

2017

National Aptitude Test in Architecture – NATA Information Brochure

NATA Website: www.nata.in

Version: 1.1

Release date: 23-12-2016

Go green: Avoid printing



Council of Architecture

India Habitat Centre, Core 6A, 1st Fl, Lodhi Road, New Delhi - 110 003

Tel: (011) 79412100 Fax: (011) 24647746

Web: www.coa.gov.in e mail: nata-coa@gov.in



Contents

1.0	Introduction.....	3
2.0	About NATA 2017	4
3.0	Schedule of Examination	5
4.0	Pattern of Questions and Mode of Answering.....	5
4.1	Mathematics & General Aptitude Test.....	5
4.2	Drawing Test.....	6
4.3	Tie breaking rules for overall score	6
5.0	Eligibility Criteria for Candidates	7
6.0	Application Procedure.....	8
6.1	Application form.....	8
6.2	Image uploading	9
6.3	Application Fee Details.....	9
6.4	Confirmation Page (A proof of REGISTRATION)	10
7.0	Filling up of Application Form.....	10
7.1	Discrepancy and correction (By Candidates).....	10
8.0	Issue of Admit Card	11
9.0	Allocation of Examination Centre.....	11
10.0	Declaration of Results.....	11
10.1	Rules for scrutiny / review of Answer Sheet	11
10.2	Result format.....	12
10.3	Validity of NATA-2017 score.....	12
11.0	Interpretation & Legal Jurisdiction	13
12.0	Procedure for conduct of Examination:	13
	APPENDIX I - Syllabus for NATA-2017	14
	APPENDIX II - Procedures to be followed in the Examination.....	17
	APPENDIX III - DOs AND DON'Ts.....	19
	APPENDIX IV - Guidelines for filling up the online form.....	20
	APPENDIX V - List of Examination Cities.....	23
	APPENDIX VI - Important Dates.....	25
	APPENDIX VII - Version Control	26

1.0 Introduction

The Council of Architecture (COA) has been constituted by the Government of India under the provisions of the Architects Act, 1972, enacted by the Parliament of India, which came into force on 1st September, 1972. The Act provides for registration of Architects, standards of education, recognized qualifications and standards of professional conduct and etiquette to be complied with by the architects. The Council of Architecture is vested with the responsibility to regulate the education and practice of profession throughout India besides maintaining the register of architects. For this purpose, the Government of India has framed Rules and Council of Architecture has framed Regulations as provided for in the Architects Act, with the approval of Government of India.

Any person desirous of carrying on the profession of 'Architect' must have registered himself with Council of Architecture. For the purpose of registration, one must possess the recognized qualification as appended to the Architects Act, after having undergone the education in accordance with the Council of Architecture (Minimum Standards of Architectural Education) Regulations, 1983. The registration with Council of Architecture entitles a person to use the title and style of Architect, for practising the profession of architecture. If any person falsely represents or claims to be registered architect or uses any words or letters to suggest that s/he is an architect or misuses title and style of architect, such acts tantamount to committing of a criminal offence punishable under the Architects Act, 1972.

The practice of profession of an architect is regulated under the Architects (Professional Conduct) Regulations, 1989 (as amended in 2003), which prescribe the professional conduct, ethics and etiquette, conditions of engagement and scale of charges, architectural competition guidelines etc. Pursuant to these Regulations, the Council of Architecture has framed guidelines governing the various aspects of practice. There are about 450 institutions presently imparting architectural education in India leading to recognized qualifications. The standards of education being imparted in these institutions (constituent colleges/departments of universities, deemed universities, affiliated colleges/schools, IITs, NITs and autonomous institutions) are prescribed and monitored by Council of Architecture by way of Regulations and norms & standards prescribed from time to time which set forth the requirement of eligibility for admission, course duration, standards of staff & accommodation, course content, examination etc. These minimum standards as prescribed by the Council are required to be maintained by all the institutions. The COA oversees the maintenance of the standards periodically by way of conducting inspections. The COA is required to keep the Central Government informed of the standards being maintained by the institutions and is empowered to make recommendations to the Government of India with regard to recognition and/or de-recognition of a qualification. As per the Minimum Standards of Architectural Education Regulations, qualifying in an aptitude test in Architecture is mandatory for admission to B.Arch. degree course. Hon'ble

Madras High Court vide order dated 21.07.2003 in W.P.No.9707 of 2003, had held the aptitude test as a mandatory requirement.

2.0 About NATA 2017

National Aptitude Test in Architecture (NATA) is being conducted by COA since 2006, in terms of the provisions of CoA (Minimum Standards of Architectural Education) Regulations, 1983, published in the Gazette of India. It is implied that a separate aptitude test in Architecture should be conducted and such test should not be combined with the tests for admissions to Engineering, Pharmacy, Medicine and other disciplines. Being the competent authority for fixing norms and standards for architectural institutions, COA has the necessary expertise to hold a Common Aptitude Test in Architecture, at national level to provide a single window system for appearing in aptitude test and to facilitate institutions, students and public at large for admission to First year of 5 year B.Arch. Degree Course at all recognized Institutions all over country.

The purpose of conducting NATA is to provide a single scheme of examination for holding aptitude test and to facilitate prospective students all over the country to apply for admissions in architecture seats in institutions spread across the country and to avoid appearing in multiple aptitude tests. However, the actual admissions shall be carried out only by the concerned competent authorities of the respective states/institutions based on NATA. The NATA also ensures that the eligibility criteria for admission to five year Bachelor of Architecture (B.Arch.) degree course, as prescribed by CoA and duly approved by the Central Government, are strictly adhered to and followed all over the country in Architectural Institutions.

NATA measures the aptitude of the applicant for specific field of study, i.e. Architecture. The test makes an assessment of drawing and observation skills, sense of proportion, aesthetic sensitivity, Mathematics and critical thinking ability that have been acquired over a long period of time and are related to the specific field of study.

In order to further strengthen the conduct of the test and to attract more number of bright aspirants into studying Architecture, COA has decided to conduct NATA-2017 for admission to B.Arch. in the academic session 2017-18, as a one-day paper based examination all over the country. This would surely be a step towards producing competent architects to serve the society and to build the nation in coming decades, especially in view of the Govt. of India mission of Smart Cities.

3.0 Schedule of Examination

Date & Time of Examination	Subject and Marks of Examination	
16.04.2017 (Sunday) 11.00 a.m. to 2.00 p.m. (Grand Total of 200 marks)	FIRST 90 minutes TOTAL 120 Marks	
	Mathematics (MCQ)	30X2 = 60 Marks (OMR BASED)
	General Aptitude (MCQ)	30X2 = 60 Marks (OMR BASED)
	LAST 90 minutes TOTAL 80 Marks	
	Drawings (TWO SETS) in A4 Size paper 2X 40 = 80 Marks	

N.B. No further examination shall be held under any circumstances for those who will be unable to appear on the scheduled date and time of NATA-2017 examination.

4.0 Pattern of Questions and Mode of Answering

All the booklets will be served at the beginning in one folder. MCQ answer sheet (OMR) will be withdrawn after 90 minutes. It is to be noted carefully that the candidates must fill in as well as bubble in ALL the relevant information including the “Question Booklet No” at the indicated places on OMR Answer Sheet, Drawing Sheets and Attendance Sheet during examination.

Questions and all instructions will be available only in English medium.

Syllabus for NATA-2017 is given in **APPENDIX – I**.

Subject	Distribution of Marks	Total Marks
Mathematics (30 Qs)	30 x 2	60
General Aptitude (30 Qs)	30 x 2	60
Drawing (2 Qs)	2 x 40	80
	TOTAL	200

4.1 Mathematics & General Aptitude Test

Only one option is correct and correct response will yield 2 (two) marks. There is no negative marking, but wrong answering will be penalized in case of tie breaking, as elaborated below.

Answers to both parts must be provided on same OMR sheet, which is specially designed machine readable response sheet. **ANSWERS ARE TO BE MARKED (BUBBLED) USING BLUE/BLACK BALL POINT PEN ONLY ON THE ‘OMR ANSWER SHEET.’**

4.2 Drawing Test

Candidate has to attempt two questions within 90 minutes. The drawing aptitude is judged on the following aspects -

- Ability to sketch a given object proportionately and rendering the same 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.

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.

4.3 Tie breaking rules for overall score

Unified merit list of candidates will be published in NATA-2017. During merit listing, all candidates would get unique rank. Therefore, if more than one candidate gets the same overall marks, tie breaking logic would be applied in the following order:

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

5.0 Eligibility Criteria for Candidates

5.1 Taking NATA-2017

The lower age limit of the candidate is 17 years as on 31.07.2017.

Candidates may come from the following backgrounds:

- (a) 10+2 or equivalent passed/appearing with Mathematics as one of the subjects of examination;
- (b) 10+3 Diploma (any stream) passed/appearing recognized by Central/State Govts with Mathematics as one of the subjects of examination;
- (c) International Baccalaureate Diploma passed/appearing, after 10 years of Schooling with Mathematics as compulsory subject of examination.

NOTE: EVEN AFTER EXAMINATION OR ADMISSION, OR DURING ANY STAGE THEREOF, IF IT IS FOUND ON SCRUTINY THAT AN APPLICANT IS UNDER AGE, i.e. BELOW 17 YEARS AS ON 31.07.2017. OR OTHERWISE INELIGIBLE, HIS/HER NATA-2017 SCORE WILL BECOME VOID.

5.2 Admission to B.Arch. course

QUALIFYING IN NATA-2017 DOES NOT CONSTITUTE A RIGHT/ GUARANTEE IN FAVOUR OF THE CANDIDATE FOR HIS/HER ADMISSION TO ANY ARCHITECTURE COURSE UNLESS HE/SHE HAS FULFILLED ALL THE PRESCRIBED REQUIREMENTS AS SPECIFIED BY RESPECTIVE COUNSELLING AND ADMISSION AUTHORITIES.

Only candidates who have the following credentials shall be eligible for admission to B.Arch. Course.

- i. Qualified a recognized aptitude test in Architecture (NATA or equivalent) in 2017 OR qualified in NATA-2016 AND
- ii. Have gone through any of the following curriculum with marks as prescribed below:
 - (a) secured 50% marks in 10+2 or equivalent examination with Mathematics as one of the subjects;
OR
 - (b) 10+3 Diploma (any stream) recognized by Central/State Govts with 50% aggregate marks with Mathematics; OR
 - (c) International Baccalaureate Diploma passed/appearing, after 10 years of Schooling with 50% marks in aggregate and with Mathematics as compulsory subject of examination

No direct lateral admission is allowed at any year/stage of B.Arch. course based on any qualification.

The interpretation of NATA-2016 score of candidates is explained later in Section 10.2.

5.3 Reservations under different categories

NATA-2017 is a qualifying examination where a general merit list will be published along with score of candidate. Reservation is a prerogative of the admission/ counselling authority and this examination has nothing to do with it. However, candidates with specific disability of colour blindness may be debarred from admission to B. Arch. Course, as per the policy of the respective institution/ University.

6.0 Application Procedure

Application has to be filled up ONLINE at the NATA portal of NIC <http://www.nata.nic.in>

Candidates need to visit the portal and CLICK the requisite link ONLINE APPLICATION NATA– 2017 and thereafter will be directed to the actual application form. The form is interactive in nature and the fields required to be filled up are categorized in different sub-sections. The fields super-scribed with * **MUST be filled up as they are MANDATORY, otherwise the application will NOT get submitted.**

The application form is broadly categorized into three steps: filling of **PERSONAL DETAILS; DOCUMENT UPLOADING & FEE PAYMENT**. Please see **Appendix-IV** for detailed guidelines on fields to be entered at the time of online form filling.

Candidates need to fill in the first part i.e. PERSONAL DETAILS and will thereafter be directed to DOCUMENT UPLOADING. Once the documents are successfully uploaded, the system enters into the FEE PAYMENT. Finally, the candidate must take a printout of CONFIRMATION PAGE generated upon successful fee payment for their own record. **There is no need to send any document by post.**

6.1 Application form

Filling up of fields will be interactive in nature. As soon as the cursor is taken to a certain field, a cursor tip MESSAGE will be shown to the candidate to assist in filling up. In case of difficulty, the HELP icon placed right next to the field will redirect the candidate to that section of the Brochure which deals with the filling up of the said field. Please note that the **applicant name, father's name, mother's name, postal address and date of birth taken together must be unique for each application.**

On completion and submission of the PERSONAL DETAILS, the system will generate a unique **7-digit numeric APPLICATION NUMBER** for the candidate. The candidate has to choose a **PASSWORD** and keep it as guarded secret for all subsequent entries into their domain. A **SECURITY QUESTION AND ANSWER** will be captured from the candidate by the system at this stage. Candidate has to remember this question-answer

pair for prompt retrieval of password in case it is forgotten at later stage. Once an Application Number is generated and the password is chosen, the candidate may logout of the system. The candidate will need to enter the system subsequently for various reasons as given below:

- Accessing and editing personal information (till going to the document upload stage)
- Uploading of images.
- Printing of e-Challan for Bank / performing fee payment through EPG.
- Printing of the Confirmation Page.
- Correction to data during dates specified by the Council, if needed.
- Viewing of OMR answer sheet and result details after examination.

The candidate has to use this system generated Application Number and chosen password for subsequent login to the system for all subsequent accesses to the system. Therefore it is very important for the candidate to note down the application number and password. It is also important to note the **security question** and the answer pair for retrieval of password in case the candidate forgets the chosen password. So the candidate must note down the security question and answer for future reference.

6.2 Image uploading

All candidates are required to upload the following images:

1. **Recent coloured Passport sized Photograph**
2. **Left Thumb Impression (LTI) Impression should be very clear neither fade nor submerged with ink.**
3. **Own Signature**

Documents have to be in **jpg / jpeg format**. The page size of document is to be in A4 format. Following are the details regarding the size and dimension of the documents:

Document	Storage size		Image dimension	
	minimum	maximum	Height	Width
Photograph	4 KB	100 KB	4.0 cm	3.0 cm
Left thumb impression	1 KB	30 KB	1.5 cm	3.5 cm
Signature	1 KB	30 KB	1.5 cm	3.5 cm

6.3 Application Fee Details

Irrespective of his/her category and gender, a candidate applying for NATA– 2017 has to pay INR **1250/- (Rupees one thousand two hundred fifty only)** as application fee, through ONLINE mode. The candidate, on successfully uploading the PERSONAL DETAILS and DOCUMENTS; will be directed to the webpage containing process of payment of application fee. **Service charges, as applicable, would be payable along with fees at the bank.**

1. **Payment through ICICI Bank e-Challan:** The candidate has to select “**ICICI Bank e-challan**” to submit the application fee through bank. As soon as he selects it an **e-Challan** will be generated containing details of the candidate. The candidate has to take a printout of the same and take it to the nearest **Core Banking Service (CBS) facility enabled Branch of the Bank** for making **payment**. After payment, the candidate has to login to the system and upload the details written on the e-Challan (Journal No., Branch Name and Date etc.) by the bank official.
2. Only when the payment details are uploaded, the **Confirmation Page** will be generated.
3. **Payment through EPG:** The candidate has to select EPG if he/she desires to submit the application fee through **electronic payment gateway via debit card, credit card or net banking**. As soon as the transaction is completed, a RECEIPT will be generated containing details of the transaction. Upon successful payment, the **Confirmation Page will be automatically generated**

6.4 Confirmation Page (A proof of REGISTRATION)

The **Confirmation Page** is generated upon successful payment of Application Fee. Its generation means that the candidate has been successfully REGISTERED. The candidate should take a printout and preserve the confirmation page for future reference. **There is no need to send any document to the Council by post.**

7.0 Filling up of Application Form

The online filling-up of the Application Form is interactive in nature and online guidance will be available to the candidate while filling up the form. Please refer to **APPENDIX-III** and **APPENDIX-IV** for detailed guidelines on filling up the form.

7.1 Discrepancy and correction (By Candidates)

Normally, it is expected that the candidate has filled up all details correctly before proceeding to next stage. However, in case corrections are needed, there will be a window period during which the candidates would be allowed to change their data. **No further changes would be entertained beyond this stipulated window period.** The candidate is required to enter their domain **by typing the Application Number and password in the specified space** through www.nata.nic.in for getting intimation regarding any discrepancy about the data or uploaded documents by the Council. **Candidates would also be intimated over phone depending on the criticality of the mistakes.**

As per **activity no. 7 indicated in APPENDIX-VI**, candidates may change their credentials and upload new certificates as per changed credentials during the mentioned period. **No error correction will be normally entertained after this stipulated period.**

8.0 Issue of Admit Card

For each Applicant, an Admit Card will be generated indicating the allotted Examination Centre for **NATA - 2017** and a downloadable version of the admit card will be published on the respective webpage of the candidate concerned. **An Examination Roll Number will also be generated for each candidate.**

Candidate has to **download the soft copy** of the Admit Card from the website and **has to appear in the examination with a printed hard copy** at the concerned Examination Centre indicated in the downloaded Admit Card on production of the same along with **Identical one copy of (a) Original photograph (same as uploaded) and (b) One photo identity card e.g. Voter Card, Pan Card, Aadhar Card, Driving Licence.**

Candidates must ensure that the photograph and signature printed on the admit card are not mutilated / distorted / soiled even by accident. Candidates with such mutilated / distorted / soiled admit cards will not be allowed to appear in NATA-2017.

Candidates are advised to retain their admit cards carefully in secured place in undamaged condition in all respects as stated above till the completion of admission procedure.

All applicants who appear to be prima facie eligible shall be provisionally permitted to sit for NATA-2017. If, after scrutiny at any stage, it is found that an applicant is otherwise ineligible, his/her candidature shall be cancelled even if he/she has appeared in NATA-2017 and secured a position in the merit list.

The candidature shall also be cancelled if he/she fails to produce any of the required documents in original for fulfilment of eligibility and other criteria as specified earlier during counselling and physical admission and subsequent registration in respective affiliating institution.

9.0 Allocation of Examination Centre

The allocation of examination centre spread across all state capitals and other selected cities subject to availability of at least 250 students in general. Cities will be based on the choices given by the candidate during online form fill-up. However, discretion of the Council in allocation of examination centre shall be final. No request for change of allocated center will be entertained under any circumstances. List of city-wise examination zones is given in **APPENDIX-V.**

10.0 Declaration of Results

10.1 Rules for scrutiny / review of Answer Sheet

After the examination, model answers to MCQ portion would be available in public domain for feedback from all concerned. Thereafter, the answers will be frozen by a set of reviewers not connected with the paper setting / moderation process.

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**.

No review will be available for the drawing test. 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.

10.2 Result format

Results will be available in the website of the COUNCIL, and some other websites which will be announced in various electronic/printing media before declaration of results.

The result will be available in three formats:

1. Marks obtained out of 200 and in each component
2. Merit listing – unique based on marks and tie breaking rules (mentioned in Section 4 above)
3. Percentile score based on the merit listing

Qualifying marks for NATA-2017 would be based on the following rules:

1. At least 25% must be secured in MCQ portion (30 out of 120)
2. At least 25% must be secured in Drawing portion (20 out of 80)
3. Overall qualifying marks (out of 200) would be based on post-exam statistics and at the discretion of the Council.

Candidate will not qualify in NATA-2017 unless (s)he satisfies all three conditions mentioned above.

An attempt will be made to normalize (with respect to NATA-2017) the score of NATA-2016 qualified candidates seeking admission in the session 2017-18 in order to specify their position in order of merit for counselling purposes. Such guidelines would be based on statistical analysis and the Council's decision would be final in this regard.

10.3 Validity of NATA-2017 score

NATA-2017 score shall be valid only for admission in the session 2017-18.

11.0 Interpretation & Legal Jurisdiction

- **In case of any dispute regarding interpretation of any clause in this brochure, the interpretation of Council shall be final and binding.**
- All matters pertaining to conduct of NATA–2017 shall fall within the jurisdiction of Courts situated in **Delhi only.**
- The Council will not be a party pertaining to any dispute arising in the process of admission to any course of study through NATA– 2017.

12.0 Procedure for conduct of Examination:

Important procedures to be followed during the conduct of examination are specified in **APPENDIX - II**. Please also refer to **APPENDIX-III** for necessary information.

APPENDIX I - Syllabus for NATA-2017

Subject		Questions	Marks	Mode of Exam
Mathematics & General Aptitude	Mathematics	30	60	MCQ (OMR based)
	General Aptitude	30	60	MCQ (OMR based)
Drawing test		02	80	Paper and Pencil

MATHEMATICS

Algebra: Definitions of A. P. and G.P.; General term; Summation of first n-terms of series $\sum n, \sum n^2, \sum n^3$; Arithmetic/Geometric series, A.M., G.M. and their relation; Infinite G.P. series and its sum.

Logarithms: Definition; General properties; Change of base.

Complex Numbers: Definition and properties of complex numbers; Complex conjugate; Triangle inequality; Square root of complex numbers; Cube roots of unity; De Moivre's theorem (statement only) and its elementary applications. Solution of quadratic equation in complex number system.

Quadratic Equations: Quadratic equations with real coefficients; Relations between roots and coefficients; Nature of roots; Formation of a quadratic equation, sign and magnitude of the quadratic expression $ax^2 + bx + c$ (where a, b, c are rational numbers and $a \neq 0$).

Binomial theorem (positive integral index): Statement of the theorem, general term, middle term, equidistant terms, properties of binomial coefficients.

Matrices: Concepts of $m \times n$ ($m \leq 3, n \leq 3$) real matrices, operations of addition, scalar multiplication and multiplication of matrices. Transpose of a matrix. Determinant of a square matrix. Properties of determinants (statement only). Minor, cofactor and adjoint of a matrix. Nonsingular matrix. Inverse of a matrix. Finding area of a triangle. Solutions of system of linear equations. (Not more than 3 variables).

Trigonometry: Trigonometric functions, addition and subtraction formulae, formulae involving multiple and submultiple angles, general solution of trigonometric equations. Properties of triangles, inverse trigonometric functions and their properties.

Coordinate geometry of two dimensions: Distance formula, section formula, area of a triangle, condition of collinearity of three points in a plane. Polar coordinates, transformation from Cartesian to polar coordinates and vice versa. Parallel transformation of axes, concept of locus, elementary locus problems. Slope of a line. Equation of lines in different forms, angle between two lines. Condition of perpendicularity and parallelism

of two lines. Distance of a point from a line. Distance between two parallel lines. Lines through the point of intersection of two lines. Equation of a circle with a given center and radius. Condition that a general equation of second degree in x, y may represent a circle. Equation of a circle in terms of endpoints of a diameter. Equation of tangent, normal and chord. Parametric equation of a circle. Intersection of a line with a circle. Equation of common chord of two intersecting circles.

Co-ordinate geometry of three dimensions: Direction cosines and direction ratios, distance between two points and section formula, equation of a straight line, equation of a plane, distance of a point from a plane.

Differential calculus: Functions, composition of two functions and inverse of a function, limit, continuity, derivative, chain rule, derivative of implicit functions and functions defined parametrically.

Integral calculus: Integration as a reverse process of differentiation, indefinite integral of standard functions. Integration by parts. Integration by substitution and partial fraction.

Definite integral as a limit of a sum with equal subdivisions. Fundamental theorem of integral calculus and its applications. Properties of definite integrals.

Differential Equations: Formation of ordinary differential equations, solution of homogeneous differential equations, separation of variables method, linear first order differential equations.

Application of Calculus: Tangents and normals, conditions of tangency. Determination of monotonicity, maxima and minima. Differential coefficient as a measure of rate. Motion in a straight line with constant acceleration. Geometric interpretation of definite integral as area, calculation of area bounded by elementary curves and Straight lines. Area of the region included between two elementary curves.

Vectors: Addition of vectors, scalar multiplication, dot and cross products, scalar triple product.

Sets, Relations and Mappings: Idea of sets, subsets, power set, complement, union, intersection and difference of sets, Venn diagram, De Morgan's Laws, Inclusion / Exclusion formula for two or three finite sets, Cartesian product of sets. Relation and its properties. Equivalence relation — definition and elementary examples, mappings, range and domain, injective, surjective and bijective mappings, composition of mappings, inverse of a mapping.

Permutation and combination: Permutation of n different things taken r at a time ($r \leq n$). Permutation of n things not all different. Permutation with repetitions (circular permutation excluded). Combinations of n different things taken r at a time ($r \leq n$). Combination of n things not all different. Basic properties. Problems involving both permutations and combinations.

Statistics and Probability: Measure of dispersion, mean, variance and standard deviation, frequency distribution. Addition and multiplication rules of probability, conditional probability and Bayes' Theorem, independence of events, repeated independent trials and Binomial distribution.

GENERAL APTITUDE

Objects, texture related to architecture and built environment. Interpretation of pictorial compositions, Visualizing three-dimensional objects from two-dimensional drawing. Visualizing different sides of 3D objects. Analytical reasoning, mental ability (visual, numerical and verbal), Awareness of national/international architects and their creations.

DRAWING TEST

Understanding of scale and proportion of objects, geometric composition, shape, building forms and elements, aesthetics, colour texture, harmony and contrast. Conceptualization and Visualization. Drawing of patterns - both geometrical and abstract. Form transformations in 2D and 3D like union, subtraction, rotation, surfaces and volumes. Generating plan, elevation and 3D views of objects. Creating 2D and 3D compositions using given shape and forms. Perspective drawing, Sketching of urbanscape and landscape.

APPENDIX II - Procedures to be followed in the Examination

1. The Examination Hall will be opened 30 minutes before the commencement of the test. Candidates are expected to take their seats immediately after the opening of Examination Hall. If the candidates do not report in time, they are likely to miss some of the general instructions to be announced in the Examination Hall. No candidate will be allowed in examination hall after 15 minutes of commencement of test.
2. **Candidate must bring with them:**
 - i. Downloaded Admit Card of NATA 2017,
 - ii. One copy of photograph, same as the one uploaded;
 - iii. Black / Blue Ball Point Pen, pencil, eraser, colour pencils (Not water/oil colour or crayon)
 - iv. Candidates are advised to bring with them a cardboard or a clip board on which nothing should be written, so that they have no difficulty in filling responses in the Answer Sheet even if the tables provided in the examination room/hall do have smooth surface.
3. **Candidates must show** on demand the Admit Card (NATA-2017) for admission to the Examination Hall. A candidate not possessing print out of the downloaded admit card along with the photograph and one photo identity proof **shall not be allowed to enter in the Examination Hall by the Center-in-Charge.**
4. A seat indicating Roll No. will be allocated to each candidate. Candidates must find out and occupy their allocated seat.
5. **Candidates are not allowed to carry any textual material, printed or written, bits of papers or any other material except those listed under. SL.No.-2 inside examination Hall.**
6. **Mobile Phones, Bluetooth devices, Calculators, Slide Rules, Log Tables, Electronic Watches with facilities of Calculator are not allowed in the Examination Hall. Possession of such items during the Examinations may lead to cancellation of candidature.**
7. No candidate, without the special permission of the Centre-in-Charge or the invigilator concerned, will leave his/her seat or Examination Hall until the duration of examination for a paper is over. Candidate should not leave the hall without handing over their OMR sheet to the invigilator on duty; this may otherwise lead to cancellation of the concerned paper.
8. It is to be noted carefully that the candidates must write the "Question Booklet No." at the indicated places both on the OMR Answer Sheet and Attendance Sheet during examination.

Otherwise his/her OMR Answer sheet in the concerned subject will be cancelled.

9. Candidates shall maintain silence during the examination. Any conversation or gesticulation or disturbance in the examination hall shall be deemed as misdemeanour. If a candidate is found adopting unfair means, his/her candidature shall be cancelled and he/she will be liable to be debarred from taking examination either permanently or for a period according to the nature of offence.

If a candidate is found impersonating, his/her candidature will be cancelled outright and the concerned examinee will be handed over to the Police.

APPENDIX III - DOs AND DON'Ts

Dos

1. **Read the online instructions carefully before filling-in of the Application Form online.**
2. **Specify all personal information, address and date of birth correctly.**
3. **Remember your application number, security question/answer and password.**
4. **Choose the examination zones correctly.**
5. **Upload colour photograph, LTI and signature with specified size only**
6. **Retain a copy of the Confirmation Page.**
7. **Enter the examination hall only with your Admit Card, one photograph and blue/black ball point pens.**
8. **For drawings, use own pencils and coloured pencils.**
9. **Submit the OMR Answer Sheet to the Invigilator after completion of each session of Examination.**
10. **Write the Question Booklet No. in specified places on both the OMR Answer Sheet and Attendance Sheet.**

Don'ts

1. **Don't divulge your application number, security question/answer and password to anybody.**
2. **Don't give wrong/unused mobile number and e-mail id during form fill up.**
3. **Don't send poorly scanned photograph and thumb impression.**
4. **Don't sign in capital letters, sign your full signature and upload as per specifications.**
5. **Don't claim any credentials for which supporting documents are not available.**
6. **Don't send duly filled in Confirmation Page or any document through post.**
7. **Don't spoil the hard copy of your downloaded admit card.**
8. **For drawings, use of crayons, water and oil paints prohibited.**
9. **Don't bring Mobile Phone, Calculator or any other electronic gadget inside the Examination Hall.**

APPENDIX IV - Guidelines for filling up the online form

Sl No	Description of Field	Value	Remarks
A. Personal Information –as registered in Class 12 or equivalent examination			
1	Candidate's Full Name	Enter name	Max 46 character; as per school leaving record don't use prefixes like Sri, Mr, Ms, Dr, Late etc.
2	Father's Name	Enter name	Max 46 character; as per school leaving record don't use prefixes like Sri, Mr, Ms, Dr, Late etc.
3	Mother's Name	Enter name	Max 46 character; as per school leaving record don't use prefixes like Sri, Mr, Ms, Dr, Late etc.
4	Date of Birth	DD/MM/YYYY	See Section 5.2 for eligibility condition on date of birth (must be 17 years of age as on 31.07.2017).
5	Gender	---Select---	Male (M) / Female (F) / Transgender (T)
6	Category	---Select---	General / SC / ST / OBC-NCL Has no bearing on the exam
7	Person with disability	YES/NO	Auto-filled with NO, may be changed to YES Has no bearing on the exam
8	Type of disability	---Select---	Visual Acuity / One eyed vision / Others Note: extra support to be provided to disabled candidates based on their appeal and at the discretion of centre-in-charge Note: Certain disabilities, such as colour blindness, may render a candidate ineligible for admission to B.Arch. course, depending on admitting institute policy.
9	Place of Residence	---Select---	Rural / Urban / SubUrban
10	Nationality	---Select---	Indian / OCI / PIO / Foreign
11	Aadhar Number	--- Enter ---	This field is optional and verified offline
12	Have you applied in JEE (Main) Paper-II	---Select---	YES (Y) / NO (N)
13	If Yes, enter Application No of JEE(Main)	Type valid number if Y	(Max 8 character) Has no bearing on this exam and verified offline
14	Have you qualified in NATA-2016?	---Select---	YES (Y) / NO (N)
15	If Yes, enter Id of NATA-	Type valid	Enter Candidate-Id (Max 10 character)

	2016	number if Y	Has no bearing on this exam and verified offline
B. Choice of examination centre			
16-18	Choice of Location of Examination	-- 1st Choice-- -- 2nd Choice-- -- 3rd Choice--	Three choices to be selected mandatorily from the entire list of examination cities nation-wide (see Appendix-V for the complete list)
C. Details of education - Class X or equivalent			
19	Education Qualification	--- Fixed ---	Class 10th or equivalent
20	Pass Status	--- Fixed ---	Passed
21	Course/Stream name	--- Fixed ---	High School
22	Board/University	---Select---	Select from drop down list
23	Year of passing	---Select---	Select from drop down list
24	Obtained Marks	Enter value	Mandatory (aggregate)
25	Total Marks	Enter value	Mandatory
26	% Marks	---	Auto calculate
27	Roll No/Enroll No	Enter value	Enter correct roll no as per Class X records
28	Institute Name and address	100 character	Enter name and address of school of study in Class X
29	Pin Code	6 character	Pin code of school address
D. Details of education - Post X			
30	Education Qualification	--- Fixed ---	Class 12th or equivalent
31	Pass Status	--- Select ---	Passed / Appearing
32	Course/Stream name	--- Select ---	10+2 / 10 + 3 years Diploma
33	Board/University Name	---Select---	Select from drop down list
34	Year of passing	---Select---	Conditional – if Passed, Select from drop down list
35	Obtained Marks	Enter value	Conditional – if Passed, enter aggregate
36	Total Marks	Enter value	Conditional – if Passed
37	% Marks	---	Auto calculate – if Passed
38	Roll No/Enroll No	Enter value	Conditional – if Passed
39	Institute Name and address	100 character	Enter name and address of school of study in Class X Mandatory

40	Pin Code	6 character	Pin code of school address - Mandatory
E. Communicating address			
41	Address of residence	50 characters	Enter full address
42	State of Domicile	---Select---	All states and union territories to be shown
43	District of Domicile	---Select---	Select from drop down menu
44	Pin Code	6 character	Mandatory
45	Email Id	Enter valid id	Please enter valid – to be used for communication
46	Mobile no	Enter valid no	Please enter valid – to be used for communication
47	Land line no	Enter valid no	Optional
F. Income category			
48	Family income	--- Select ---	Below 2.5 Lakh / 2.5 to 6.0 Lakh / 6.0 to 10.0 Lakh / Above 10.0 Lakh (four options)
G. Secure application before final submission			
49	Choose password	Enter as per password policy	<ol style="list-style-type: none"> 1. Password must be 8 to 13 characters long. 2. Password must have at least one Upper case, one lower case alphabet and one numeric value and at least one special characters among !@#%&*- 3. New Password cannot be identical to any of the previous three passwords.
50	Confirm password	Enter same as above	Has to match with the above entry and noted down for all future entries into the system
51	Security question	---Select---	Select from options in drop down menu
52	Security answer	Enter response	Please enter relevant value and note down – used for future retrieval of forgotten password
<p>Now the application may be reviewed before final submission. Once application is submitted, an Application Number (7 digit, Most Significant Digit=7) gets generated. It must be noted down along with password and security question-answer – as these are all important for subsequent logins – to upload images and submit fees. Please note that it is impossible to submit a duplicate form by any candidate – with same name, father name, mother name and date of birth. Any correction to filled-up form details can be sought through correction window to be made available on designated dates.</p>			

APPENDIX V - List of Examination Cities

City Code	State	City Name
1	ANDAMAN & NICOBAR	PORT BLAIR
2	ANDHRA PRADESH	VIJAYAWADA
3		VISAKHAPATNAM
4	ARUNACHAL PRADESH	ITANAGAR
5	ASSAM	GUWAHATI
6	BIHAR	GAYA
7		MUZAFFARPUR
8		PATNA
9	CHANDIGARH	CHANDIGARH/MOHALI
10	CHHATISGARH	RAIPUR
11	DELHI	DELHI/NEW DELHI
12	GOA	PANAJI
13	GUJARAT	AHMEDABAD
14		GANDHINAGAR
15		SURAT
16		VADODARA
17	HARYANA	FARIDABAD
18		GURGAON
19		KURUKSHETRA
20	HIMACHAL PRADESH	HAMIRPUR
21		SHIMLA
22	JAMMU & KASHMIR	JAMMU
23	JHARKHAND	DHANBAD
24		JAMSHEDPUR
25		RANCHI
26	KARNATAKA	BENGALURU
27		HUBLI
28		MANGALORE
29	KERALA	ERNAKULAM
30		KOZHIKODE
31		THIRUVANTHAPURAM
32	MADHYA PRADESH	BHOPAL
33		GWALIOR
34		INDORE
35		JABALPUR
36	MAHARASHTRA	AURANGABAD
37		MUMBAI
38		NAGPUR
39		NASIK
40		PUNE
41	MANIPUR	IMPHAL
42	MEGHALAYA	SHILLONG
43	MIZORAM	AIZWAL

City Code	State	City Name
44	NAGALAND	DIMAPUR
45	ODISHA	BALASORE
46		BHUBANESWAR
47		CUTTACK
48		SAMBALPUR
49	PUDUCHERRY	PUDUCHERRY
50	PUNJAB	AMRITSAR
51		BATHINDA
52	RAJASTHAN	JAIPUR
53		JODHPUR
54		UDAIPUR
55	SIKKIM	GANGTOK
56	TAMILNADU	CHENNAI
57		COIMBATORE
58		MADURAI
59	TELANGANA	HYDERABAD
60		WARANGAL
61	TRIPURA	AGARTALA
62	UTTARAKHAND	DEHRADUN
63		ROORKEE
64	UTTAR PRADESH	AGRA
65		ALLAHABAD
66		LUCKNOW
67		VARANASI
68	WEST BENGAL	KOLKATA
69		SILIGURI

Note: Final retention of city depends on availability/requests.

APPENDIX VI - Important Dates

SI No	Activity	Date (with time)
1	Availability of information in the public domain	From 15 th December, 2016
2	Start of Online form fill-up	04.01.2017.
3	End of registration	02.02.2017. (11:59 PM)
4	Image uploads allowed till	03.02.2017. (11:59 PM)
5	Fee payment allowed till	04.02.2017. (11:59 PM)
6	Confirmation page printing available till	28.02.2017. (11:59 PM)
7	Candidate Correction window (based on Council feedback and self-induced errors) along with upload of correct testimonials	20.02.2017. (10:30 AM) to 24.02.2017. (11:59 PM)
8	Publication of Downloadable Admit Card in www.nata.in	26.03.2017. (10:30 AM)
9	Date and Time of Examination	16.04.2017. (11 AM to 2 PM)
10	Publication of Results	By 10 th June, 2017

Note: All schedules are subject to change under unavoidable circumstances

APPENDIX VII - Version Control

V1.0: (released on 15-12-2016) This is the first version, generated by compiling information from previous NATA brochure, procedures followed for offline exams in general.

V1.1: (released on 23-12-2016) In this version,

- The starting date of registration has been changed from 24th Dec, 2016 to 4th Jan, 2017 under unavoidable circumstances. Accordingly, entries 2-5 and 7 in the Table showing important dates in Appendix-VI have been modified.
- A clause clarifying the validity of NATA-2017 score has been added as Section 10.3.
- Some changes are made in the registration form in Appendix-IV.



"We shape our buildings; thereafter they shape us."

- Winston Churchill