

JEE Handbook

I. Details of JEE Exam:

#	Particulars	BArch
1	Exam mode	Online (Mathematics and Aptitude) and offline (Drawing test)
2	Number of sections and subjects	3 (Drawing, Mathematics and Aptitude)
3	Duration of exam	3 hours (180 minutes) 60 minutes per section
4	Number of questions	77 questions (Mathematics: 25 questions, Aptitude: 50 and Drawing: 2)
5	Type of questions	Mathematics and Aptitude: Objective type questions Drawing: Questions to test the candidate's drawing and sketching skills
6	Total Marks	400 marks (Drawing section will be of total 100 marks, marking of every question will be given along with it)
7	Language of paper	English, Hindi and Gujarati (Aspirant's from Gujarat, Daman & Diu and Dadra and Nagar Haveli can opt for Gujarati as well)

II. JEE at a glance:

#	Question	Answer
1	What is JEE?	The Joint Entrance Examination (JEE Main) comprises of two papers. The Paper1 is conducted for admission to Undergraduate Engineering Programs (B.E/B. Tech) at NITs, IITs, other Centrally Funded Technical Institutions (CFTIs), Institutions/Universities funded/recognized by participating State Governments, as well as an eligibility test for JEE (Advanced), which is conducted for admission to IITs. Candidates of UPSEE (2021) will take JEE (Main) 2021. The Paper 2 is conducted for admission to B. Arch and B. Planning courses in the Country. From this year, Dr. APJ Abdul Kalam Technical University (AKTU), Lucknow will also use the score sheet of JEE (Main) – 2021 for admission to the B.Tech / M.Tech (Integrated)/B.Arch. Courses in its affiliated colleges across the State.
2	Who is eligible for JEE Paper 2?	<p>1. Age Limit</p> <p>For appearing in the JEE (Main) 2021, there is no age limit for the candidates. The candidates who have passed the class 12 / equivalent examination in 2019, 2020, or appearing in 2021 irrespective of their age can appear in JEE (Main) 2021 examination. However, the candidates may be required to fulfil the age criteria of the Institute(s) in which they are desirous of taking admission.</p>

		<p>2. List of Qualifying Examinations (QE)</p> <ul style="list-style-type: none"> i) The final examination of the 10+2 system, conducted by any recognized Central/ State Board, such as Central Board of Secondary Education, New Delhi; Council for the Indian School Certificate Examinations, New Delhi; etc. ii. Intermediate or two-year Pre-University examination conducted by a recognized Board/ University. ii) Final examination of the two-year course of the Joint Services Wing of the National Defense Academy iv. Senior Secondary School Examination conducted by the National Institute of Open Schooling with a minimum of five subjects. iii) Any Public School/ Board/ University examination in India or any foreign country recognized as equivalent to the 10+2 system by the Association of Indian Universities (AIU). iv) Higher Secondary Certificate Vocational Examination. vii. A Diploma recognized by AICTE or a State board of technical education of at least 3 years duration. v) General Certificate Education (GCE) examination (London/Cambridge/Sri Lanka) at the Advanced (A) level. vi) High School Certificate Examination of the Cambridge University or International Baccalaureate Diploma of the International Baccalaureate Office, Geneva. <p>3. Year of Appearance in Qualifying Examination</p> <p>Only those candidates who have passed Class 12 / equivalent examination in 2019, 2020 or 2021; or those who are appearing in Class 12 / equivalent examination in 2021, are eligible to appear in JEE (Main) 2021.</p> <p>Candidates who passed Class 12/equivalent examination in 2018 or before as well as those who will appear in such examination in 2022 or later are not eligible to appear in JEE (Main) 2021.</p> <p>Candidates must note that the IITs permit only two attempts for the JEE (Advanced), i.e. a candidate should have appeared for the Class XII (or equivalent) examination for the first time in either 2020 or 2021, subject to the condition of not having been admitted at an IIT on an earlier occasion.</p> <p>Details may be obtained from the Information Brochure of the JEE (Advanced) 2021. Please see link: https://home.iitd.ac.in/news-jab.php https://jeeadv.ac.in/.</p>
3	Where to appear for JEE?	At designated Test Centers located at centers / colleges / schools of architecture in India.
4	In how many Sessions will JEE (Main)-2021 be conducted?	JEE (Main)-2021 will be conducted in Four Sessions (February/ March/ April/ May).

5	Which score will be considered in compilation of Result and Preparation of Merit List / Ranking:	A candidate has a choice to appear in one/ more sessions. He/ she will be awarded NTA score in each session based on his performance. The candidate's best NTA Scores of all the sessions in which he/ she has appeared will be considered for preparation of Merit List/ Ranking.
6	How is JEE Paper 2 conducted?	NATA is Computer cum Paper based exam. The Aptitude & Mathematics Test is a computer-based test. The Drawing Test is paper based test.
7	What will be the pattern of examinations?	<p>B. Arch. (Paper 2A)- To be conducted in February and May sessions: *Part -1 will have two sections. Section A will be of Multiple-Choice Questions (MCQs) and Section B will contain Questions whose answers are to be filled in as a numerical value. In Section B, candidates have to attempt any five questions out of 10. There will be no negative marking for Section B.</p> <p>B. Planning (Paper 2B)- To be conducted in February and May sessions: * Part -1 will have two sections. Section A will be of Multiple-Choice Questions (MCQs) and Section B will contain Questions whose answers are to be filled in as a numerical value. In Section B, candidates have to attempt any five questions out of 10. There will be no negative marking for Section B.</p>
8	What is the passing score at JEE?	The JEE Main 2021 exam pass mark varies with categories. For the general category candidates, they must secure a minimum aggregate of 75%. For the SC/ST/PWD categories, they must score a minimum of 65% in aggregate
9	How is a tie break in JEE merit list done?	<p>According, to the officials If there is a tie then below is the criteria for JEE Main</p> <ul style="list-style-type: none"> - Resolution by marks obtained in Mathematics in JEE (Main). Candidate obtaining higher marks will be given better rank. - Resolution by marks obtained in Physics in the JEE (Main). Candidate obtaining higher marks will be given better rank - Resolution by finding the ratio of positive marks and negative marks. Candidate having higher absolute value of the ratio will be given better rank. - If the resolution is not possible after this criterion, candidates will be given the same rank
10	Can candidates ask for re-evaluation of JEE test marks?	No. There is no re-evaluation/re-checking of result.
11	Where can a candidate seek admission on the basis of JEE?	A candidate may apply for admission to any of the participating institutions as per the time schedule specified by the respective appropriate admission authority, along with all the documents desired by it.

12	Which type of institutions offer B.Arch programs?	In India, B.Arch program is offered by the following institutions:		
		#	Type of Institution	Examples
		1	State Level Institutions - Govt Aided	J.J., Rachana Sansad (Aided), CEPT etc
		2	State Level Institutions - Unaided / Private	Kamala Raheja, LS Raheja, IES etc
		3	All India Level Institutions - Govt Aided	SPAs and NITs
4	Deemed Universities	Amity, DY Patil, NMIMS (BSSA etc)		
		Note: JEE (Paper 2) score is valid for admission to All India Level Institutions.		
13	What is the basis for B.Arch Admission Merit list?	The merit list for B.Arch Admission is prepared on the following bases:		
		#	Basis of Merit List	Weightage
		1	Marks obtained in NATA / JEE (Paper 2)	50%
		2	Aggregate % obtained in 10+2 / 10+3 Diploma exam.	50%
		Note: Studying for XII Std is as important is studying for the JEE exam.		

III. JEE PAPER2 (B.Arch) Marking Scheme:

Paper 2A (B. Arch): Mathematics (Part-I) and Aptitude Test (Part-II) in Computer Based Test (CBT) mode only and Drawing Test (Part-III) in Pen & Paper Based (offline) mode, to be attempted on drawing sheet of A4 size.

Subject wise distribution of Questions, Total Number of Questions and Marks	Subject	No of Questions		Marks
	Mathematics (Part I)	20*	10*	100
	Aptitude Test (Part II)	50		200
	Drawing Test (Part III)	2		100
	Total	82		400

The drawing aptitude is judged on the following aspects -

- Ability to sketch an object proportionately and rendering it in visually appealing manner.
- Visualising and drawing the effects of light on the object and shadows cast on surroundings.
- Sense of perspective drawing
- Combining and composing given three dimensional elements to form a building or structural form.
- Creating interesting two-dimensional composition using given shapes and forms.
- Creating visual harmony using colours in given composition.
- Understanding of scale and proportions.
- Drawing from memory through pencil sketch on themes from day to day experiences.

Types of Question in Drawing Test and What to Focus on:

#	Types of Questions	What to Focus on?
1	<p>Memory Drawing question <i>E.g. You are a water pipe at your college entrance gate. Its college time and all the students are rushing in. Draw the scene from your point of view.</i></p>	<p>Focus on:</p> <ol style="list-style-type: none"> 1. Visualizing day to day scenes. Add creativity. 2. Drawing in proper Perspective technique. 3. Creating visual harmony using colors. 4. Drawing the elements in perspective. 5. Drawing needs to have good finish & quality.
2	<p>2D Composition question <i>E.g. Use standard shape of any three leaves for e.g.: Banana leaf, Mango leaf, Maple leaf etc. Use any 2 pairs of contrast colours to colour this composition. Use only 3 types of leaves.</i></p>	<p>Focus on:</p> <ol style="list-style-type: none"> 1. Combine shapes & forms interestingly. 2. Add creativity & aesthetics. 3. Creating visual harmony using colors. 4. Design should be well finished & high quality.
3	<p>3D Composition question <i>E.g. Use 3D forms of a Railway engine for e.g.: you could use Giant wheels, steam exhaust pipe, the engine as a tapered cylinder and create an interesting stable composition, you can scale each object to any size of your choice, and use them in multiples. Also show the effect of light and shadow on your composition.</i></p>	<p>Focus on:</p> <ol style="list-style-type: none"> 1. Combine 3D elements interestingly. 2. Drawing in proper Perspective technique. 3. Showing effect of light & shadow properly. 4. Design should be well finished & high quality.

IV. About Aptitude Section

Topics & Types of Question in Aptitude Section

Below is the detailed explanation for each of 7 Topics and Types of Questions expected in the Aptitude Section of NATA / JEE (B.Arch).

#	Topic	Type of Questions
1	Architecture Aptitude: Visualizing different sides of 3D objects	Questions on count the number of oblique surfaces, horizontal surfaces, vertices, vertical lines etc, that an object contains, folding & cutting of paper, water images, mirror images etc
2	Architecture Aptitude: Visualizing 3D objects from 2D drawings	Questions on identify right plan for given elevations, right elevation for given plans, right isometric view, right shadow etc.
3	Architecture Aptitude: Awareness about Architectural materials & objects	Question can be on Construction Materials, Architectural Terms, Textures etc.
4	Architecture Aptitude: Awareness of World Architecture	Most questions will be image based. Topics can be famous architects, buildings, monuments, structures, architecture etc.
5	General Aptitude: Analytical & Logical Ability	Questions can be asked from over 30 topics of Analytical & Logical Reasoning. Topics can be about- Analogy, Classification, Verbal & Non-Verbal Series, Statement & Arguments, Analytical Decision Making, Causes and Effect, Non-Verbal Reasoning, Visual Reasoning etc.
6	General Aptitude: English Communication & Comprehension Ability	Questions can be asked on topics such as Synonyms, Antonyms, Verbal Analogies, One word substitutes, Spellings, Reading Comprehension etc.
7	General Aptitude: Quantitative Ability	Questions are asked on basic arithmetic, algebra and geometry. Topics can be Percentage, Area, Profit & Loss, Interest, Volume & Surface Area, Average etc.

Topics & Types of Question in Mathematics Section

Below is a list of Topics that are expected in the Mathematics Section of NATA / JEE (B.Arch) exam. Also included is the SILICA Coaching Module classes and hours.

NATA / JEE (B.Arch) Mathematics - Topics vs Lecture				
#	Unit	Topic	Hours	Lecture No
1	3D Geometry	3D Geometry	3	1
2	Differential Calculus	Limits, Continuity, Derivatives	6	2, 3
3	Integral Calculus	Indefinite & Definite	6	4, 5
4	Differential Equations	Differential Equations	3	6
5	Applications of Calculus	Applications of Calculus	6	7, 8
6	Binomial Distribution & Mathematical Reasoning	Both	3	9
XII Std Topics			27	9
1	Algebra	Sequence & Series	3	1
2	Logarithms	Logarithms	3	2
3	Matrices & Determinants	Matrices & Determinants	3	3
4	Trigonometry	Trigonometry	9	4, 5, 6
5	2D Geometry	2D Geometry	9	7, 8, 9
6	Permutations & Combinations	Permutations & Combinations	3	10
7	Statistics & Probability	Statistics & Probability	6	11, 12
XI Std Topics			36	12