

GATE PAPER PATTERN

Weightage Distribution is given on Page - 3

Type of Questions & Negative Marking Scheme

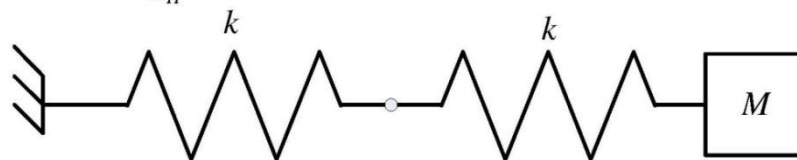
GATE 2021 Exam will consist of **Multiple Choice Questions (MCQ's)** and **Numerical Answer Type (NAT) Questions**.

Multiple Choice Questions (MCQ's):

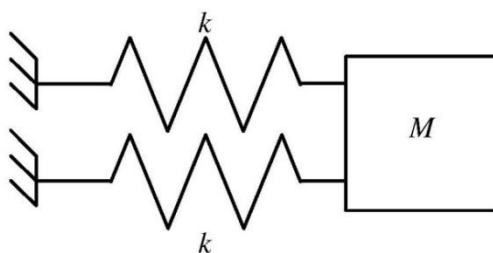
These questions are objective in nature and each question will have 4 options, out of which only one is correct. Each question carries 1 or 2 marks in all the sections. There **will be negative marking** for MCQ's (0.33 marks will be deducted for 1 mark question and 0.66 mark will be deducted for every 2 marks question, if you have answered it wrong). So, a student should avoid making any kind of wild guess.

Example of MCQ type question of 1 mark (from [GATE 2019 paper](#)) is given below;

The natural frequencies corresponding to the spring-mass systems I and II are ω_I and ω_{II} , respectively. The ratio $\frac{\omega_I}{\omega_{II}}$ is



SYSTEM I



SYSTEM II

(A) $\frac{1}{4}$

(B) $\frac{1}{2}$

(C) 2

(D) 4

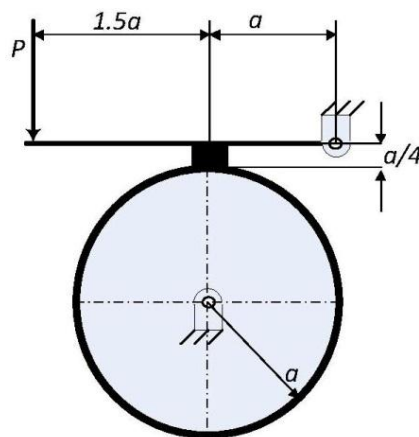
..... go to next page for NAT type question

Numerical Answer Type (NAT) Questions:

There will be no choices available for these types of questions. The NAT carries 1 or 2 marks questions in all sections. The answer for these questions is a real number to be entered by using mouse and virtual keypad displayed on the monitor. **No negative marking** for these questions.

Example of NAT type question of 2 marks (from [GATE 2019 paper](#)) is given below;

A single block brake with a short shoe and torque capacity of $250 \text{ N}\cdot\text{m}$ is shown. The cylindrical brake drum rotates anticlockwise at 100 rpm and the coefficient of friction is 0.25 . The value of a , in mm (round off to one decimal place), such that the maximum actuating force P is 2000 N , is _____



..... go to next page for Weightage Distribution

WEIGHTAGE / QUESTION DISTRIBUTION

100 marks paper of duration 3 hrs. Total number of questions will be 55 as shown in the table below

Section	Question no.	No. of Questions	Marks per Question	Total Marks
General Aptitude (15 marks)	Q.1 - Q.5	5	1	5
	Q.6 - Q.10	5	2	10
Engg. Mathematics (15 marks) + Technical Subjects (70 marks)	Q.1 - Q.25	25	1	25
	Q.26 - Q.55	30	2	60
Total questions		65	Total marks = 100	

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

1. **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 the most from a one-line computation.
2. **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 the fundamental ideas.
3. **Application:** In these questions, the candidate is expected to apply his/her knowledge either through computation or by logical reasoning.
4. **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.

The following table gives an idea of **GATE organizing institutes** in the recent years;

Paper	Organizing Institute
GATE 2021 - Our Focus	IIT, Bombay
GATE 2020	IIT, Delhi
GATE 2019	IIT, Madras
GATE 2018	IIT, Guwahati
GATE 2017	IIT, Roorkee
GATE 2016	IISc, Bangalore

Note:

As we would be preparing for GATE 2021, which will be organized by IIT, Bombay; we should definitely consider putting extra time solving GATE papers previously set by it to get a feel of the type of questions they ask. Previous GATE Papers set by IIT, Bombay are **GATE 2013**, **GATE 2005**, **GATE 1999**, **GATE 1993** & **GATE 1987**.