

NATA Handbook

I. Structure of New NATA Exam:

The new NATA exam is for 3 hours and has following subjects:

Section	Subject	# Questions	Marks	Time
Section I	Drawing*	3	125	2 Hrs
Section II	Physics,Chemistry,Mathematics	15	22.5	1 Hr
Section III	General Aptitude	35	52.5	
		53	200	3 hours

II. NATA at a glance:

#	Question	Answer
1	What is NATA?	The national aptitude test in architecture (NATA) measures the aptitude of the applicant for Architecture. It is one of the two qualifying exams for admission to B.Arch program. The other exam is JEE (Paper 2).
2	Who is eligible for NATA?	Any person who has- 1. Obtained 50% aggregate marks in 10+2 or equivalent / 10+3 Diploma. 2. Taken Physics, Chemistry, Maths as subject in 10+2 / 10+3 examination and has got 50% aggregate marks in those subjects. 3. The lower age limit of the candidate is 17 years as on 31.07.2020. You can see it in detail at- http://www.nata.in
3	Where to appear for NATA?	At designated Test Centers located at centers / colleges / schools of architecture in India. Updated list of Test centers is available at the following website: http://www.nata.in
4	When does NATA exam happen?	NATA Exam occurs generally twice in a year. Once in April e.g. 19 April 2020. And once in May e.g. 31st May 2020.
5	How to register / apply for NATA?	Registration for NATA can only be done Online. Candidate can apply at website either through credit cards / debit cards / net banking.
6	How is NATA 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	For how long is the NATA score valid for?	The NATA score is only valid for one year. So, the NATA 2020 score will be valid only for admission to B.Arch program in admission year 2020-21.
8	When, Where and How is the Score card available?	Results will be available on the website and some other websites which will be announced in various electronic / print media before declaration of results on specified date The result will be available in three formats: <ol style="list-style-type: none"> 1. Marks obtained out of 200 and in each component 2. Merit listing – unique based on marks and tie breaking rules 3. Percentile score based on the merit listing
9	What is the passing score at NATA?	Qualifying marks for NATA would be based on the following rules: <ol style="list-style-type: none"> 1. At least 25% must be secured in MCQ portion (19 out of 75) 2. At least 25% must be secured in Drawing portion (32 out of 125) 3. Overall qualifying marks (out of 200) would be based on post-exam statistics and at the discretion of the Council. For 2018 & 2019, this score was 70 out of 200 marks. Candidate will not qualify in NATA unless he/she satisfies all three conditions mentioned above.
10	How is a tie break in NATA merit list done?	The breaking logic for a tie in NATA marks for the purpose of merit rank would be applied in the following order: <ol style="list-style-type: none"> 1. More overall marks obtained in Mathematics test component 2. Less wrong answers in attempted ones of Mathematics test component 3. More overall marks in problems of Aptitude test component 4. Less wrong answers in attempted ones of aptitude test component 5. Earlier date of birth
11	Can candidates ask for re-evaluation of NATA test marks?	<ol style="list-style-type: none"> 1. MCQ Questions: Before publication of results, the response sheets of each candidate will be uploaded along with subject wise mark(s) secured. Candidates may request for rechecking of the machine recorded responses online by payment of 1000 INR per response (Question) within stipulated period of time. Council will consider all such cases prior to result publication. 2. Drawing Questions: No review will be available for the drawing test. 3. Further, there will be no provision for post publication scrutiny and /or review and hence will not entertain any such request after the result publication.
12	Where can a candidate seek admission on the basis of NATA?	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.

13	Which type of institutions offer B.Arch programs?	<p>In India, B.Arch program is offered by the following institutions:</p> <table border="1" data-bbox="549 280 1394 748"> <thead> <tr> <th>#</th> <th>Type of Institution</th> <th>Examples</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>State Level Institutions - Govt Aided</td> <td>J.J., Rachana Sansad (Aided), CEPT etc</td> </tr> <tr> <td>2</td> <td>State Level Institutions - Unaided / Private</td> <td>Kamala Raheja, LS Raheja, IES etc</td> </tr> <tr> <td>3</td> <td>All India Level Institutions - Govt Aided</td> <td>SPAs and NITs</td> </tr> <tr> <td>4</td> <td>Deemed Universities</td> <td>Amity, DY Patil, NMIMS (BSSA etc)</td> </tr> </tbody> </table> <p>Note: NATA score is valid for admission to State Level Institutions - Govt Aided / Unaided and Deemed Universities. JEE (Paper 2) score is valid for admission to All India Level Institutions.</p>	#	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)
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14	What is the basis for B.Arch Admission Merit list?	<p>The merit list for B.Arch Admission is prepared on the following bases:</p> <table border="1" data-bbox="549 958 1394 1189"> <thead> <tr> <th>#</th> <th>Basis of Merit List</th> <th>Weightage</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Marks obtained in NATA / JEE (Paper 2)</td> <td>50%</td> </tr> <tr> <td>2</td> <td>Aggregate % obtained in 10+2 / 10+3 Diploma exam.</td> <td>50%</td> </tr> </tbody> </table> <p>Note: Studying for XII Std is as important is studying for the NATA exam.</p>	#	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%						
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III. About Drawing Section:

This section is for 120 minutes, where candidate has to attempt three questions. Each question of the Drawing section is to be given on A4 sized paper. Students should try to get **100 out of 125 marks**. The Answer to each question in the 'drawing' paper will be examined by more than one examiner independently and the marks are to be averaged. The primary emphasis in scoring the drawing section is on the candidate's drawing, imagination and observation skills. The candidate's sense of proportion and perspective are also evaluated together with sense for colour and composition.

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 Questions in Drawing Section & Marks for each:

#	Types of Questions	Marks
1	Memory Drawing question	70
2	2D / 3D Composition question	55
	Total	125 marks

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

#	Types of Questions	What to Focus on?
1	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>	Focus on: <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	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>	Focus on: <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	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>	Focus on: <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

- Aptitude Section will be MCQ type questions.
- The answers will have to mark on the OMR sheet.
- There will be 35 questions for 52.5 marks (1.5 marks per question)
- Students should get at least **45 out of 52.5 marks**.
- It is made up of 2 main subjects- Architecture Aptitude & General Aptitude.

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

V. About Physics, Chemistry, Mathematics Section

- PCM Section will be MCQ type questions.
- The answers will have to mark on the OMR sheet.
- There will be 15 questions for 22.5 marks (1.5 marks per question).
- Students should get at least **18 out of 22.5 marks**.
- This is the first time Physics & Chemistry is part of NATA. We expect level of **difficulty** for Maths to be similar to Maths Section of JEE (Paper 2).

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