWO papers in which a candidate can appear MUST be from the pre-defined list as given in Table 4.3. Also note that for a paper running in multiple sessions, a candidate will be mapped to appear for the examination in one of the sessions ONLY.

**Table 4.2 List of GATE 2022 Papers and Corresponding Codes**

GATE Paper	Code	GATE Paper	Code
Aerospace Engineering	AE	Instrumentation Engineering	IN
Agricultural Engineering	AG	Mathematics	MA
Architecture and Planning	AR	Mechanical Engineering	ME
Bio-medical Engineering	BM	Mining Engineering	MN
Biotechnology	BT	Metallurgical Engineering	MT
Civil Engineering	CE	Naval Architecture and Marine Engineering	NM
Chemical Engineering	CH	Petroleum Engineering	PE
Computer Science and Information Technology	CS	Physics	PH
Chemistry	CY	Production and Industrial Engineering	PI
Electronics and Communication Engineering	EC	Statistics	ST
Electrical Engineering	EE	Textile Engineering and Fibre Science	TF
Environmental Science & Engineering	ES	Engineering Sciences	XE*
Ecology and Evolution	EY	Humanities & Social Sciences	XH**
Geomatics Engineering	GE	Life Sciences	XL***
Geology and Geophysics	GG		

**Note: “Geomatics Engineering (GE)” and “Naval Architecture and Marine Engineering (NM)” are two new papers introduced in GATE 2022.**



*XE Paper Sections	Code	**XH Paper Sections	Code	***XL Paper Sections	Code
Engineering Mathematics (Compulsory) (15 marks)	A	Reasoning and Comprehension (Compulsory) (25 marks)	B1	Chemistry (Compulsory) (25 marks)	P
Any TWO optional Sections (2x35 = 70 marks)		Any ONE optional Section (60 marks)		Any TWO optional Sections (2x30 = 60 marks)	
Fluid Mechanics	B	Economics	C1	Biochemistry	Q
Materials Science	C	English	C2	Botany	R
Solid Mechanics	D	Linguistics	C3	Microbiology	S
Thermodynamics	E	Philosophy	C4	Zoology	T
Polymer Science and Engineering	F	Psychology	C5	Food Technology	U
Food Technology	G	Sociology	C6		
Atmospheric and Oceanic Sciences	H				

\*XE (Engineering Sciences), \*\*XH (Humanities & Social Sciences), \*\*\*XL (Life Sciences), papers are of general nature and will be comprised of Sections listed in the above table.

**Note: Each subject/paper is of total 100 marks. General Aptitude (GA) section of 15 marks is common for all papers. Hence remaining 85 marks are for the respective subject/paper code.**

Note: CE, CS, EC, EE and ME papers: Examination MAY be conducted in multiple sessions. However, a candidate is allowed to appear in only ONE specified / assigned session by the GATE committee.

The syllabus for each of the papers is given on GATE website <https://gate.iitkgp.ac.in>. Making a choice of the appropriate paper in the GATE application is the responsibility of the candidate. Some guidelines in this respect are suggested below.

Candidates are expected to appear in paper(s) appropriate to the discipline of their qualifying degree. However, candidates are free to choose any one or the allowed set of two papers of the GATE 2022 examination as per their admission or employment plan, while keeping in mind the eligibility criteria for the institutions in which they wish to seek admission/employment. For more details regarding the admission criteria in any particular institute, the candidate is advised to refer to the website of that institute.

Candidates must familiarize themselves with the paper code as it is required both during application and examination. As the candidates are permitted to appear in ONE or UP TO TWO papers of the allowed combination of TWO papers (refer Table 4.3) of the GATE 2022, they should make their choice with due care.

If a candidate makes more than one application for the same paper, he/she will be allowed to appear in any one session ONLY. One of the duplicate / triplicate applications will be considered and the remaining applications will be rejected without any refund of application fee.

**Table 4.3 Combination of TWO Papers Allowed to Appear in GATE 2022  
(subject to availability of infrastructure and schedule)**

Code of The First (Primary) Paper	Codes of Papers Allowed as The Second Paper	Code of The First (Primary) Paper	Codes of Papers Allowed as The Second Paper
AE	NM, XE	IN	EC, EE, PH
AG	ES, GE, XE, XL	MA	CS, GE, PH, ST
AR	CE	ME	AE, CH, NM, PI, XE
BM	BT, EC, IN, XL	MN	GE, GG, XE
BT	BM, XL	MT	PH, XE
CE	AE, AR, ES, GE, NM	NM	AE, CE, XE
CH	PE, XE	PE	CH, GG, XE
CS	EC, GE, MA, ST	PH	EC, GE, GG, IN, MA, MT, ST, XE
CY	XL	PI	ME, MT, XE
EC	IN, PH, EE, CS, GE	ST	MA, PH
EE	EC, IN	TF	XE
ES	AG, CE, GE	XE	AE, AG, CH, ME, MN, MT, PE, PI, TF, NM
EY	XL	XH	ST
GE	CE, GG, ES, MN	XL	BM, BT, CY, EY
GG	GE, MN, PE, PH		

**Note:** Candidates opting to appear in TWO subject papers must have a primary choice of paper, which will be their default choice and second choice of paper, which has to be chosen from the allowed combinations are given in Table 4.3. Combinations other than the listed ones are NOT allowed. Under unforeseen circumstances, GATE 2022 committee has the rights to remove certain combinations listed in Table 4.3 at a later date. In such case, the fee paid towards the second paper will be refunded to the candidates. Also note that the examination centre for candidate to appear for the second paper may be different (but in same city) from that for the first paper due to the infrastructure and scheduling constraints. GATE committee is NOT liable for any legal obligations related to this issue.

### 4.3 GATE 2022 Examination Cities

Table 4.4 gives a tentative list of the cities (zone-wise) in which GATE 2022 examination is planned to be held. Also given in the table are the details of the Zonal GATE Offices.

**Choice of Examination City:** A candidate can choose **THREE** cities from the list of examination cities given in Table 4.4. All the three choices must be from the same GATE 2022 zone.

If a candidate chooses a particular city (in a particular zone) as the first choice, then he/she will be able to choose the city of second and third choices **ONLY** from the same zone. Note that, because of the operational constraints, the GATE Committee reserves the right to add a new city or remove an existing one, and allot a city that may not be from any of the choices selected by the candidate.

### 4.4 Application Process

Application for GATE 2022 must be submitted ONLINE website (<https://gate.iitkgp.ac.in>) by paying necessary application fees. The photograph, signature, category certificate (SC / ST / PwD) and / or Dyslexic certificate, wherever applicable, must be uploaded during the online application. **Candidates MUST enter the valid photo identity (ID) number specified in any one of the following IDs: Aadhaar-UID (preferable), Passport, PAN Card, Voter ID and Driving License.** The candidates who do not possess any of these identity cards, may please procure any one of them before making the application. Candidate MUST produce the SAME original valid photo ID proof during the examination for verification purpose. In the absence of the SAME original valid photo ID proof, candidate will NOT be allowed to appear for GATE 2022 examination.

**Note: "Candidates applying to GATE are required to apply online only. GATE applications in any other form are unauthorized and not sold".**

**Table 4.4 Tentative List of Zone-Wise Examination Cities**

Zone No.	Zonal GATE Office	Tentative List of Examination Cities/Towns*
Zone-1	IISc Bangalore Bengaluru - 560 012 Website: <a href="http://gate.iisc.ac.in">http://gate.iisc.ac.in</a>	Ananthapuramu (AP), Angamaly (KL), Bagalkot (KA), Ballari (Bellary KA), Belagavi (Belgaum KA), Bengaluru North (KA), Bengaluru South (KA), Bidar (KA), Chikkamagaluru (KA), Davanagere (KA), Hassan (KA), Hubballi (Hubli KA), Hyderabad (TS), Kalaburagi (Gulbarga KA), Kannur (KL), Kasaragod (KL), Kolar (KA), Kozhikode (KL), Kurnool (AP), Malappuram (KL), Mangaluru (KA), Manipal (KA), Mysuru (Mysore KA), Palakkad (KL), Payyanur (KL), Port Blair (AN), Shivamogga (Shimoga KA), Thrissur (KL), Tumakuru (KA), Vatakara (KL) - (30 Cities).
Zone-2	IIT Bombay, Powai, Mumbai - 400 076 Website: <a href="https://gate.iitb.ac.in/">https://gate.iitb.ac.in/</a>	Ahmedabad (GJ), Ahmednagar (MH), Akola (MH), Amravati (MH), Anand (GJ), Aurangabad (MH), Baramati (MH), Bhavnagar (GJ), Bhuj (GJ), Dhule (MH), Gandhinagar (GJ), Goa (GA), Jalgaon (MH), Kolhapur (MH), Mehsana (GJ), Mumbai-Navi Mumbai-Thane (MH), Nagpur (MH), Nanded (MH), Nashik (MH), Pune (MH), Panvel-Raigad (MH), Rajkot (GJ), Ratnagiri (MH), Sangamner-Loni-Shirdi (MH), Sangli (MH), Satara (MH), Solapur (MH), Surat (GJ), Vadodara (GJ), Vasai-Palghar (MH) - (30 Cities).
Zone-3	IIT Delhi, Hauz Khas, New Delhi - 110 016 Website: <a href="http://gate.iitd.ac.in">http://gate.iitd.ac.in</a>	Ajmer (RJ), Alwar (RJ), Bikaner (RJ), Faridabad (HR), Greater NOIDA (UP), Gurugram (HR), Hisar (HR), Indore (MP), Jaipur (RJ), Jammu-Samba (JK), Jodhpur (RJ), Kota (RJ), Mathura (UP), New Delhi (DL), Sikar (RJ), Sonapat (HR), Srinagar (JK), Udaipur (RJ), Ujjain (MP) - (19 Cities).
Zone-4	IIT Guwahati Guwahati - 781 039 Website: <a href="http://iitg.ac.in/gate-jam/">http://iitg.ac.in/gate-jam/</a>	Agartala (TR), Aizawl (MZ), Asansol-Durgapur (WB), Bokaro Steel City (JH), Burdwan (WB), Dhanbad (JH), Dibrugarh (AS), Dimapur-Kohima (NL), Gangtok (SK), Guwahati (AS), Imphal (MN), Itanagar (AR), Jorhat (AS), Kalyani (WB), Muzaffarpur (BR), Patna (BR), Purnea (BR), Shillong (ML), Silchar (AS), Siliguri (WB), Tezpur (AS) - (21 Cities).
Zone-5	IIT Kanpur Kanpur - 208 016 Website: <a href="http://gate.iitk.ac.in">http://gate.iitk.ac.in</a>	Agra (UP), Aligarh (UP), Allahabad (UP), Bareilly (UP), Bhopal (MP), Gorakhpur (UP), Gwalior (MP), Jabalpur (MP), Jhansi (UP), Kanpur (UP), Lucknow (UP), Sagar (MP), Satna (MP), Varanasi (UP) - (14 Cities).
Zone-6	IIT Kharagpur Kharagpur - 721 302 Website: <a href="http://gate.iitkgp.ac.in">http://gate.iitkgp.ac.in</a>	Baharampur-Murshidabad (WB), Balasore (OD), Berhampur (OD), Bhilai (CH), Bhubaneswar (OD), Bilaspur (CH), Cuttack (OD), Dhenkanal (OD), Eluru (AP), Hazaribag (JH), Hooghly (WB), Jamshedpur (JH), Kakinada (AP), Kharagpur (WB), Kolkata (WB), Machilipatnam (AP), Raipur (CH), Rajamahendravaram (Rajahmundry AP), Ranchi (JH), Rourkela (OD), Sambalpur (OD), Srikakulam (AP), Tadepalligudem (AP), Vijayawada (AP), Visakhapatnam (AP), Vizianagaram (AP) - (26 Cities).

Zone No.	Zonal GATE Office	Tentative List of Examination Cities/Towns*
Zone-7	IIT Madras Chennai - 600 036 Website: <a href="http://gate.iitm.ac.in">http://gate.iitm.ac.in</a>	Alappuzha (KL), Aluva-Ernakulam (KL), Attingal (KL), Chengannur (KL), Chennai South (TN), Chennai West (TN), Chirala (AP), Chittoor (AP), Coimbatore (TN), Cuddalore (TN), Dindigul (TN), Gudur (AP), Guntur (AP), Idukki (KL), Kadapa (AP), Kanjirapally (KL), Kanyakumari-Nagercoil (TN), Karimnagar (TS), Khammam (TS), Kodad (TS), Kollam (KL), Kothamangalam (KL), Kottayam (KL), Madurai (TN), Muvattupuzha (KL), Namakkal (TN), Nellore (AP), Ongole (AP), Puducherry (PY), Salem (TN), Thanjavur (TN), Thiruvananthapuram (KL), Thoothukudi (TN), Tiruchirapalli (TN), Tirunelveli (TN), Tirupati (AP), Vellore (TN), Villupuram (TN), Virudhunagar (TN), Warangal (TS) - (40 Cities).
Zone-8	IIT Roorkee Roorkee – 247 667 Website: <a href="https://gate.iitr.ac.in">https://gate.iitr.ac.in</a>	Ambala (HR), Amritsar (PB), Bathinda (PB), Dehradun (UK), Ghaziabad (UP), Haldwani (UK), Hamirpur-Una (HP), Jalandhar (PB), Karnal (HR), Kurukshetra (HR), Ludhiana (PB), Meerut (UP), Mohali-Chandigarh (PB), Moradabad (UP), Muzaffarnagar (UP), NOIDA (UP), Panipat (HR), Pathankot (PB), Patiala-Sangrur (PB), Roorkee (UK), Shimla-Solan (HP), Yamunanagar (HR) - (22 Cities).

This is a tentative list of examination cities, and any changes will be updated on website: <https://gate.iitkgp.ac.in>

#### 4.4.1 GATE 2022 Application Fee

Details of the application fee per candidate per paper are given in Table 4.5. The application fee is NEITHER refundable (except for condition in note above Table 4.3) NOR transferable. Payments have to be made online by using either net banking / debit card / credit card / wallet. As per the prevailing norms, additional online transaction charges or bank charges may be applicable. These charges will be specified on the payment portal.

**Table 4.5 Details of Application Fee for GATE 2022 (Per Subject Paper)**

For Examination Centres in India	Regular Period (30 <sup>th</sup> August to 24 <sup>th</sup> Sept. 2021)	During the Extended Period (25 <sup>th</sup> Sep. to 1 <sup>st</sup> Oct. 2021)
Female candidates (per paper)	₹ 750	₹ 1250
SC / ST / PwD* category candidates (per paper)	₹ 750	₹ 1250
All other candidates (per paper)	₹ 1500	₹ 2000

**Note:** The application fee mentioned above DOES NOT INCLUDE service charges, processing fees and any other charges that the banks may levy.

\*PwD means Persons with Disability.

#### 4.4.2 GATE Online Application Process

GATE 2022 (<https://gate.iitkgp.ac.in>) provides an online interface to the candidate for interacting with the GATE administration. With this interface, a candidate can:

- Apply for the examination.
- Upload photograph, signature and other documents and category certificate (SC / ST / PwD) and / or Dyslexic certificate as applicable.
- Pay the application fee through any of the electronic payment modes.
- Check the Status of the application form: Received, under scrutiny, Accepted, Defect status, Status after rectification, rejected with valid reasons, Admit Card ready for download, etc.
- Download Admit Card.
- View your answers, marks and GATE score.
- Download GATE scorecard.

**Registration:** A candidate must first register by providing Full Name (as per the valid photo ID, which candidate MUST bring in original while appearing for GATE 2022 examination at the examination centre), a valid e-mail address, mobile number and by choosing a password. All communications from the GATE Offices will be sent to this e-mail address (ONLY ONE PERSON CAN REGISTER WITH ONE e-mail ADDRESS) and / or mobile number. Give the personal mobile number and e-mail address, because most of the communication will be through e-mail and/or SMS.

**Enrolment ID:** Each registered candidate will be provided with an Enrolment ID. Upon registration, an e-mail containing the Enrolment ID will be sent to the candidate. This Enrolment ID will be the reference ID for all future communication until the examination gets over.

**Password:** The candidate has to choose a password during Enrolment. This password must be remembered along with the Enrolment ID to login in to your account. It is strongly recommended to choose a password that cannot be guessed easily (it should not be the candidate's name, date of birth, or some easily identifiable string of numbers or letters like 12345 or abcd). Length of the password should be 8-15 characters. Keep your password information safe, secure and confidential.

#### 4.4.3 Filling in GATE 2022 Application

After due registration, GATE 2022 application must be filled and submitted ONLINE only.

Candidates are discouraged from making application through a third person. If someone else (friend or Internet café person) is filling the application on behalf of the candidate, the candidate must ensure that the data submitted are correct. Based on the earlier experience, submission through a third person is highly discouraged to ensure an error-free application.

- i) **Data Requirement for Filling the Application Form:** The following data will be required while filling the online application form:

•Personal information (name, date of birth, personal mobile number, parents' name, parents' mobile number, etc.). Please note that the name of the candidate in the application form must be exactly the same as that in the valid photo ID, which the candidate MUST produce in original while appearing for GATE 2022 examination at the centre. GATE 2022 scorecard will be issued as per the name entered in the application form. Prefix/title such as Mr/Shri/Dr/Mrs/Smt/Prof/Capt/Maj/Lt/Col., etc. MUST NOT be used before name.

- Address for Communication (including PIN code)
- Eligibility degree details
- College name and address with PIN code
- GATE paper(s) (subject)
- Choice(s) of GATE examination cities
- High quality image of candidate's photograph conforming to the requirements specified
- Good quality image of candidate's signature conforming to the requirements specified
- Scanned copy of valid photo Identity Document (ID) (The same ID, in original, MUST be carried to the examination hall)
- Scanned copy of Category (SC / ST) certificate (if applicable) in pdf format
- Scanned copy of PwD Certificate (if applicable) in pdf format
- Scanned copy of Dyslexic Certificate (if applicable) in pdf format
- Net-banking / debit card/credit card / wallet details for fee payment

ii) **Application Filling:** The GATE 2022 website allows you to enter the data, save partially filled form, logout, and resume filling the form by logging in again. The online application process is self-explanatory and user-friendly. Additional help information required in filling various fields in the will also be made available.

Before proceeding to payment, the candidate is advised to view the filled-in application form by clicking "Save and View Application" button. Please check carefully for any errors in the data entered in the application form. Once the candidate clicks "Submit and Proceed to Payment" button, NO further changes to the application can be made. For online payment, follow the instructions given in Section 4.4.8 for payment options.

iii) **Declaration:** Before submitting the online application form, a candidate MUST read and accept the following declaration statement:

*I confirm that I fulfil the eligibility criteria to appear for the Graduate Aptitude Test in Engineering (GATE 2022) examination and I, myself have filled up the entire online application form. I have fully understood each and every point in the form and filled up the details accordingly. I agree to strictly comply with the code of conduct for GATE 2022 examination as detailed in Appendix B of the Information Brochure. I confirm that the information provided by me in this form is correct in all respect. I also confirm that I am NOT filling more than ONE form for myself.*

*If any of the information provided by me is found to be incorrect at a later time, my candidature for GATE 2022 will be cancelled. This cancellation of my candidature can happen either before, during or after the examination, including the time after generation of my GATE 2022 score card, if any.*

*I also understand that GATE is NOT an admission ensuring examination, and qualifying in GATE examination does NOT guarantee admission / scholarship / job. GATE 2022 committee is NOT liable for any legal obligations related to admission / job.*

*I shall be liable for legal action for providing any type of false information. GATE 2022 committee's decision will be final and legally binding on me.*

**iv) Problems in Login:** In case of forgotten user ID or password, follow the instructions on the GATE 2022 website to retrieve them.

#### **4.4.4 Identity Proof**

Candidates have to specify ANY ONE of the following valid photo Identity Documents (IDs) during the online application process and enter the document number specified: **Aadhaar-UID (preferable)**, Passport, PAN Card, Voter ID or Driving License. On the examination day, the candidate must bring the original ID proof along with the GATE 2022 Admit Card. Candidates will NOT be permitted to take the examination, in case the admit card and the same valid original photo identification document are NOT presented at the examination.

For international candidates, ONLY a valid Passport / Government issued ID / Driving License will be accepted as the recognized identification document.

#### **4.4.5 PwD Candidates and Scribe Related Guidelines**

GATE 2022 will follow the guidelines as per the government regulations (**Appendix A**).

Refer: [https://gate.iitkgp.ac.in/documents/PWD\\_Guidelines.pdf](https://gate.iitkgp.ac.in/documents/PWD_Guidelines.pdf)

A Person with benchmark Disability (PwD) / Dyslexic candidate has the option of availing scribe assistance during the GATE 2022 examination. The option exercised by the candidates in this regard should be done during the application stage. PwD / Dyslexic candidates can either arrange their own scribe or request GATE authority to arrange for a panel of scribes. The assistance that the Scribe can render to the candidate is limited to ONLY reading the instructions and test paper displayed on the computer screen verbatim and in mouse-clicks, if the candidate is not able to do so.

- The Scribe shall NOT translate/interpret/emphasize the Test Paper Contents to the Candidate.

##### **i) Scribes arranged by Candidates:**

The Scribe MUST NOT be a candidate for a test paper in GATE 2022. According to the GoI (Government of India) guidelines, in case the candidates have opted to bring their Scribe, then the qualification of the Scribe should be one step below the qualification of the candidates taking the examination.

- If PwD / Dyslexic candidate have opted for their own scribe but they do not bring their own Scribe then it will not be possible to arrange a new Scribe.
- NO honorarium will be paid to the scribe arranged by the PwD / Dyslexic candidate.



## ii) Scribes arranged by GATE:

- GATE Scribes will be used for those PwD / Dyslexic candidates who have a priori opted for GATE Scribes.
- The qualification of the Scribe arranged by GATE will NOT be more than the minimum eligibility criteria of GATE. However, the qualification of the Scribe will be matriculation (10<sup>th</sup>) or above.
- If there are Y candidates who require scribe, it will be ensured that a panel of Y+1 scribes are available at the exam centre so that every candidate can have an alternative scribe to choose for the services. A PwD / Dyslexic (similar learning disabilities) candidate who has been allowed to use a scribe has to choose from this panel. Candidates will NOT be permitted to bring their own scribe, if they have already opted for scribes to be arranged by GATE.

iii) **Assistive Devices:** PwD candidates, if required, can use assistive devices like Abacus, Braille slate, Wheel chair, etc. PwD candidates desiring to make use of these devices have to arrange them, on their own and bring along with them, to the examination. GATE is not in a position to provide any of these assistive devices. However, since GATE 2022 is a Computer Based Test, candidate will be given an option to view the content on the computer screen in a magnified font (Step 1 magnification: approximately 1.25x, and Step 2 magnification: approximately 1.5x).

PwD Candidates are permitted to visit the Exam Centre a day before the examination to see and get familiarized with the arrangements.

iv) **Compensatory time:** Candidates with Scribe can avail a compensatory time of one additional hour (20 minutes per hour of examination) at a stretch for the three-hour GATE examination. As per GATE guidelines, PwD / Dyslexic (similar learning disabilities) candidates with Scribes are eligible for a compensatory time of 60 minutes. This compensatory time of 60 minutes will be provided automatically, which needs to be checked in the server and candidate's console. However, PwD candidates, with certain benchmark disabilities (that limits the speed of writing) who do not want to avail the scribe assistance, but at the same time request for compensatory time during the time of application, may be considered for an extra time of one hour. **On-spot request for any compensatory time at the examination hall will NOT be entertained.**

## 4.4.6 Supporting Documents

### (i) Photo ID

Candidates MUST upload PDF file of any one of the following valid photo identity (ID): Aadhaar-UID (preferable), Passport, PAN Card, Voter ID and Driving License.

For international candidates, ONLY a valid Passport / Government issued ID / Driving License will be accepted as the recognized identification document.

The candidates who do not possess any of these identity cards, may please obtain any one of them before making the application. Candidate MUST produce the SAME original valid photo ID proof during the examination for verification purpose. In absence of the SAME original valid photo ID proof, candidate will NOT be allowed to appear for GATE 2022 examination.

#### (ii) Category (SC / ST) Certificate

Candidates who belong to SC or ST category have to upload a valid documentary proof (for getting the concession in application fee). Certificate issued ONLY by the authorized officials will be valid (refer to **Appendix A**, for a list of Authorities Empowered to Issue SC / ST Certificate). Necessary legal actions will be initiated for any wrongdoing and misinformation. The same document is required to be submitted to the admitting institution which may admit student using GATE score at the time of admission. The onus of verifying SC / ST certificate lies with the admitting institute. The GATE committee will NOT be responsible for any incorrect declaration in this regard.

NOTE: OBC-NCL and EWS candidates are NOT required to submit / upload any category certificate while filling the online application form.

#### (iii) Person with Disability (PwD) Certificate

In order to avail the application fee concession under the Person with Disability (PwD) category, the candidates should attach a **recently** obtained and proper PwD certificate issued by the competent authority. Benefit would be given to those who have benchmark disability i.e. not less than 40% impairment irrespective of the type of disability. The same document is required to be submitted to the admitting institution at the time of admission. The onus of verifying PwD certificate lies with the admitting institute. The GATE committee will NOT be responsible for any incorrect declaration of the PwD status of candidates.

Those PwD candidates who have physical limitation to take examination, including that of speed, may request during the application time for availing the services of a scribe. A scribe will be arranged by the GATE authorities.

#### (iv) Certificate of Dyslexia

To avail the services of a scribe, the dyslexic candidates should attach a proper dyslexic certificate issued by any authorized Dyslexia Association (refer to **Appendix A**, for Authorities Empowered to Issue Certificate of Dyslexia). The scribe will be provided by the GATE authorities. The same document is required to be submitted to the admitting institution at the time of admission. The onus of verifying dyslexic certificate lies with the admitting institute. The GATE committee will not be responsible for any incorrect declaration of the dyslexic status of candidates.

### 4.4.7 Photograph and Signature Requirements

The GATE 2022 application requires that your photograph and signature are to be uploaded electronically. Uploading photograph and signature that does not meet the specifications may eventually result in the disqualification of the application without any refund of the application fee.

#### **Photograph Requirements:**

- Please upload only good quality (not blurred) photograph as per following guidelines. The GATE 2022 admit card and scorecard will be printed with the photograph that you have submitted.
- The photograph MUST match with your appearance on the day of the examination.

- A passport size (3.5 cm Width × 4.5 cm Height) photograph of the face of the candidate is required for the application form.
- The face of the candidate must cover 60% - 70% of the above mentioned size of the photograph.
- The photograph must be recent, in COLOUR with WHITE background. Photographs taken using a mobile phone and other self-composed portraits may result in rejection of the application.
- Face in the photo MUST NOT be covered with any foreign objects (except spectacles with power). Sunglasses, Caps, Hats, Coloured glasses etc. are NOT allowed.
- Both the ears MUST be visible on the photo.
- Photo MUST contain ONLY candidate's face. NO objects/persons in the background are allowed.
- Upload the image of your photo in JPEG / JPG format of size with aspect ratio, minimum aspect ratio = 0.66; maximum aspect ratio = 0.89. After cropping to the mentioned size, face must cover 60-70% of the image.
- Maximum size for photo can be 480×640 in pixels and minimum pixel resolution 240×320. File size MUST be minimum of 20 kB and maximum of 200 kB.
- Background of the photograph must be WHITE in *colour*.
- The photograph MUST have a full-face view looking into the camera directly.
- The main features of the face must not be covered by hair of the head, any cloth or any shadow. Forehead, eyes, nose, ears and chin should be clearly visible.
- If the candidate normally wears spectacles, a photograph with glare on glasses is NOT acceptable in the photo. While the candidate may wear spectacles for the photo shoot, if the glare cannot be avoided, then the spectacles MUST be removed.
- Photographs which are not adhering to above criteria will lead to rejection of your GATE application, WITHOUT any refund of the application fee.
- Table 4.6 shows the samples of acceptable good quality photographs and poor quality unacceptable photographs.



**Table 4.6 Sample Photographs**

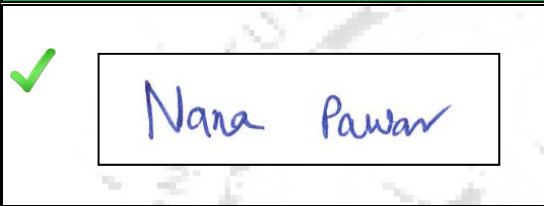
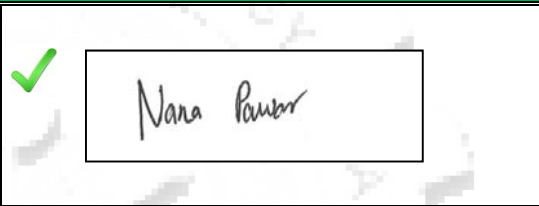
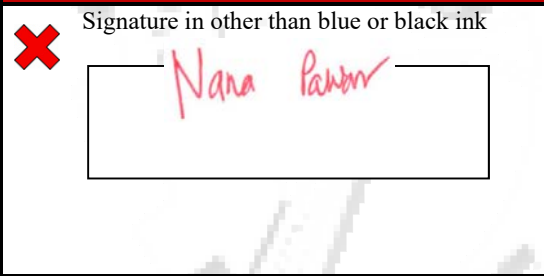
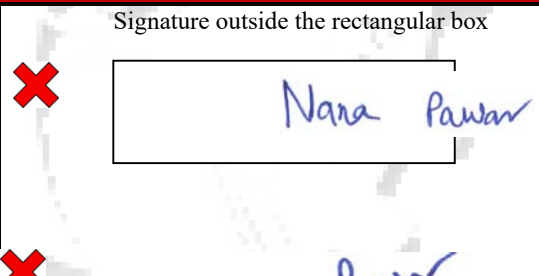
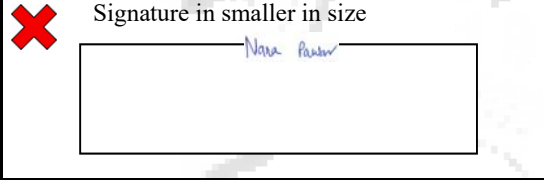
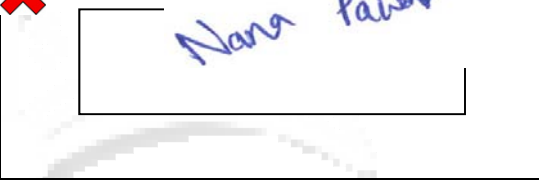
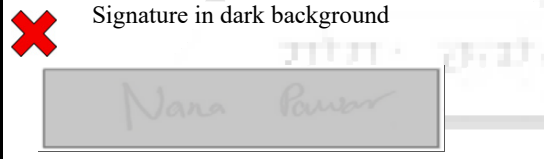
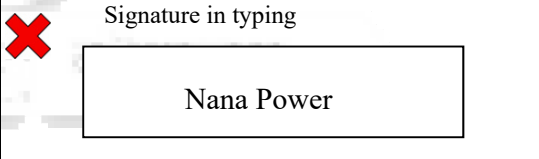
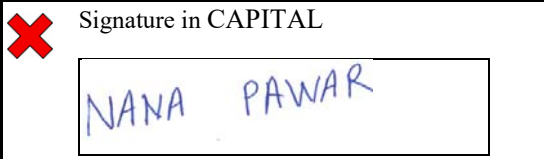
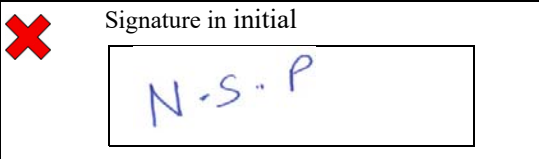
A: Sample Photographs: Acceptable			
			
B: Sample Photographs: Not Acceptable			
 <p>Smaller in size (Not matching with a specified size of 35 mm width x 45 mm height)</p>	 <p>Wearing coloured glasses or sunglasses</p>	 <p>Shadow on face</p>	
 <p>Improper background and side view</p>	 <p>Not facing the camera</p>	 <p>Photo taken in dark background</p>	
 <p>Distorted Face</p>	 <p>Face covered with Mask</p>	 <p>Blurred image</p>	

**Signature Specifications:**

Upload the image of your clear signature in JPEG / JPG format of size with aspect ratio, height: width = 1.0 : A, where, value of A can be between 3.25 to 3.75. After cropping to the mentioned size, area of signature must cover 70-80% of the image.

- Sign with black or dark blue colour ink only.
- File size MUST be within 5 kB (minimum) to 200 kB (maximum).

**Table 4.7 Sample Signatures**

Acceptable signatures	
	
Unacceptable signatures	
 <p>Signature in other than blue or black ink</p>	 <p>Signature outside the rectangular box</p>
 <p>Signature in smaller in size</p>	
 <p>Signature in dark background</p>	 <p>Signature in typing</p>
 <p>Signature in CAPITAL</p>	 <p>Signature in initial</p>

- The signature by any other person or in any other colour (other than **black** and **blue**) will NOT be accepted.
- Get the digital image of the rectangular box (with your signature inside) scanned by using a professional scanner. Crop it to the border of the box. Table 4.7 shows sample signatures which are acceptable and unacceptable.
- To avoid signature with a dark background, **do not take photograph with mobile phone**.
- Only JPEG / JPG image format will be accepted.
- The maximum image size for the signature can be 160×560 in pixels.
- The minimum image size for the signature should be 80×280 in pixels.
- The signature must be signed only by the applicant and not by any other person.
- If the applicant's signature, at the time of examination, does NOT match the signature on the Admit Card, the applicant will be disqualified.

#### **4.4.8 Application Fee Payment Options**

Details of the application fee are given in Table 4.5. From the GATE 2022 application portal, the candidate will be redirected to the payment gateway, which provides the payment options. The fee can be paid with net-banking / debit / credit card / wallet / UPI.

The fee amount and bank charges will be shown to the candidate and he/she will have to confirm and pay. Once the payment is successful, he/she will be redirected back to the GATE 2022 application portal, from where the candidate will be able to download the pdf copy of the submitted application form by clicking "Download Application Form" button.

If the candidate has any difficulty (due to internet connection or power failure problems, for example), and he/she is not sure whether the payment has been processed or not, then the candidate should check the status of transaction from their bank account and also login back to GATE 2022 application portal after some time and check the status of the payment.

If the payment was received by GATE, you can continue the process of printing the application form. If the payment is not received by GATE 2022, you may initiate a fresh payment.

In case, any fee amount has been debited (deducted) from your bank account, but not received any acknowledgement for fee payment from GATE 2022, then the money will be credited back to your account. However, this may take a week or more.

Any multiple payments received on behalf of GATE 2022 from your account with respect to one application, will automatically be returned (credited) to the same bank account. However, this may take a week or more. In such a situation, the candidate needs to initiate fresh payment without waiting for the refund of money paid, in order to complete the application submission process within the deadline.

Before submitting the GATE 2022 Application Form, the candidate MUST ensure that all the details and all the necessary supporting documents are filled/uploaded and there is NO ERROR in that process. An application once submitted **CANNOT** be changed/rectified. As a checklist the candidate MUST verify that he/she has filled in and uploaded the following information, whichever is applicable:

- Personal information (name, date of birth, personal mobile number, parent's/guardian's name, parent's/guardian's mobile number, etc.).
- Address for Communication (including PIN code).
- Eligibility degree details (Roll No / Registration No, College address, PIN code of college).
- Good quality image of a recent photograph conforming to the requirements specified.
- Good quality image of signature conforming to the requirements specified.
- Details and good quality scanned copy of the same valid photo ID Proof that will be carried to the examination hall.
- Category certificate (SC / ST / PwD) in case a concession in application fee is claimed.

**Important: It is essential that the candidate fills-in all the details in GATE 2022 online application form without ANY ERROR. The application is liable to be REJECTED if there is any error. GATE committee is NOT responsible for the rejection of any application due to such error(s).**

#### **4.5 Application Scrutiny and Rectification**

All the applications submitted for GATE 2022 examination will be scrutinized for the accuracy of the data, which include uploaded supporting documents, clarity of the photograph and signature. If everything is found to be in order, the application will be accepted. Otherwise, defects in the application will be marked and intimated to the candidate for rectification, which needs to be carried out within a stipulated given time. The status of the application and defects identified in the application will be intimated to the candidates by an e-mail and/or SMS, which the candidate has provided while filling the application form. The current status of an application will be updated after its receipt and scrutiny by the respective zonal GATE offices. The status of the candidate's application can be checked anytime by logging into your GATE 2022 account.

Candidates should act **quickly to rectify** the defects in the application and update it before the stipulated deadline. Failing to rectify the defects within the stipulated time can lead to the rejection of the application and NO further communication will be entertained in this regard.

#### **4.6 Admit Card**

Admit Card can ONLY be downloaded from the GATE 2022 website from 3rd January 2022. Admit Cards will NOT be sent by post or as an e-mail attachment.

Candidates must bring a print-out of the downloaded Admit Card on A4 sized paper to the Examination for the verification along with the original and valid photo Identity Document (NO photocopy / scanned copy / NOT an expired document), which was specified during the filling up of

the online application (for example: Aadhaar-UID, Passport, PAN card, Voter ID and Driving License).

The Admit Card is valid IF and ONLY IF the candidate's photograph and signature images are clear and legible. The photograph on the Admit Card and that in the valid photo identity document should match with the appearance of the candidate on the day of examination. To ensure this, print the Admit Card on an A4 sized paper using a **laser printer**, preferably in colour. Both, the GATE 2022 Admit Card and Original ID proof are essential for entry into the examination hall.

## 5. GATE 2022 Examination Related Information

GATE 2022 examination will be conducted for 29 papers (subjects) as listed in Table 4.2. A candidate can appear for one or two (as per combinations given in Table 4.3) of the 29 GATE papers. The examination for all the papers will be conducted in an ONLINE Computer Based Test (CBT) mode where the candidates will be shown the questions on a computer screen.

A Virtual Scientific Calculator will be available on the computer screen during the examination. Candidates have to use the same during the examination. Personal calculators, any type of watches, wallets, mobile phones or any electronic / communication devices are NOT allowed inside the examination hall. Candidates must NOT bring any charts/tables/papers into the examination hall. GATE officials will NOT be responsible for the safe-keep of the candidates' personal belongings.

A scribble pad will be provided to the candidates for rough work. The candidates have to write their name and registration number on the scribble pad before they start using it. The candidate can possess ONLY one scribble pad at any point of time. Before taking the second scribble pad, if required, the first scribble pad MUST be returned to the invigilator. The scribble pad in the candidate's possession must be returned to the invigilator at the end of the examination.

Syllabus for each of the papers ([Appendix C](#)), previous years GATE (model) question papers, and mock examination links along with virtual scientific calculator will be available on GATE 2022 website: <https://gate.iitkgp.ac.in/>

**Note:** Zonal GATE offices (IITs and IISc) NEVER sell or advertise any GATE examination papers or syllabus. Candidates MUST be aware about frauds in the market/fake emails/fake SMS related to this aspect. Any individual/organization claiming to sell /distribute GATE papers in the name of IITs and IISc will be subjected to appropriate legal actions.

### 5.1 Examination Duration

All the papers of the GATE 2022 examination will be of 3 hours duration and they consist of 65 questions for a total of 100 marks. Since the examination is an ONLINE computer based test (CBT), at the end of the stipulated time (3-hours), the computer screen will automatically close the examination inhibiting any further action.

Candidates will be permitted to occupy their allotted seats 40 minutes before the scheduled start of the examination. Candidates can login and start reading the instructions 20 minutes before the start of examination. The late login time (if any) recorded by the computer system MUST NOT be beyond 30 minutes from the actual starting time of the examination. Under NO circumstances, will a candidate be permitted to login after 30 minutes from the actual examination starting time. Candidates will NOT be permitted to leave the examination hall before the end of the examination.



## 5.2 GATE 2022 Question Papers

### 5.2.1 Pattern of Questions

GATE 2022 may contain questions of THREE different types in all the papers:

**(i) Multiple Choice Questions (MCQ)** carry 1 or 2 marks each, in all the papers and sections. These questions are objective in nature, and each will have choice of four answers, out of which ONLY ONE choice is correct.

**Negative Marking for Wrong Answers:** For a wrong answer chosen in a MCQ, there will be negative marking. For 1-mark MCQ, 1/3 mark will be deducted for a wrong answer. Likewise, for 2-mark MCQ, 2/3 mark will be deducted for a wrong answer.

**Example of MCQ :**

Which Institute is organising GATE 2022 examination ?

(A) IISc Bangalore (B) IIT Kharagpur (C) IIT Delhi (D) IIT Madras.

Here, correct answer is (B) only. Candidate will get full marks only if this answer is selected. The candidates will be given NEGATIVE marks for choosing any other option as their answer.

**(ii) Multiple Select Questions (MSQ)** carrying 1 or 2 marks each in all the papers and sections. These questions are objective in nature, and each will have choice of four answers, out of which ONE or MORE than ONE choice(s) is / are correct.

**Note:** There is NO negative marking for a wrong answer in MSQ questions. However, there is NO partial credit for choosing partially correct combinations of choices or any single wrong choice.

**Example of MSQ :**

Which of the following is / are state(s) in India ?

(A) Maharashtra (B) Gujarat (C) Mumbai (D) Goa.

Here, the correct answer is the combination of (A), (B) and (D). Candidates will get full marks if and only if this combination is selected. There are NO partial marks in this type of question. The candidates will NOT get any marks for choosing any other option / combination as their answer.

**(iii) Numerical Answer Type (NAT)** Questions carry 1 or 2 marks each in most of the papers and sections. For these questions, the answer is a signed real number, which needs to be entered by the candidate using the virtual numeric keypad on the monitor (keyboard of the computer will be disabled). No choices will be shown for these types of questions. The answer can be a number such as 10 or -10 (an integer only). The answer may be in decimals as well, for example, 10.1 (one decimal) or 10.01 (two decimals) or -10.001 (three decimals). These questions will be mentioned with, up to which decimal places, the candidates need to present the answer. Also, for some NAT type problems

an appropriate range will be considered while evaluating these questions so that the candidate is not unduly penalized due to the usual round-off errors. Candidates are advised to do the rounding off at the end of the calculation (not in between steps). Wherever required and possible, it is better to give NAT answer up to a maximum of three decimal places.

**Example of NAT:** If the wire diameter of a compressive helical spring is increased by 2%, the change in spring stiffness (in %) is \_\_ (correct to two decimal places).

*Note: There is NO negative marking for a wrong answer in NAT questions.*

*Also, there is NO partial credit in NAT questions.*

### 5.2.2 Marks Distribution

In all the papers, there will be a total of 65 questions carrying 100 marks, out of which 10 questions carrying a total of 15 marks will be on General Aptitude (GA), which is intended to test typically the Language and Analytical Skills.

In the papers bearing the codes AE, AG, BM, BT, CE, CH, CS, EC, EE, ES, GE, IN, ME, MN, MT, NM, PE, PI, TF and XE, the General Aptitude section will carry 15% of the total marks and the remaining 85% of the total marks is devoted to the subject of the paper out of which 15% will be Engineering Mathematics.

In the papers bearing the codes AR, CY, EY, GG, MA, PH, ST, XH and XL, the General Aptitude section will carry 15% of the total marks and the remaining 85% of the total marks is devoted to the subject of the paper.

### 5.2.3 Design of Questions

The questions in a paper may be designed to test the following abilities:

**(i) Recall:** These are based on facts, principles, formulae or laws in the discipline of the paper. The candidate is expected to be able to obtain the answer either from his/her memory of the subject or at most from a one-line computation.

Example:

Q. During machining, maximum heat is produced  
(A) in flank face (B) in rake face  
(C) in shear zone (D) due to friction between chip and tool

**(ii) Comprehension:** These questions will test the candidate's understanding of the basics of his/her field, by requiring him/her to draw simple conclusions from fundamental ideas.

Example:

Q. A DC motor requires a starter in order to  
(A) develop a starting torque (B) compensate for auxiliary field ampere turns  
(C) limit armature current at starting (D) provide regenerative braking

**(iii) Application:** In these questions, the candidate is expected to apply his/her knowledge either through computation or by logical reasoning.

Example:

Q. The sequent depth ratio of a hydraulic jump in a rectangular channel is 16.48. The Froude number at the beginning of the jump is:

(A) 5.0 (B) 8.0 (C) 10.0 (D) 12.0

The above questions may be a mix of single standalone statement/phrase/data type questions, combination of option codes type questions or match items type questions.

(iv) **Analysis and Synthesis:** In these questions, the candidate is presented with data, diagrams, images, etc. that require analysis before a question can be answered. A Synthesis question might require the candidate to compare two or more pieces of information. Questions in this category could, for example, involve candidates in recognizing unstated assumptions, or separating useful information from irrelevant information.

## 5.3 Marking Scheme – Distribution of Marks and Questions

### 5.3.1 General Aptitude (GA) Questions

In all papers, GA questions carry a total of 15 marks. The GA section includes 5 questions carrying 1-mark each (sub-total 5 marks) and 5 questions carrying 2-marks each (sub-total 10 marks).

### 5.3.2 Question Papers other than AR, GE, GG, XE, XH and XL

These papers would contain 25 questions carrying 1-mark each (sub-total 25 marks) and 30 questions carrying 2-marks each (sub-total 60 marks) consisting of some MCQ type questions, while the remaining may be MSQ and / or NAT questions.

### 5.3.3 AR (Architecture and Planning) Paper

Apart from the General Aptitude (GA) section, the question paper consists of two parts: Part A (60 marks) and Part B (25 marks). Part A is compulsory for all the candidates. Part B contains two parts: Part B1 (Architecture) and Part B2 (Planning). Candidates will have to attempt questions in Part A and questions in either Part B1 or Part B2 of Part B. The choice of Part B1 OR Part B2 can be made during examination.

Part A consists of 39 questions carrying a total of 60 marks: 18 questions carrying 1-mark each (sub-total 18 marks) and 21 questions carrying 2-marks each (sub-total 42 marks). Some are MCQ type questions, while the remaining may be MSQ and / or NAT questions. Either section of Part B [Part B1 (Architecture) and Part B2 (Planning)] consists of 16 questions carrying a total of 25 marks: 7 questions carrying 1-mark each (sub-total 7 marks) and 9 questions carrying 2-marks each (sub-total 18 marks). Some are MCQ type questions, while the remaining may be MSQ and / or NAT questions.

### 5.3.4 GE (Geomatics Engineering) Paper

Apart from the General Aptitude (GA) section, the question paper consists of two parts: Part A (55 marks) and Part B (30 marks). Part A is compulsory for all the candidates. Part B contains two sections: Section I and Section II. Candidates will have to attempt questions in Part A and questions in either Section I or Section II of Part B. The choice of Section I OR Section II of Part B can be made during examination.

Part A consists of 36 questions carrying a total of 55 marks: 17 questions carrying 1-mark each (sub-total 17 marks) and 19 questions carrying 2-marks each (sub-total 38 marks). Some are MCQ type questions, while the remaining may be MSQ and / or NAT questions. Either section of Part B [Section

I or Section II) consists of 19 questions carrying a total of 30 marks: 8 questions carrying 1-mark each (sub-total 8 marks) and 11 questions carrying 2-marks each (sub-total 22 marks). Some are MCQ type questions, while the remaining may be MSQ and / or NAT questions.

### 5.3.5 GG (Geology and Geophysics) Paper

Apart from the General Aptitude (GA) section, the GG question paper consists of two parts: Part A and Part B. Part A is compulsory for all the candidates. Part B contains two sections: Section 1 (Geology) and Section 2 (Geophysics). Candidates will have to attempt questions in Part A and questions in either Section 1 or Section 2 of Part B. The choice of Section 1 OR Section 2 of Part B has to be made **at the time of filling online application form**. At the examination hall, candidate cannot request for change of section.

Part A consists of 16 questions carrying a total of 25 marks: 7 questions carrying 1-mark each (sub-total 7 marks) and 9 questions carrying 2-marks each (sub-total 18 marks). Some are MCQ type questions, while the remaining may be MSQ and / or NAT questions. Either section of Part B (Section 1: Geology and Section 2: Geophysics) consists of 39 questions carrying a total of 60 marks: 18 questions carrying 1-mark each (sub-total 18 marks) and 21 questions carrying 2-marks each (sub-total 42 marks). Some are MCQ type questions, while the remaining may be MSQ and / or NAT questions.

### 5.3.6 XE Paper (Engineering Sciences)

A candidate appearing in the XE paper has to answer the following:

- GA – General Aptitude carrying a total of 15 marks.

**Section A – Engineering Mathematics (Compulsory):** This section contains 11 questions carrying a total of 15 marks: 7 questions carrying 1-mark each (sub-total 7 marks), and 4 questions carrying 2-marks each (sub-total 8 marks). Some are MCQ type questions, while the remaining may be MSQ and / or NAT questions.

**Any two of XE Sections B to H:** The choice of two sections from B to H can be made during the examination after viewing the questions. Only TWO optional sections can be answered at a time. A candidate wishing to change midway of the examination to another optional section must first choose to deselect one of the previously chosen optional sections (B to H). Each of the optional sections of the XE paper (Sections B through H) contains 22 questions carrying a total of 35 marks: 9 questions carrying 1-mark each (sub-total 9 marks) and 13 questions carrying 2-marks each (sub-total 26 marks). Some are MCQ type questions, while the remaining may be MSQ and / or NAT questions.

### 5.3.7 XH Paper (Humanities and Social Sciences)

A candidate appearing in the XH paper has to answer the following:

- GA – General Aptitude carrying a total of 15 marks

**Section B1 – Reasoning and Comprehension (Compulsory):** This section contains 15 questions carrying a total of 25 marks: 7 questions carrying 1-mark each (sub-total 7 marks) and 9 questions

carrying 2-marks each (sub-total 18 marks). Some are MCQ type questions, while the remaining may be MSQ and / or NAT questions.

**Any ONE of XH Sections C1 to C6:** The ONE choice of section from C1 to C6 has to be made **at the time of filling online application form**. Candidate cannot request for change of section at the examination hall. Each of the optional sections of the XH paper (Sections C1 through C6) contains 39 questions carrying a total of 60 marks: 18 questions carrying 1-mark each (sub-total 18 marks) and 21 questions carrying 2-marks each (sub-total 42 marks). Some are MCQ type questions, while the remaining may be MSQ and / or NAT questions.

### 5.3.8 XL Paper (Life Sciences)

A candidate appearing in the XL paper has to answer the following:

- **GA – General Aptitude** carrying a total of 15 marks.

**Section P– Chemistry (Compulsory):** This section contains 17 questions carrying a total of 25 marks: 9 questions carrying 1-mark each (sub-total 9 marks) and 8 questions carrying 2-marks each (sub-total 16 marks). Some are MCQ type questions, while the remaining may be MSQ and / or NAT questions.

**Any two of XL Sections Q to U:** The choice of two sections from Q to U can be made during the examination after viewing the questions. Only TWO optional sections can be answered at a time. A candidate wishing to change midway of the examination to another optional section must first choose to deselect one of the previously chosen optional sections (Q to U). Each of the optional sections of the XL paper (Sections Q through U) contains 19 questions carrying a total of 30 marks: 8 questions carrying 1-mark each (sub-total 8 marks) and 11 questions carrying 2-marks each (sub-total 22 marks). Some are MCQ type questions, while the remaining may be MSQ and / or NAT questions.

## 6. Post-Examination Related Information

Post examination events are as follows:

1. After the GATE 2022 examinations, candidates' responses will be available in their account at GATE 2022 website, which can be downloaded.
2. Answer keys for various GATE 2022 papers will be displayed in GATE 2022 website.
3. Candidates may submit their contests on the answer keys provided for a very limited time period against a payment.
4. Evaluation of examination papers will be finalized and GATE results (Score) will be announced.
5. Qualified candidates can download score card from their accounts at GATE 2022 website.

### 6.1. GATE Score

After the evaluation of the answers, the actual (raw) marks obtained by a candidate will be considered for computing the GATE Score. For multi-session papers (subjects), raw marks obtained by the candidates in different sessions will be converted to Normalized marks for that particular subject. Thus, raw marks (for single session papers) or normalized marks (for multi-session papers) will be used for computing the GATE Score, based on the qualifying marks.

### 6.1.1 Calculation of Normalized Marks for Multi-Session Papers

In GATE 2022 examination, some papers may be conducted in multi-sessions. Hence, for these papers, a suitable normalization is applied to take into account any variation in the difficulty levels of the question papers across different sessions. The normalization is done based on the fundamental assumption that "in all multi-session GATE papers, the distribution of abilities of candidates is the same across all the sessions". This assumption is justified since the number of candidates appearing in multi-session papers in GATE 2022 is large and the procedure for allocation of session to candidates is random. Further, it is also ensured that for the same multi-session paper, the number of candidates allotted in each session is of the same order of magnitude.

Based on the above, and considering various normalization methods, the committee arrived at the following formula for calculating the normalized marks for the multi-session papers.

Normalization mark of  $j^{th}$  candidate in the  $i^{th}$  session  $\hat{M}_{ij}$  is given by

$$\hat{M}_{ij} = \frac{\bar{M}_t^g - M_q^g}{\bar{M}_{ti} - M_{iq}^g} (M_{ij} - M_{iq}^g) + M_q^g$$

where

$M_{ij}$ : is the actual marks obtained by the  $j^{th}$  candidate in  $i^{th}$  session

$\bar{M}_t^g$ : is the average marks of the top 0.1% of the candidates considering all sessions

$M_q^g$ : is the sum of mean and standard deviation marks of the candidates in the paper considering all sessions

$\bar{M}_{ti}$ : is the average marks of the top 0.1% of the candidates in the  $i^{th}$  session

$M_{iq}^g$ : is the sum of the mean marks and standard deviation of the  $i^{th}$  session.

### 6.1.2 Calculation of GATE Score for All Papers

For all papers for which there is only one session, actual marks obtained by the candidates will be used for calculating the GATE 2022 Score. For papers in multi-sessions, normalized marks will be calculated corresponding to the raw marks obtained by a candidate and the GATE 2022 Score will be calculated based on the normalized marks.

The GATE 2022 score will be computed using the formula given below.

where

$$\text{GATE Score} = S_q + (S_t - S_q) \frac{(M - M_q)}{(\bar{M}_t - M_q)}$$

$M$ : marks obtained by the candidate (actual marks for single session papers and normalized marks for multi-session papers)

$M_q$ : is the qualifying marks for general category candidate in the paper

$\bar{M}_t$ : is the mean of marks of top 0.1% or top 10 (whichever is larger) of the candidates who appeared in the paper (in case of multi-session papers including all sessions)

$S_q$ : 350, is the score assigned to  $M_q$

$S_t$ : 900, is the score assigned to  $\bar{M}_t$

In the GATE 2022 the qualifying marks ( $M_q$ ) for general category student in each subject will be **25 marks (out of 100) or  $\mu + \sigma$ , whichever is larger**. Here  $\mu$  is the mean and  $\sigma$  is the standard deviation of marks of all the candidates who appeared in the paper.

After the declaration of results, GATE Scorecards can be downloaded by the **GATE qualified candidates ONLY**.

The GATE 2022 Committee has the authority to decide the qualifying mark/score for each GATE paper. In case of any claim or dispute with respect to GATE 2022 examination or score, the Courts and Tribunals in Kolkata alone will have the exclusive jurisdiction to entertain and settle them.

## 6.2. GATE 2022 Results

**GATE 2022 results will be announced on 17<sup>th</sup> March 2022 and will be available on the GATE 2022 Website. GATE 2022 score is valid for THREE YEARS from the date of announcement of the results. No information on the GATE 2022 score will be available after this period.**

## 6.3. GATE 2022 Scorecard

After the declaration of results, GATE 2022 Scorecards of the qualified candidates can be downloaded free of cost between 21<sup>st</sup> March 2022 to 31<sup>st</sup> May 2022 from the GATE 2022 website. It is highly recommended that a softcopy of the scorecard is safely stored by the candidate for all the future uses.

In case, GATE qualified candidates require the soft copy of their GATE Scorecard after 31<sup>st</sup> May 2022 and till 31<sup>st</sup> December 2022, they **MUST** pay a fee of ₹500 (Rupees five hundred only) for obtaining the same. From 1<sup>st</sup> January 2023 onwards, **NO** scorecard will be issued by GATE authority for GATE 2022 qualified candidates.

There is **NO** provision for the issue of hard copies of the GATE Scorecard.

## 7. Frequently Asked Questions (FAQs)

### 7.1. Application Process

Q1. I am currently studying in 3<sup>rd</sup> year B.A./B.Com./B.Sc. Am I eligible to appear for GATE 2022?

A1. Yes, any undergraduate student currently in 3<sup>rd</sup> year or higher years of any government approved program in Engineering / Technology / Architecture / Arts / Commerce / Science is eligible to appear for GATE 2022.

Q2. I am currently studying in 3<sup>rd</sup> year B.E., but through parallel entry in the 2<sup>nd</sup> year after finishing Diploma, am I eligible to appear for GATE 2022?

A2. Yes, any undergraduate student currently in 3<sup>rd</sup> year or higher years of any government approved program in Engineering/Technology/Architecture/Arts/Commerce/Science is eligible to appear for GATE 2022.

Q3. Is there any age limit to appear for GATE 2022?

A3. NO. There is NO age limit to appear for GATE 2022.

Q4. Are there any restrictions on the number of times one can appear for GATE?

A4. NO. One can appear for the GATE examination any number of times.

Q5. Can I appear in any of the GATE 2022 papers?

A5. Although, the candidate is free to choose any of the papers [up to two from the given combinations], candidate should select paper appropriate to the discipline of qualifying degree.

Q6. How do I apply ONLINE?

A6. Refer to [Section 4.4.2](#) given in the GATE 2022 Brochure and by visiting the website <https://gate.iitkgp.ac.in>



Q7. Can I use one e-mail address to fill multiple application forms?

A7. NO. One e-mail address can be used to submit only ONE application form.

Q8. Do I need to fill two forms to appear in two papers?

A8. NO. The two papers option may be selected based on the given set of combinations in a SINGLE form only.

Q9. Why should I choose THREE examination cities?

A9. The candidates will most likely be allotted a centre in the examination city of their first choice. Only in cases, where there are too many candidates opting for a certain city as their first choice, the other two choices become relevant. The candidates are required to fill their choices of cities to appear in the examination, but should remember that because of operational constraints, the GATE committee reserves the right to add a new city or remove an existing one, and allot a city that may not be any of the choices of a candidate.

Q10. What do I do, if the power / internet connection failed during the submission of application process?

A10. Please login to your account at GATE 2022 website again and continue the application process.

Q11. Does the OBC (non-creamy layer) or EWS candidates need to upload the category certificate?

A11. NO.

Q12. Does the SC/ST/PwD candidate need to upload the category certificate?

A11. YES, category certificate is required to avail the concession in application fee.

Q13. How do I make the fee payment for GATE 2022 examination?

A13. The payment option will appear after filling the online application form in GATE 2022 website. The candidate can opt for any of the payment options listed over there. The additional charges such as service charges, processing fees or bank charges, have to be borne by the candidate.

Q14. How much fee should I pay to appear in Two papers of GATE 2022 examination?

A14. The fee per paper is given below, for two papers the amount of fee is twice that of a single paper.

For Examination Centres in India	Regular Period	During the Extended Period
Female candidates (per paper)	₹ 750	₹ 1250
SC / ST / PwD* category candidates (per paper)	₹ 750	₹ 1250
All other candidates (per paper)	₹ 1500	₹ 2000

Q15. What is the fee for candidates with foreign nationality?

A15. For the candidates with Foreign nationality, who wish to appear for GATE 2022 examination, the application fee **per paper** is as follows:

Examination Centres	Regular period	During the Extended Period
Centres in India	₹ 1500	₹ 2000

Q15. What do I do, if power/Internet connection failed during an online payment?

A15. When you can get back online, login back to GATE 2022 website and check the status of the payment. If the payment was received by GATE, you can continue the process of printing the application form. If the payment was not received by GATE 2022, you may initiate a fresh payment.

In case, any fee amount has been debited (deducted) from your bank account, but not received any acknowledgement for fee payment from GATE 2022, then the money will be credited back to your account. However, this may take a week or more.

Q16. Money has been debited from my account more than once. How do I get the money back?

A16. All multiple payments received on behalf of GATE 2022 from your account with respect to one application, will automatically be returned (credited) to the same bank account. However, this may take a week or more.

Q17. Do I have to send the print-out of the application form?

A17. NO. The print-out of the application form is NOT required to be sent to the Organising Institute (IIT Kharagpur) or any other GATE zonal offices.

Q18. When and how will I know the status of my application?

A18. You can check the status of your application by logging into GATE 2022 website time to time.

Q19. After completing the ONLINE application process and generating a PDF file, will I be able to change my application data?

A19. NO. After completing all the steps up to PDF application form generation in the ONLINE application process, you can only download the application form and CANNOT modify the data. Hence, you need to be very careful while entering the data.

Q20. I have missed to take a print-out of my ONLINE application at the end of my application process. How will I get access to it?

A20. You can login using Enrolment ID and password and take a print-out for your own reference. The print-out must not be sent to GATE Organising Institute.

Q21. If I have not uploaded photograph as per the specifications mentioned, will my application be rejected?

A21. YES, without proper photograph, the application will be REJECTED.

Q22. If I have not uploaded signature as per the specifications mentioned, will my application be rejected?

A22. YES, without proper signature, the application will be REJECTED.

Q23. Which Identity Document (ID) will be accepted in the application form?

A23. For Indian candidates, the following valid photo identification documents/cards will be accepted: Aadhaar-UID (preferable), Passport, PAN Card, Voter ID and Driving License.

Q24. Is there a relaxation in cut-off score and fee for the EWS (Economically weaker section) candidates?

A24. The application fee for EWS candidates will be same as that of General candidates, however, the qualifying mark is 90% as that of the General candidates.

Q25. What will happen if I am not able to produce EWS certificate at the time of admission/counselling etc.?

A25. If you are not having a valid EWS certificate at the time of admission/counselling, you will be considered as General category candidate. However, GATE has nothing to do with subsequent admission or recruitment process.

Q26. Do I have to upload my EWS certificate during the application process?

A26. NO.

## 7.2. Admit Card

Q27. When will I receive my Admit Card?

A27. Admit Card can ONLY be downloaded from the GATE 2022 website from 3<sup>rd</sup> January 2022. Admit Cards will NOT be sent by post or as an e-mail attachment.

Q28. Is the Admit Card alone sufficient to gain entry to the examination centre?

A28. NO. Candidates MUST also bring original and valid photo Identity Document (NO photocopy/scanned copy/NOT an expired document), which was specified during filling up of the online application.

For Indian candidates, only following identification cards will be accepted: Aadhaar-UID (preferable), Passport, PAN card, Voter ID and Driving License.

Q29. Can I bring soft copy of the Admit Card (in mobile phone/tablet/laptop) to gain entry to the examination centre?

A29. NO. Hard copy (preferably printed in colour) of the Admit Card is required to gain entry to the examination centre.

## 7.3. GATE 2022 Examination

Q30. For how many GATE papers can I apply?

A30. A candidate can apply for ONE or TWO papers (from the given set of combinations as per Table 4.3) of the 29 papers listed in the GATE INFORMATION BROCHURE or GATE website. The choice of the appropriate paper is the responsibility of the candidate. Some guidelines in this respect are suggested below:

- The candidates are expected to appear in paper(s) [up to two as per the given set of combinations in Table 4.3] appropriate to the discipline of their qualifying degree.
- The candidates are, however, free to choose any other paper according to their admission plan, keeping in mind the eligibility criteria of the institutions in which they wish to seek admission.

Q31. If a paper is being held in more than one session, can I appear in any of the sessions of that particular paper?

A31. NO. Each candidate will be assigned to ONLY ONE of the multiple sessions of a particular paper.

Q32. After submission of application, am I permitted to change my GATE Examination Paper?

A32. YES. ONLY after the last date for application submission, a request for the change of GATE Examination Paper will be entertained against additional payment till **1<sup>st</sup> October, 2021**. Any request after this date will NOT be considered.

Q33. After submission of application, am I permitted to change my GATE Examination City?

A33. YES. ONLY after the last date for application submission, a request for the change of examination city will be entertained against additional payment till 12<sup>th</sup> November, 2021. Any request after this date will NOT be considered.

Q34. After submission of application, am I permitted to change my Category?

A34. YES. ONLY after the last date for application submission, category change request will be entertained against additional payment till 12<sup>th</sup> November, 2021. Any request after this date will NOT be considered.

Q35. Will I be provided with any white paper for rough work and calculations during the examination?

A35. Only one scribble pad at any point of time will be provided to the candidate that can be used to do the rough work. To obtain a second scribble pad, the candidate MUST return the first scribble pad. The candidates have to return any scribble pad in their possession at the end of the examination. The virtual scientific calculator will be available on the computer screen.

Q36. Am I allowed to enter the examination hall at any time during the examination?

A36. NO. Candidates MUST enter before the starting time of the examination. Delayed entry is permitted such that candidates login NOT later than 30 minutes from the starting time of the examination. NO relaxation is given under any circumstances.

Q37. In case of permitted delayed entry in the examination hall, will I get extra time corresponding to my delayed entry?

A37. NO. The candidate with permitted delayed entry will NOT get any extra time.

Q38. Am I allowed to leave the examination hall during the examination?

A38. NO. Candidates will NOT be allowed to leave the examination hall for any reason during the examination. Candidates are allowed to leave the examination hall only after the scheduled end of examination.

Q39. What items are not permitted to be brought with me inside the examination venue?

A39. Mobile phones, physical calculators, wallets, watches of any type, any electronic/communicating devices, books, papers, loose sheets, pen/pencil box/pouch and any other similar items are NOT permitted inside the examination hall.

Q40. Can I use a physical calculator during the examination?

A40. NO. During the online GATE 2022 examination, all candidates will be provided with a virtual scientific calculator which has to be used to answer the questions.

Q41. Will there be any arrangement at the examination centre for the safekeeping of my personal items such as my mobile phone?

A41. NO. Such arrangements will not be made at the examination centre. If a candidate brings personal belongings including mobile phones, they have to be kept outside the examination hall at the candidate's own risk. The GATE officials are not responsible for safe keeping of your personal items.

Q42. What happens if a physical calculator (even on an electronic watch) or a mobile phone (even in switched off mode) is found in my possession in the examination hall?

A42. Such cases are in violation of GATE 2022 code of conduct and will lead to disqualification of the candidature.

Q43. Is there a separate rank/paper for Architecture and Planning (AR) candidates in GATE 2022?

A43. NO separate scores and ranks will be provided for candidates attempting either Part B1 (Architecture) or Part B2 (Planning).

Q44. Is there a separate rank/paper for Geomatics Engineering (GE) candidates in GATE 2022?

A44. NO separate scores and ranks will be provided for candidates attempting either Part B (section I) or Part B (Section II).

Q45. Is there a separate rank/paper for Geology and Geophysics (GG) candidates in GATE 2022?

A45. Separate scores and ranks will be provided for the candidates based on the Part B section in GG paper.

For this, separate cut-off marks will be obtained as per the common procedure but by considering the following sections of GG paper:

- For Geology (GL) candidates: GA Section + Part A: Common Section + Part B (Section -1): Geology
- For Geophysics (GP) candidates: GA Section + Part A: Common Section + Part B (Section-2): Geophysics

Q46. Will there be a separate rank and score for sectional papers XE, XH and XL?

A46. Yes.

## 7.4. PwD and Dyslexic Candidates

Q47. What are the details of the guidelines that will be followed about PwD candidates writing GATE 2022 examination?

A47. GATE 2022 will follow the guidelines as mentioned in the government regulations. Please refer to PWD\_Guidelines: [https://gate.iitkgp.ac.in/gate/documents/PWD\\_Guidelines.pdf](https://gate.iitkgp.ac.in/gate/documents/PWD_Guidelines.pdf)

Q48. Will the facility of scribe be given to all PwD candidates?

A48. The facility of scribe is meant for only those PwD candidates who are persons with benchmark disability (i.e. not less than 40% disability) and who have physical limitation to write including that of speed. However, provision of scribe shall be allowed on production of a certificate to the effect that the person concerned has physical limitation to write, as given in APPENDIX-A of this brochure.

In case of person with benchmark disability (i.e. not less than 40% disability) in the category of blindness, locomotor disability (both arms affected-BA) and cerebral palsy, the facility of scribe shall be allowed on advance request only.

In case of person with benchmark disability (i.e. not less than 40% disability) in the category of blindness, locomotor disability (both arms affected-BA) and cerebral palsy, the facility of scribe shall be allowed on advance request only.

(Ref. Para No. IV of OM No. F. No. 34-02/2015-DD-III Dated 29th August, 2018)

Q49. Will there be a “magnified question paper” for visually challenged PwD candidates?

A49. YES. Before beginning of the examination, please contact the GATE Institute Representative through the invigilator in your examination hall and they will do the needful.

Q50. Will the facility of scribe and/or compensatory (extra) time be given to dyslexic candidates?

A50. Yes, dyslexic candidates can avail the services of scribe, provided such candidates submit a proper dyslexic certificate issued by the competent authorities (**Appendix A**). The scribe will be provided by the GATE authorities or candidates may bring their own scribe. The compensatory (extra) time would be applicable to such dyslexic candidates availing the scribe facility.

Q51: Is there a provision of getting compensatory (extra) time for a PwD/dyslexic candidate?

A51. A person with benchmark disability (i.e. not less than 40% disability), who is allowed to avail the facility of scribe (see FAQ 48 above) will automatically get additional one hour compensatory (extra) time for an examination of three hours duration.

PwD/dyslexic candidates, with certain benchmark disabilities (that limits the speed of writing) who do not want to avail the scribe assistance, but at the same time request for compensatory time during the time of application, may be considered for an extra time of one hour **only if fulfilling the criteria of scribe as per the question No.48.**

Q52. Will the facility of own scribe be given to person with benchmark disabilities (that limits the speed of writing)?

A52. Yes, subject to fulfilling criteria of scribe as per PwD FAQ No.2 above, persons with benchmark disability (i.e. not less than 40% disability) will be allowed to opt for their own scribe, provided the qualification of the scribe is one step below the qualification of the candidate taking the examination. The candidate with benchmark disabilities (i.e. not less than 40% disability) opting for their own scribe should submit details of their own scribe as per proforma in Appendix A of the GATE 2022 information brochure. Scribe details must include latest qualification and identity documents. (Ref. Para No. VI of OM No. F. No. 34-02/2015-DD-III Dated 29th August, 2018)

Q53. Can I request for a scribe at the examination centre on the day of examination?

A53. NO. On-the-spot request for scribe at the examination hall will NOT be entertained.

## 8. Contact Information

GATE 2022 is jointly administered and conducted by the Indian Institute of Science (IISc) Bangalore and seven Indian Institutes of Technology (IITs) at Bombay, Delhi, Guwahati, Kanpur, Kharagpur, Madras, Roorkee.

Table 8.1 gives the details of each Zonal Office. Each of the institutes administer a zone and caters to a list of examination cities that fall under that zone (Table 4.4). Candidates are assigned a zone at the time of application, based on the first choice of city. Candidates must note this zone number for future references. Any queries regarding the application, examination centre, Admit Card, and result are handled by the respective GATE 2022 zonal institute in consultation with the Organising Institute.



Candidates must first try to read FAQs. If a query is not resolved even after going through FAQs, then they should contact the zonal GATE offices, which will provide quicker and clearer information.

**Table 8.1 Contact Details for Zonal GATE Offices**

Zone No	Contact Address	Phone Number	E-mail Id
Zone-1	Chairperson, GATE Indian Institute of Science, Bangalore, Bengaluru 560012	080-22932392 080-23601227	<a href="mailto:gate@gate.iisc.ac.in">gate@gate.iisc.ac.in</a>
Zone-2	Chairperson, GATE Indian Institute of Technology Bombay, Powai, Mumbai 400076	022-25767068	<a href="mailto:gateoffice@iitb.ac.in">gateoffice@iitb.ac.in</a>
Zone-3	Chairperson, GATE Indian Institute of Technology Delhi, Hauz Khas, New Delhi 110016	011-26591749	<a href="mailto:gate@admin.iitd.ac.in">gate@admin.iitd.ac.in</a>
Zone-4	Chairperson, GATE Indian Institute of Technology Guwahati, Guwahati 781039	0361-2582751 0361-2582755	<a href="mailto:gate@iitg.ac.in">gate@iitg.ac.in</a>
Zone-5	Chairperson, GATE Indian Institute of Technology Kanpur, Kanpur 208016	0512-2597412	<a href="mailto:gate@iitk.ac.in">gate@iitk.ac.in</a>
Zone-6	Organising Chairperson, GATE Indian Institute of Technology Kharagpur, Kharagpur 721302	03222-282091 03222-282095	<a href="mailto:gateonline@adm.iitkgp.ac.in">gateonline@adm.iitkgp.ac.in</a>
Zone-7	Chairperson, GATE Indian Institute of Technology Madras, Chennai 600036	044-22578200	<a href="mailto:gate@iitm.ac.in">gate@iitm.ac.in</a>
Zone-8	Chairperson, GATE Indian Institute of Technology Roorkee, Roorkee 247667	01332-284531	<a href="mailto:gate@iitr.ac.in">gate@iitr.ac.in</a>