Appendix –II

Procedure for Online Payment of Fees and Helpline for Payment-Related Queries

After completing Step 2 of the **Online** Application Form**,** the candidate may remit the examination fee **(Step 3)** in the following manner:

- Check the validity of the Debit/ Credit Card and keep it ready with you while logging on to the website for submitting the Application Form. The candidates should enter the information asked for and make payment through a Debit/ Credit Card.
- Through Net Banking, check the balance in your account and keep all credentials ready with you while logging on to the website for making payments. The candidates should log in with his/her credentials of net banking and make payments accordingly.
- For payment through a UPI Service, check whether there is a requisite balance in the Bank Account / Wallet to which the concerned UPI is linked.

The prescribed Examination Fee (please see the Information at a Glance) can be paid through any Bank/Payment Gateway in any Payment Mode [service/processing charges per transaction and GST applicable thereon @ 18 % are to be borne by the candidate

S. No	Mode of Payment	ICICI BANK			HDFC BANK			CANARA BANK			STATE BANK OF INDIA	
1	**Net Banking**	ICICI	NIL Charge		HDFC	NIL Charge		Canara Bank	NIL Charge		SBI	
		Other Banks	4.00 + GST		Other Banks	4.00 + GST		Other Banks	5.00 + GST		Other Banks	Rs 5.00+GST
2	**All Debit Card**	ICICI or Other Banks	Transaction upto Rs 2000/-	0 %	HDFC or Other Banks	Transaction upto Rs 2000/-	0 %	Canara Bank or Other Banks	Nil Charge	Nil		Transaction upto Rs 2000/-
			Transaction above Rs 2000/-	0.5 % + GST		Transaction above Rs 2000/-	0 %					Transaction above Rs 2000/-
3	**Credit Card**	Domestic	0.40%of Transaction value		Domestic	0.40% of Fee + GST		Domestic		0.80% of Fee + GST	Domestic	0.80% of Fee+ GST (Minimum Rs 11/-)
		International	2.35%of Transaction value		International	Nil Charge		International		2.35% of Fee+ GST	International	3.50% of Fee+ GST (Minimum Rs 11/-)
4	**Unified Payment Interface (UPI)**	ICICI or other banks	Transaction upto Rs 2000/-	0 %	Nil Charge							Transaction upto Rs 2000/-
			Transaction above Rs 2000/-	5.0 % + GST								Transaction above Rs 2000/-

Note: In case, the fee payment status is not 'OK', or the Confirmation Page of the Online Application is not generated after fee payment (completion of Step 3) of the candidate is advised to contact the helpline number/email of the concerned Bank/Payment Gateway Integrator, as mentioned below:-

(a) If Paying through the State Bank of India (SBI):

Level	Name	Email ID	Contact Number
1	Helpdesk	dgmcs.cc@sbi.co.in	18004253800
2	Helpdesk3	sbi.05222@sbi.co.in	08026599990
3	Customer Care	agmcustomer.Ihodel@sbi.co.in	1800112211
4	Through SMS	UNHAPPY (add text)	8008202020

(b) If Paying through Canara Bank:

Level	Name	Email ID	Contact Number
1	Helpdesk	pgsupport@billdesk.com	01202400850/1 9971262371
2	Complaint Management Services	genadmnronoida@canarabank.com	01202400850/1
3	Customer Care	genadmnronoida@canarabank.com	9971262371
4	Through SMS	genadmnronoida@canarabank.com	01202400850/1

(c) If Paying through HDFC Bank:

Level	Name	Email ID	Contact Number
1	Shri Vikram Singh	vikram.singh4@hdfcbank.com	9799810080
2.	Amit Singh	amit.singh26@hdfcbank.com	7428869770
3	Shri Ripon Bhattacharjee	ripon.bhattacharjee@hdfcbank.com	9625031697

(d) If Paying through ICICI Bank:

S. No.	Name	Contact Number
1.	Helpdesk	1800222884
2.	Deepak Kumar	8882892218
3.	Rakesh Bhatnagar	9953972004

Appendix-III

Computer Based Test (CBT)

The major examinations being conducted by NTA are Computer-Based Tests (CBT). A CBT requires candidates to sit in front of a computer terminal (node) allocated to them against their Roll number and Admit card. After logging the candidate will get detailed instructions for the examinations. At the designated time of the start of the examination, the candidates will be able to proceed and see the questions on the computer screen using the computer mouse. Candidates will have the option to change/modify/edit/answers already entered at any time during the examination.

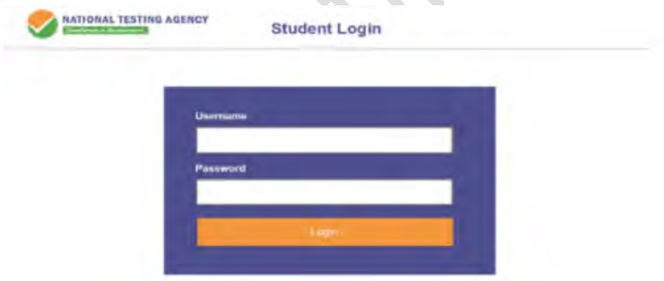
Procedure for appearing in Computer Based Test (CBT):

(Sample/mock test will be available on the NTA website: www.nta.ac.in for hands-on practice)

(a) A computer terminal (node) indicating the Roll Number will be allocated to each candidate. Candidates should find and sit on their allocated computers only. Any candidate found to have changed room/hall or the computer on their own other than the one allotted would lead to cancellation of candidature and no plea in this regard would be entertained.

(b) For login, the candidate will have to enter a **login ID and password**. The computer terminal allotted to the candidate will display the WELCOME login screen, the Candidate's photograph and the subject opted by the candidate.

Candidate Login Page



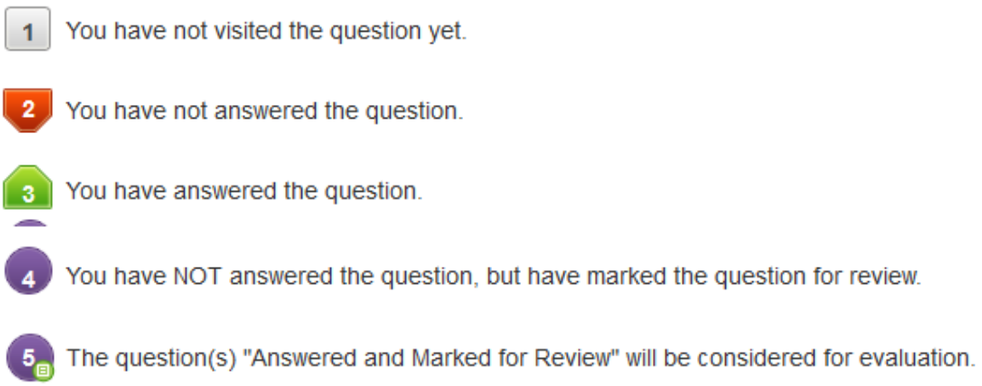
Candidate Welcome Screen

(c) After login, the candidate shall be able to see the detailed instructions for the examination. Candidates are advised to go through the instructions carefully regarding the type of questions and marking scheme. At the designated time of the start of the examination, the candidates will be able to proceed and see the questions on the computer screen.

Please read the instructions carefully

General Instructions:

1. The total duration of the examination is **180** minutes for **Paper 1 (B.E./B.Tech)** and **210 minutes** for (B.Arch and B.Planning) both.
2. The clock will be set on the server. The countdown timer in the top right corner of the screen will display the remaining time available for you to complete the examination. When the timer reaches zero, the examination will end by itself. You will not be required to end or submit your examination.
3. The Question Palette displayed on the right side of the screen will show the status of each question using one of the following symbols:



4. The 'Marked for Review' status for a question simply indicates that you would like to look at that question again.

5. You can click on the ">" arrow which appears to the left of the question palette to collapse the question palette thereby maximizing the question window. To view the question palette again, you can click on "< " which appears on the right side of the question window.
6. You can click on your "Profile" image on the top right corner of your screen to change the language during the exam for the entire question paper. On clicking on the Profile image, you will get a drop-down to change the question content to the desired language.
7. You can click on to navigate to the bottom and to navigate to the top of the question area, without scrolling.

Navigating to a Question:

8. To answer a question, do the following:
    a. Click on the question number in the Question Palette at the right of your screen to go to that question directly. Note that using this option does NOT save your answer to the current question.

b. Click on **Save & Next** to save your answer for the current question and then go to the next question.
c. Click on **Mark for Review & Next** to save your answer for the current question, mark it for review, and then go to the next question.

Answering a Question :

9. Procedure for answering a Multiple Choice Type question:

a. To select your answer, click on the button of one of the options.
b. To deselect your chosen answer, click on the button of the chosen option again or click on the **Clear Response** button.
c. To change your chosen answer, click on the button of another option.
d. To save your answer, you must click on the Save & Next button
e. To mark the question for review, click on the **'Mark for Review & Next'** button.

10. To change your answer to a question that has already been answered, first select that question for answering and then follow the procedure for answering that type of question.

Navigating through sections:

11. Sections in this question paper are displayed on the top bar of the screen. Questions in a section can be viewed by clicking on the Section name. The section you are currently viewing is highlighted.
12. After clicking the **Save and Next** button on the last question for a Section, you will automatically be taken to the first question of the next section.
13. You can shuffle between sections and questions anytime during the examination as per your convenience only during the time stipulated.
14. The candidate can view the corresponding section summary as part of the legend that appears in every section above the question palette.

Instruction for Question:

15. For the correctness of the translation for a particular language, only the **English version** will be considered as the final version for evaluation purposes.

The keyboard attached to the computer, if any, will be disabled during the entire duration of the examination. Depending on the type of question, the answers to questions can either be entered by clicking on the virtual on-screen keyboard (numeric or otherwise) using the computer mouse or by clicking the chosen option(s) using the computer mouse. Candidates will have the option to change/modify answers already entered at anytime during the entire duration of the examination.

In case the computer/mouse allotted to any candidate malfunctions during the test, he/she will be immediately allotted another computer system and the time lost due to this will be adjusted in the server so as to give the candidate the full allotted time.

The on-screen computer clock counter of every candidate will be set at the server. The countdown timer on the top right side of the computer screen will display the time remaining (in minutes) available for the candidate to complete the examination. When the timer reaches zero, the examination will end by itself. The candidates will not be required to end or submit the examination.

The Question Palette displayed on the screen will show the status of each question using one of the following symbols:

The question(s) "Answered and Marked for Review" status for a question indicates that the candidates would like to have a relook at that question again. A candidate has the option of answering a question and simultaneously "Marked for Review", these answers will be considered for evaluation. However, if a candidate has simply put "Marked for Review" for a question without answering it, the corresponding question marked for review without an answer will not be considered for evaluation. It may be noted that a candidate can return to any "Marked for Review" question at any time during the examination by clicking on the corresponding question number icon displayed on the Question Palette of the corresponding section.

(d) The candidates can click on the ">" arrow which appears to the left of the question palette to collapse the question palette thereby maximizing the question viewing window. To view the question palette again, the candidate can click on "<" which appears on the right side of the question window.

(e) Candidates can click on to navigate to the bottom and to navigate to the top of the question area, without scrolling. Using the computer mouse the candidate can scroll up and down the question viewing area for viewing the entire question.

(f) The full paper can be viewed by clicking the "Question Paper" icon on the top right corner of the screen.

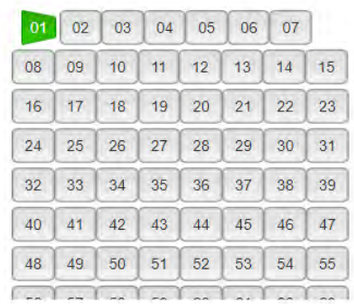
(g) Blank Sheets for doing Rough Work/calculations shall be provided to the candidates. The Blanks Sheets would have a Header page for the candidates to write down his/her Name and Roll Number. All calculations/writing work is to be done only in the Blank Sheets provided at the Centre in the Examination Room/Hall and on completion of the test candidates must hand over the rough sheets to the invigilator on duty in the Room/Hall.

(h) Navigating to a Question To navigate between questions within a Paper, the candidate needs to do the following:

(a) Click on the question number in the Question Palette at the right of the screen to go to that numbered question directly. Note that using this option does NOT save the answer to the currently displayed question.

(b) Click on "Save and Next" to save the answer to any question. Clicking on "Save and Next" will save the answer for the current question and the next question will be displayed on the candidate's computer screen.

(c) Click on "Mark for Review and Next" to mark a question for review (without answering it) and proceed to the next question.



(i) Answering a Question

To navigate between questions within a Paper, the candidate needs to do the following:

Procedure for answering a Multiple-Choice type question**:**

(a) To select the option(s), click on the corresponding button(s) of the option(s).

(b) To deselect the chosen answer, click on the button of the chosen option again or click on the "Clear Response" button.

(c) To save the answer, the candidate MUST click on the "Save and Next" button.

(d) To mark the question for review (without answering it), click on the "Mark for Review and Next" button.

(j) Navigating through sections:

(i) Sections in the question paper are displayed on the top bar of the screen. Questions in a section can be viewed by clicking on the section name. The section in which the candidate is currently viewing will be highlighted.

(ii) After clicking the "Save and Next" button on the last question for a section, the candidate will automatically be taken to the first question of the next section.

(iii) Candidates can shuffle between sections and questions within sections anytime during the examination as per convenience only during the time stipulated.

(iv) The candidate can view the corresponding section summary as part of the legend that appears in every section above the question palette.

(k) Procedure for answering questions that require inputs from the on-screen virtual keyboard (numeric or otherwise):

(a) The candidate will have to use the on-screen virtual keyboard (that would be displayed just below the question statement of these types of questions) and the attached computer mouse to enter his/her answer in the space provided for the answer.

On-Screen Virtual Keyboard

(b) The answer can be changed, if required, anytime during the test. To save the answer, the candidate MUST click on the "Save and Next" button.

(c) To mark the question for review (without answering it), click on the "Mark for Review and Next" button.

The candidates will have the option to change previously saved answer to any question, anytime during the entire duration of the test. To change the answer to a question that has already been answered, first select the corresponding question from the Question Palette, then click on "Clear Response" to clear the previously entered answer and subsequently follow the procedure for answering that type of question.

(l) ROUGH WORK:

All calculations/writing work is to be done only in the rough sheet provided at the Centre in the Examination Room/Hall and on completion of the test candidates must hand over the rough sheets to the invigilator on duty in the Room/Hall.

Appendix-IV

NTA: Test Practice Centres (TPCs)

What is a Test Practice Centre (TPCs)?

The Ministry of Human Resource Development mandated the NTA to set up, establish, and create a network of Test Practice Centres for candidates, especially in remote and rural areas to enable them to practice and be comfortable in taking a Computer Based Test (CBT). This facility is completely free of cost. Candidates can register online (on the NTA website) where they are provided a convenient TPC near to their location to practice on a given computer node. This facilitates and eases the process of being able to take a Computer Based Test (CBT). The entire experience of using a computer is close to the actual experience of taking a CBT. All efforts are made to provide practice tests and questions so that candidates can familiarize themselves with logging into the system, go through the detailed instructions regarding the test, use the mouse or numeric keyboard on-screen (virtual) to attempt each question, scroll down to the next question, navigate between questions, review and edit their options and submit questions.

The objective of TPCs is primarily to organize test practice for the upcoming NTA examinations.

Appendix - V

Procedure to be adopted for compilation of NTA scores for multi-session Papers
(Normalization procedure based on PERCENTILE SCORE)

NTA may conduct examinations on multiple dates, generally in two sessions per day. The candidates will be given different sets of questions per session and it is quite possible that in spite of all efforts to maintain equivalence among various question papers, the difficulty level of these question papers administered in different sessions may not be exactly the same. Some of the candidates may end up attempting a relatively tougher set of questions when compared to other sets. The candidates who attempt the comparatively tougher examination are likely to get lower marks as compared to those who attempt the easier one. In order to overcome such a situation, a **"Normalization procedure based on Percentile Score"** will be used to ensure that candidates are neither benefitted nor disadvantaged due to the difficulty level of the examination. With the objective of ensuring that a candidate's true merit is identified and that a level playing field is created in the above context, the Normalization Procedure, set out below shall be adopted, for compiling the NTA scores for multi-session papers.

The process of Normalization is an established practice for comparing candidate scores across multi-session papers and is similar to those being adopted in other large educational selection tests conducted in India. For normalization across sections, NTA shall use the percentile equivalence.

Percentile Scores: Percentile scores are scores based on the relative performance of all those who appear for the examination. The marks obtained are transformed into a scale ranging from 100 to 0 for each session of examinees.

The Percentile Score indicates the percentage of candidates that have scored EQUAL TO OR BELOW (same or lower raw scores) **that particular Percentile in that examination. Therefore the topper (highest score) of each session will get the same Percentile of 100 which is desirable. The marks obtained in between the highest and lowest scores are also converted to appropriate Percentiles.**

The Percentile score will be the Normalized Score for the examination (instead of the raw marks of the candidate) and shall be used for the preparation of the merit lists**.**

The Percentile Scores will be calculated up to 7 decimal places to avoid the bunching effect and reduce ties.

The Percentile score of a Candidate is calculated as follows:

$$\frac{\text{100 X Number of candidates appeared in the 'Session' with raw score EQUAL TO OR LESS than the candidate}}{\text{The total number of the candidates who appeared in the 'Session'}}$$

Note: The Percentile of the Total shall **NOT be** an aggregate or average of the Percentile of the individual subject. The percentile score is not the same as the percentage of marks obtained.

Example: Suppose a test was held in 4 sessions of examinees as per details given below:

(Allocation of Days and shifts was done randomly)

(a) **The distribution of candidates was as follows:**

Session-1: Day-1 Shift-1, **Session-2:** Day-1 Shift-2, **Session-3:** Day-2 Shift-1 and **Session-4:** Day-2 Shift-2

Session	Day/Shift	No of Candidates			Marks	
		Absent	Appeared	Total	Highest	Lowest
Session-1	Day-1 Shift-1	3974	28012	31986	335	-39
Session-2	Day-1 Shift-2	6189	32541	38730	346	-38
Session-3	Day-2 Shift-1	6036	41326	47362	331	-49
Session-4	Day-2 Shift-2	9074	40603	49677	332	-44
Total (Session-1 to Session-4)		25273	142482	167755	346	-49

In this method of scoring the HIGHEST RAW SCORE in each paper (irrespective of the raw scores) will be the 100 Percentile indicating that 100% of candidates have scored equal to or lesser than the highest scorer/ topper for that session.

Highest Raw Score and Percentile Score: All the highest raw scores will have a normalized Percentile Score of 100 for their respective session.

Session	Total Candidates Appeared	Highest Raw Score	Candidates who scored EQUAL OR LESS THAN Highest Raw Score	Percentile Score	Remarks
Session-1	28012	335	28012	100.0000000 [(28012/28012)*100]	i.e. **all the highest raw scores** would be **normalized** to 100 Percentile Score for their respective session.
Session -2	32541	346	32541	100.0000000 [(32541/32541)*100]	
Session -3	41326	331	41326	100.0000000 [(41326/41326)*100]	
Session -4	40603	332	40603	100.0000000 [(40603/40603)*100]	

Lowest Raw Score and Percentile Score: The percentile Score of all the lowest raw scores will depend on the total number of candidates who have taken the examination for their respective sessions.

Session	Total Candidates Appeared	Lowest Raw Score	Candidates who scored EQUAL OR LESS THAN Lowest Raw Score	Percentile Score	Remarks
Session -1	28012	-39	1	0.0035699 [(1/28012)*100]	i.e. Percentile Score of **all the lowest raw scores is different** i.e. Percentile Score depends on the total number of candidates who have taken the examination for their respective sessions.
Session -2	32541	-38	1	0.0030730 [(1/32541)*100]	
Session -3	41326	-49	1	0.0024198 [(1/41326)*100]	
Session -4	40603	-44	1	0.0024629 [(1/40603)*100]	

The following is a further explanation of the interpretation of the raw scores and Percentile Score in Session-3 (Day-2 and Shift-1) with 41326 candidates who have taken the examination.

Candidate	Percentile Score	No of Candidates	Raw Score	Remark
A	**100.0000000** [(41326/41326)*100]	**1**	**331**	This indicates that amongst those who appeared, 100% have scored either EQUAL TO OR LESS THAN candidate A **(331 raw scores)**.
				It also indicates that no candidate has scored more than candidate A **(331 raw scores)**.
B	**90.1224411** [(37244/41326)*100]	**77**	**121**	This indicates that amongst those who appeared, 90.1224411% have scored either EQUAL TO OR LESS THAN candidate B **(121 raw scores)**.
				It also indicates that the remaining candidates have scored

				more than candidate B **(121 raw scores)**.
C	**50.4549194** [(20851/41326)*100]	**381**	**41**	This indicates that amongst those who appeared, 50.4549194% have scored either EQUAL TO OR LESS THAN candidate C **(41 raw scores)**.
				It also indicates that the remaining those who appeared have scored more than candidate C **(41 raw scores)**.
D	**31.7040120** [(13102/41326)*100]	**789**	**25**	This indicates that amongst those who appeared, 31.7040120% have scored either EQUAL TO OR LESS THAN candidate D **(25 raw scores)**
				It also indicates that the remaining candidates have scored more than candidate D **(25 raw scores)**.
E	**1.1034216** [(456/41326)*100]	**100**	**-15**	Indicates that amongst those who appeared, 1.1034216% have scored either EQUAL TO OR LESS THAN candidate E **(-15 raw score)**
				It also indicates that the remaining candidates have scored more than candidate E **(-15 raw score)**

STEP-BY-STEP PROCEDURE FOR NORMALIZATION AND PREPARATION OF RESULT:

Step-1: Distribution of Examinees in two shifts:

Candidates have to be distributed into two sessions randomly so that each session has an approximately equal number of candidates. These two sessions would be as follows:

Session-1: Day-1 Shift-1, Session-**2:** Day-1 Shift-2

In the event of a more number of days or less number of shifts, the candidates will be divided accordingly.

This will ensure that there is no bias in the distribution of candidates who shall take the examination. Further, with a large population of examinees spread over the entire country, the possibility of such bias becomes remote.

Step 2: Preparation of Results for each Session:

The examination results for **each session** will be prepared in the form of

- Raw Scores
- Percentiles Scores of Total raw scores.

The Percentiles would be calculated for each candidate in the Session as follows:

Let TP1 be the Percentile Score of the Total Raw Score of that candidate.

$$\textbf{Total Percentile (TP1) :} \quad 100 \times \frac{\text{No. of candidates appeared from the session with raw score EQUAL TO OR LESS than the score of the Candidate}}{\text{Total No. of candidates who appeared in the session}}$$

Step-3: Compilation of NTA score and Preparation of Result:

The Percentile scores for the Total Raw Score for all the sessions **(Session-1:** Day-1 Shift-1**, Session-2:** Day-1 Shift-2) **as calculated in Step-2 above would be merged and shall be called the NTA scores which will then be used for the compilation of results and further processing for deciding the allocation.**

In the event of the percentiles for the multi-shifts being dissimilar/unequal, the lowest will be the eligibility cut-off for that category for all candidates (i.e. all shifts).

For Example: In the examination held in two shifts, if the 40% marks correspond to a Percentile score of 78 in Shift 1 and 79 in Shift 2, then all those equal to or above 78 percentiles (Percentile score of 100 to 78) in both shifts will become eligible in General Category. A similar method will be adopted for the other categories to determine eligibility cut-offs. In case the examination is held in more number of shifts the same principle shall apply.

Appendix - VI

Syllabus for JEE (Main) - 2024

Syllabus for JEE Main Paper 1 (B.E./B.Tech.)- Mathematics, Physics, and Chemistry

MATHEMATICS

UNIT 1: SETS, RELATIONS, AND FUNCTIONS:

Sets and their representation: Union, intersection, and complement of sets and their algebraic properties; Power set; Relation, Type of relations, equivalence relations, functions; one-one, into and onto functions, the composition of functions.

UNIT 2: COMPLEX NUMBERS AND QUADRATIC EQUATIONS:

Complex numbers as ordered pairs of reals, Representation of complex numbers in the form a + ib and their representation in a plane, Argand diagram, algebra of complex number, modulus, and argument (or amplitude) of a complex number, Quadratic equations in real and complex number system and their solutions Relations between roots and co-efficient, nature of roots, the formation of quadratic equations with given roots.

UNIT3: MATRICES AND DETERMINANTS:

Matrices, algebra of matrices, type of matrices, determinants, and matrices of order two and three, evaluation of determinants, area of triangles using determinants, Adjoint, and evaluation of inverse of a square matrix using determinants and, Test of consistency and solution of simultaneous linear equations in two or three variables using matrices.

UNIT 4: PERMUTATIONS AND COMBINATIONS:

The fundamental principle of counting, permutation as an arrangement and combination as section, Meaning of P (n,r) and C (n,r), simple applications.

UNIT 5: BINOMIAL THEOREM AND ITS SIMPLE APPLICATIONS:

Binomial theorem for a positive integral index, general term and middle term, and simple applications.

UNIT 6: SEQUENCE AND SERIES:

Arithmetic and Geometric progressions, insertion of arithmetic, geometric means between two given numbers, Relation between A.M and G.M.

UNIT 7: LIMIT, CONTINUITY, AND DIFFERENTIABILITY:

Real–valued functions, algebra of functions, polynomials, rational, trigonometric, logarithmic, and exponential functions, inverse function. Graphs of simple functions. Limits, continuity, and differentiability. Differentiation of the sum, difference, product, and quotient of two functions. Differentiation of trigonometric, inverse trigonometric, logarithmic, exponential, composite, and implicit functions; derivatives of order up to two, Applications of derivatives:

Rate of change of quantities, monotonic-Increasing and decreasing functions, Maxima and minima of functions of one variable,

UNIT 8: INTEGRAL CALCULAS:

Integral as an anti-derivative, Fundamental integral involving algebraic, trigonometric, exponential, and logarithmic functions. Integrations by substitution, by parts, and by partial functions. Integration using trigonometric identities.

Evaluation of simple integrals of the type

$\int \frac{dx}{x^2+a^2}$, $\int \frac{dx}{\sqrt{x^2 \pm a^2}}$, $\int \frac{dx}{a^2-x^2}$, $\int \frac{dx}{\sqrt{a^2-x^2}}$, $\int \frac{dx}{ax^2+bx+c}$, $\int \frac{dx}{\sqrt{ax^2+bx+c}}$, $\int \frac{(px+q)dx}{ax^2+bx+c}$,

$\int \frac{(px+q)dx}{\sqrt{ax^2+bx+c}}$ $\int \sqrt{a^2 \pm x^2}\ dx$, $\int \sqrt{x^2-a^2}\ dx$

. The fundamental theorem of calculus, properties of definite integrals. Evaluation of definite integrals, determining areas of the regions bounded by simple curves in standard form.

UNIT 9: DIFFRENTIAL EQUATIONS

Ordinary differential equations, their order, and degree, the solution of differential equation by the method of separation of variables, solution of a homogeneous and linear differential equation of the type

$\frac{dy}{dx} + p(x)y = q(x)$

UNIT 10: CO-ORDINATE GEOMETRY

Cartesian system of rectangular coordinates in a plane, distance formula, sections formula, locus, and its equation, the slope of a line, parallel and perpendicular lines, intercepts of a line on the co-ordinate axis.

Straight line

Various forms of equations of a line, intersection of lines, angles between two lines, conditions for concurrence of three lines, the distance of a point form a line, co-ordinate of the centroid, orthocentre, and circumcentre of a triangle,

Circle, conic sections

A standard form of equations of a circle, the general form of the equation of a circle, its radius and central, equation of a circle when the endpoints of a diameter are given, points of intersection of a line and a circle with the centre at the origin and sections of conics, equations of conic sections (parabola, ellipse, and hyperbola) in standard forms,

UNIT 11: THREE DIMENSIONAL GEOMETRY

Coordinates of a point in space, the distance between two points, section formula, directions ratios, and direction cosines, and the angle between two intersecting lines. Skew lines, the shortest distance between them, and its equation. Equations of a line

UNIT 12: VECTOR ALGEBRA

Vectors and scalars, the addition of vectors, components of a vector in two dimensions and three-dimensional space, scalar and vector products,

UNIT 13: STATISTICS AND PROBABILITY

Measures of discretion; calculation of mean, median, mode of grouped and ungrouped data calculation of standard deviation, variance, and mean deviation for grouped and ungrouped data.

Probability: Probability of an event, addition and multiplication theorems of probability, Baye's theorem, probability distribution of a random variate,

UNIT 14: TRIGONOMETRY

Trigonometrical identities and trigonometrical functions, inverse trigonometrical functions, and their properties,

PHYSICS

UNIT 1: PHYSICS AND MEASUREMENT

Units of measurements, System of Units, S I Units, fundamental and derived units, least count, significant figures, Errors in measurements, Dimensions of Physics quantities, dimensional analysis, and its applications.

UNIT 2: KINEMATICS

The frame of reference, motion in a straight line, Position- time graph, speed and velocity; Uniform and non-uniform motion, average speed and instantaneous velocity, uniformly accelerated motion, velocity-time, position-time graph, relations for uniformly accelerated motion, Scalars and Vectors, Vector. Addition and subtraction, scalar and vector products, Unit Vector, Resolution of a Vector. Relative Velocity, Motion in a plane, Projectile Motion, Uniform Circular Motion.

UNIT 3: LAWS OF MOTION

Force and inertia, Newton's First law of motion; Momentum, Newton's Second Law of motion, Impulses; Newton's Third Law of motion. Law of conservation of linear momentum and its applications. Equilibrium of concurrent forces.

Static and Kinetic friction, laws of friction, rolling friction.

Dynamics of uniform circular motion: centripetal force and its applications: vehicle on a level circular road, vehicle on a banked road.

UNIT 4: WORK, ENERGY, AND POWER

Work done by a constant force and a variable force; kinetic and potential energies, work-energy theorem, power.

The potential energy of spring conservation of mechanical energy, conservative and non-conservative forces; motion in a vertical circle: Elastic and inelastic collisions in one and two dimensions.

UNIT5: ROTATIONAL MOTION

Centre of the mass of a two-particle system, Centre of the mass of a rigid body; Basic concepts of rotational motion; moment of a force; torque, angular momentum, conservation of angular momentum and its applications;

The moment of inertia, the radius of gyration, values of moments of inertia for simple geometrical objects, parallel and perpendicular axes theorems, and their applications. Equilibrium of rigid bodies, rigid body rotation and equations of rotational motion, comparison of linear and rotational motions.

UNIT 6: GRAVITATION

The universal law of gravitation. Acceleration due to gravity and its variation with altitude and depth. Kepler's law of planetary motion. Gravitational potential energy; gravitational potential. Escape velocity, Motion of a satellite, orbital velocity, time period, and energy of satellite.

UNIT 7: PROPERTIES OF SOLIDS AND LIQUIDS

Elastic behaviour, Stress-strain relationship, Hooke's Law. Young's modulus, bulk modulus, and modulus of rigidity. Pressure due to a fluid column; Pascal's law and its applications. Effect of gravity on fluid pressure.

Viscosity. Stokes' law. terminal velocity, streamline, and turbulent flow.critical velocity. Bernoulli's principle and its applications.

Surface energy and surface tension, angle of contact, excess of pressure across a curved surface, application of surface tension - drops, bubbles, and capillary rise. Heat, temperature, thermal expansion; specific heat capacity, calorimetry; change of state, latent heat. Heat transfer-conduction, convection, and radiation.

UNIT 8: THERMODYNAMICS

Thermal equilibrium, zeroth law of thermodynamics, the concept of temperature. Heat, work, and internal energy. The first law of thermodynamics, isothermal and adiabatic processes.

The second law of thermodynamics: reversible and irreversible processes.

UNIT 9: KINETIC THEORY OF GASES

Equation of state of a perfect gas, work done on compressing a gas, Kinetic theory of gases - assumptions, the concept of pressure. Kinetic interpretation of temperature: RMS speed of gas molecules: Degrees of freedom. Law of equipartition of energy and applications to specific heat capacities of gases; Mean free path. Avogadro's number.

UNIT 10: OSCILLATIONS AND WAVES

Oscillations and periodic motion – time period, frequency, displacement as a function of time. Periodic functions. Simple harmonic motion (S.H.M.) and its equation; phase: oscillations of a spring -restoring force and force constant: energy in S.H.M. - Kinetic and potential energies; Simple pendulum - derivation of expression for its time period:

Wave motion. Longitudinal and transverse waves, speed of the travelling wave. Displacement relation for a progressive wave. Principle of superposition of waves, reflection of waves. Standing waves in strings and organ pipes, fundamental mode, and harmonics. Beats.

UNIT 11: ELECTROSTATICS

Electric charges: Conservation of charge. Coulomb's law forces between two point charges, forces between multiple charges: superposition principle and continuous charge distribution.

Electric field: Electric field due to a point charge, Electric field lines. Electric dipole, Electric field due to a dipole. Torque on a dipole in a uniform electric field.

Electric flux. Gauss's law and its applications to find field due to infinitely long uniformly charged straight wire uniformly charged infinite plane sheet, and uniformly charged thin spherical shell. Electric potential and its calculation for a point charge, electric dipole and system of charges; potential difference, Equipotential surfaces, Electrical potential energy of a system of two point charges and of electric dipole in an electrostatic field.

Conductors and insulators. Dielectrics and electric polarization, capacitors and capacitances, the combination of capacitors in series and parallel, and capacitance of a parallel plate capacitor with and without dielectric medium between the plates. Energy stored in a capacitor.

UNIT 12: CURRENT ELECTRICITY

Electric current. Drift velocity, mobility, and their relation with electric current. Ohm's law. Electrical resistance. V-l characteristics of Ohmic and non-ohmic conductors. Electrical energy and power. Electrical resistivity and conductivity. Series and parallel combinations of resistors; Temperature dependence of resistance.

Internal resistance, potential difference, and emf of a cell, a combination of cells in series and parallel. Kirchhoff’s laws and their applications. Wheatstone bridge. Metre Bridge.

UNIT 13: MAGNETIC EFFECTS OF CURRENT AND MAGNETISM

Biot - Savart law and its application to the current carrying circular loop. Ampere's law and its applications to infinitely long current carrying straight wire and solenoid. Force on a moving charge in uniform magnetic and electric fields.

Force on a current-carrying conductor in a uniform magnetic field. The force between two parallel currents carrying conductors-definition of ampere. Torque experienced by a current loop in a uniform magnetic field: Moving coil galvanometer, its sensitivity, and conversion to ammeter and voltmeter.

Current loop as a magnetic dipole and its magnetic dipole moment. Bar magnet as an equivalent solenoid, magnetic field lines; Magnetic field due to a magnetic dipole (bar magnet) along its axis and perpendicular to its axis. Torque on a magnetic dipole in a uniform magnetic field. Para-, dia- and ferromagnetic substances with examples, the effect of temperature on magnetic properties.

UNIT 14: ELECTROMAGNETIC INDUCTION AND ALTERNATING CURRENTS

Electromagnetic induction: Faraday's law. Induced emf and current: Lenz’s Law, Eddy currents. Self and mutual inductance. Alternating currents, peak and RMS value of alternating current/ voltage: reactance and impedance: LCR series circuit, resonance: power in AC circuits, wattless current. AC generator and transformer.

UNIT 15: ELECTROMAGNETIC WAVES

Displacement current. Electromagnetic waves and their characteristics, Transverse nature of electromagnetic waves, Electromagnetic spectrum (radio waves, microwaves, infrared, visible, ultraviolet. X-rays. Gamma rays), Applications of e.m. waves.

UNIT 16: OPTICS

Reflection of light, spherical mirrors, mirror formula. Refraction of light at plane and spherical surfaces, thin lens formula, and lens maker formula. Total internal reflection and its applications. Magnification. Power of a Lens. Combination of thin lenses in contact. Refraction of light through a prism. Microscope and Astronomical Telescope (reflecting and refracting) and their magnifying powers.

Wave optics: wavefront and Huygens' principle. Laws of reflection and refraction using Huygens principle. Interference, Young's double-slit experiment, and expression for fringe width, coherent sources, and sustained interference of light. Diffraction due to a single slit, width of central maximum. Polarization, plane-polarized light: Brewster's law, uses of plane-polarized light and Polaroid.

UNIT 17: DUAL NATURE OF MATTER AND RADIATION

Dual nature of radiation. Photoelectric effect. Hertz and Lenard's observations; Einstein's photoelectric equation: particle nature of light. Matter waves-wave nature of particle, de Broglie relation.

UNIT 18: ATOMS AND NUCLEI

Alpha-particle scattering experiment; Rutherford's model of atom; Bohr model, energy levels, hydrogen spectrum. Composition and size of nucleus, atomic masses, Mass-energy relation, mass defect; binding energy per nucleon and its variation with mass number, nuclear fission, and fusion.

UNIT 19: ELECTRONIC DEVICES

Semiconductors; semiconductor diode: I-V characteristics in forward and reverse bias; diode as a rectifier; I-V characteristics of LED. the photodiode, solar cell, and Zener diode; Zener diode as a voltage regulator. Logic gates (OR. AND. NOT. NAND and NOR).

UNIT 20: EXPERIMENTAL SKILLS

Familiarity with the basic approach and observations of the experiments and activities:

1. Vernier calipers -its use to measure the internal and external diameter and depth of a vessel.
2. Screw gauge-its use to determine the thickness/ diameter of thin sheet/wire.
3. Simple Pendulum-dissipation of energy by plotting a graph between the square of amplitude and time.
4. Metre Scale - the mass of a given object by the principle of moments.
5. Young's modulus of elasticity of the material of a metallic wire.
6. Surf ace tension of water by capillary rise and effect of detergents,
7. Co-efficient of Viscosity of a given viscous liquid by measuring the terminal velocity of a given spherical **body,**
8. Speed of sound in air at room temperature using a resonance tube,
9. Specific heat capacity of a given (i) solid and (ii) liquid by method of mixtures.
10. The resistivity of the material of a given wire using a metre bridge.
11. The resistance of a given wire using Ohm's law.

12. Resistance and figure of merit of a galvanometer by half deflection method.
13. The focal length of;
    (i) Convex mirror
    (ii) Concave mirror, and
    (ii) Convex lens, using the parallax method.
14. The plot of the angle of deviation vs angle of incidence for a triangular prism.
15. The refractive index of a glass slab using a travelling microscope.
16. Characteristic curves of a p-n junction diode in forward and reverse bias.
17. Characteristic curves of a Zener diode and finding reverse break down voltage.
18. Identification of Diode. LED,. Resistor. A capacitor from a mixed collection of such items.

CHEMISTRY

PHYSICAL CHEMISTRY

UNIT I: SOME BASIC CONCEPTS IN CHEMISTRY

Matter and its nature, Dalton's atomic theory: Concept of atom, molecule, element, and compound:: Laws of chemical combination; Atomic and molecular masses, mole concept, molar mass, percentage composition, empirical and molecular formulae: Chemical equations and stoichiometry.

UNIT 2: ATOMIC STRUCTURE

Nature of electromagnetic radiation, photoelectric effect; Spectrum of the hydrogen atom. Bohr model of a hydrogen atom - its postulates, derivation of the relations for the energy of the electron and radii of the different orbits, limitations of Bohr's model; Dual nature of matter, de Broglie's relationship. Heisenberg uncertainty principle. Elementary ideas of quantum mechanics, quantum mechanics, the quantum mechanical model of the atom, and its important features. Concept of atomic orbitals as one-electron wave functions: Variation of Ψ and Ψ^2 with r for 1s and 2s orbitals; various

quantum numbers (principal, angular momentum, and magnetic quantum numbers) and their significance; shapes of s, p, and d - orbitals, electron spin, and spin quantum number: Rules for filling electrons in orbitals – Aufbau principle. Pauli's exclusion principle and Hund's rule, electronic configuration of elements, and extra stability of half-filled and completely filled orbitals.

UNIT 3: CHEMICAL BONDING AND MOLECULAR STRUCTURE

Kossel-Lewis approach to chemical bond formation, the concept of ionic and covalent bonds.

Ionic Bonding: Formation of ionic bonds, factors affecting the formation of ionic bonds; calculation of lattice enthalpy.

Covalent Bonding: Concept of electronegativity. Fajan’s rule, dipole moment: Valence Shell Electron Pair Repulsion (VSEPR) theory and shapes of simple molecules.

Quantum mechanical approach to covalent bonding: Valence bond theory - its important features, the concept of hybridization involving s, p, and d orbitals; Resonance.

Molecular Orbital Theory - Its important features. LCAOs, types of molecular orbitals (bonding, antibonding), sigma and pi-bonds, molecular orbital electronic configurations of homonuclear diatomic molecules, the concept of bond order, bond length, and bond energy.

Elementary idea of metallic bonding. Hydrogen bonding and its applications.

UNIT 4: CHEMICAL THERMODYNAMICS

Fundamentals of thermodynamics: System and surroundings, extensive and intensive properties, state functions, Entropy, types of processes.

The first law of thermodynamics - Concept of work, heat internal energy and enthalpy, heat capacity, molar heat capacity; Hess’s law of constant heat summation; Enthalpies of bond

dissociation, combustion, formation, atomization, sublimation, phase transition, hydration, ionization, and solution.

The second law of thermodynamics - Spontaneity of processes; ΔS of the universe and ΔG of the system as criteria for spontaneity. ΔG° (Standard Gibbs energy change) and equilibrium constant.

UNIT 5: SOLUTIONS

Different methods for expressing the concentration of solution - molality, molarity, mole fraction, percentage (by volume and mass both), the vapour pressure of solutions and Raoult's Law - Ideal and non-ideal solutions, vapour pressure - composition, plots for ideal and non-ideal solutions; Colligative properties of dilute solutions - a relative lowering of vapour pressure, depression of freezing point, the elevation of boiling point and osmotic pressure; Determination of molecular mass using colligative properties; Abnormal value of molar mass, van't Hoff factor and its significance.

UNIT 6: EQUILIBRIUM

Meaning of equilibrium is the concept of dynamic equilibrium.

Equilibria involving physical processes: Solid-liquid, liquid-gas - gas and solid-gas equilibria, Henry's law. General characteristics of equilibrium involving physical processes.

Equilibrium involving chemical processes: Law of chemical equilibrium, equilibrium constants (K_p and K_c) and their significance, the significance of ΔG and ΔG° in chemical equilibrium, factors affecting equilibrium concentration, pressure, temperature, the effect of catalyst; Le Chatelier's principle.

Ionic equilibrium: Weak and strong electrolytes, ionization of electrolytes, various concepts of acids and bases (Arrhenius. Bronsted - Lowry and Lewis) and their ionization, acid-base equilibria (including multistage ionization) and ionization constants, ionization of water. pH scale, common ion effect, hydrolysis of salts and pH of their solutions, the solubility of sparingly soluble salts and solubility products, and buffer solutions.

UNIT 7: REDOX REACTIONS AND ELECTROCHEMISTRY

Electronic concepts of oxidation and reduction, redox reactions, oxidation number, rules for assigning oxidation number, and balancing of redox reactions.

Electrolytic and metallic conduction, conductance in electrolytic solutions, molar conductivities and their variation with concentration: Kohlrausch's law and its applications.

Electrochemical cells - Electrolytic and Galvanic cells, different types of electrodes, electrode potentials including standard electrode potential, half-cell and cell reactions, emf of a Galvanic cell and its measurement: Nernst equation and its applications; Relationship between cell potential and Gibbs' energy change: Dry cell and lead accumulator; Fuel cells.

UNIT 8: CHEMICAL KINETICS

Rate of a chemical reaction, factors affecting the rate of reactions: concentration, temperature, pressure, and catalyst; elementary and complex reactions, order and molecularity of reactions, rate law, rate constant and its units, differential and integral forms of zero and first-order

reactions, their characteristics and half-lives, the effect of temperature on the rate of reactions, Arrhenius theory, activation energy and its calculation, collision theory of bimolecular gaseous reactions (no derivation).

INORGANIC CHEMISTRY

UNIT 9: CLASSIFICATION OF ELEMENTS AND PERIODICITY IN PROPERTIES

Modem periodic law and present form of the periodic table, s, p. d and f block elements, periodic trends in properties of elements atomic and ionic radii, ionization enthalpy, electron gain enthalpy, valence, oxidation states, and chemical reactivity.

UNIT 10: P- BLOCK ELEMENTS

Group -13 to Group 18 Elements

General Introduction: Electronic configuration and general trends in physical and chemical properties of elements across the periods and down the groups; unique behaviour of the first element in each group.

UNIT 11: d - and f- BLOCK ELEMENTS

Transition Elements

General introduction, electronic configuration, occurrence and characteristics, general trends in properties of the first-row transition elements - physical properties, ionization enthalpy, oxidation states, atomic radii, colour, catalytic behaviour, magnetic properties, complex formation, interstitial compounds, alloy formation; Preparation, properties, and uses of $K_2Cr_2O_7$, and $KMnO_4$.

Inner Transition Elements

Lanthanoids - Electronic configuration, oxidation states, and lanthanoid contraction.

Actinoids - Electronic configuration and oxidation states.

UNIT 12: CO-ORDINATION COMPOUNDS

Introduction to coordination compounds. Werner's theory; ligands, coordination number, denticity. chelation; IUPAC nomenclature of mononuclear co-ordination compounds, isomerism; Bonding-Valence bond approach and basic ideas of Crystal field theory, colour and magnetic properties; Importance of co-ordination compounds (in qualitative analysis, extraction of metals and in biological systems).

ORGANIC CHEMISTRY

UNIT 13: PURIFICATION AND CHARACTERISATION OF ORGANIC COMPOUNDS

Purification - Crystallization, sublimation, distillation, differential extraction, and chromatography - principles and their applications.

Qualitative analysis - Detection of nitrogen, sulphur, phosphorus, and halogens.

Quantitative analysis (basic principles only) - Estimation of carbon, hydrogen, nitrogen, halogens, sulphur, and phosphorus.

Calculations of empirical formulae and molecular formulae: Numerical problems in organic quantitative analysis,

UNIT 14:SOME BASIC PRINCIPLES OF ORGANIC CHEMISTRY

Tetravalency of carbon: Shapes of simple molecules - hybridization (s and p): Classification of organic compounds based on functional groups: and those containing halogens, oxygen, nitrogen, and sulphur; Homologous series: Isomerism - structural and stereoisomerism.

Nomenclature (Trivial and IUPAC)

Covalent bond fission - Homolytic and heterolytic: free radicals, carbocations, and carbanions; stability of carbocations and free radicals, electrophiles, and nucleophiles.

Electronic displacement in a covalent bond

- Inductive effect, electromeric effect, resonance, and hyperconjugation.

Common types of organic reactions- Substitution, addition, elimination, and rearrangement.

UNITS 15: HYDROCARBONS

Classification, isomerism, IUPAC nomenclature, general methods of preparation, properties, and reactions.

Alkanes - Conformations: Sawhorse and Newman projections (of ethane): Mechanism of halogenation of alkanes.

Alkenes - Geometrical isomerism: Mechanism of electrophilic addition: addition of hydrogen, halogens, water, hydrogen halides (Markownikoffs and peroxide effect): Ozonolysis and polymerization.

Alkynes - Acidic character: Addition of hydrogen, halogens, water, and hydrogen halides: Polymerization.

Aromatic hydrocarbons - Nomenclature, benzene - structure and aromaticity: Mechanism of electrophilic substitution: halogenation, nitration.

Friedel-Craft's alkylation and acylation, directive influence of the functional group in mono-substituted benzene.

UNIT 16: ORGANIC COMPOUNDS CONTAINING HALOGENS

General methods of preparation, properties, and reactions; Nature of C-X bond; Mechanisms of substitution reactions.

Uses; Environmental effects of chloroform, iodoform freons, and DDT.

UNIT 17: ORGANIC COMPOUNDS CONTAINING OXYGEN

General methods of preparation, properties, reactions, and uses.

ALCOHOLS, PHENOLS, AND ETHERS

Alcohols: Identification of primary, secondary, and tertiary alcohols: mechanism of dehydration.

Phenols: Acidic nature, electrophilic substitution reactions: halogenation. nitration and sulphonation. Reimer - Tiemann reaction.

Ethers: Structure.

Aldehyde and Ketones: Nature of carbonyl group; Nucleophilic addition to >C=O group, relative reactivities of aldehydes and ketones; Important reactions such as - Nucleophilic addition reactions (addition of HCN. NH_3, and its derivatives), Grignard reagent; oxidation: reduction (Wolf Kishner and Clemmensen); the acidity of α-hydrogen. aldol condensation, Cannizzaro reaction. Haloform reaction, Chemical tests to distinguish between aldehydes and Ketones.

Carboxylic Acids

Acidic strength and factors affecting it,

UNIT 18: ORGANIC COMPOUNDS CONTAINING NITROGEN

General methods of preparation. Properties, reactions, and uses.

Amines: Nomenclature, classification structure, basic character, and identification of primary, secondary, and tertiary amines and their basic character.

Diazonium Salts: Importance in synthetic organic chemistry.

UNIT 19: BIOMOLECULES

General introduction and importance of biomolecules.

CARBOHYDRATES - Classification; aldoses and ketoses: monosaccharides (glucose and fructose) and constituent monosaccharides of oligosaccharides (sucrose, lactose, and maltose).

PROTEINS - Elementary Idea of α-amino acids, peptide bond, polypeptides. Proteins: primary, secondary, tertiary, and quaternary structure (qualitative idea only), denaturation of proteins, enzymes.

VITAMINS – Classification and functions.

NUCLEIC ACIDS – Chemical constitution of DNA and RNA.

Biological functions of nucleic acids.

Hormones (General introduction)

UNIT 20: PRINCIPLES RELATED TO PRACTICAL CHEMISTRY

Detection of extra elements (Nitrogen, Sulphur, halogens) in organic compounds; Detection of the following functional groups; hydroxyl (alcoholic and phenolic), carbonyl (aldehyde and ketones) carboxyl, and amino groups in organic compounds.

- The chemistry involved in the preparation of the following:

  Inorganic compounds; Mohr's salt, potash alum.

Organic compounds: Acetanilide, p-nitro acetanilide, aniline yellow, iodoform.

- The chemistry involved in the titrimetric exercises – Acids, bases, and the use of indicators, oxalic-acid vs $KMnO_4$, Mohr's salt vs $KMnO_4$
- Chemical principles involved in the qualitative salt analysis:

  Cations – Pb^{2+}, Cu^{2+}, Al^{3+}, Fe^{3+}, Zn^{2+}, Ni^{2+}, Ca^{2+}, Ba^{2+}, Mg^{2+}, NH_4^+

  Anions- CO_3^{2-}, S^{2-}, SO_4^{2-}, NO_3^-, NO^{2-}, Cl^-, Br^-, I^- (Insoluble salts excluded).

  Chemical principles involved in the following experiments:

  1. Enthalpy of solution of $CuSO_4$
  2. Enthalpy of neutralization of strong acid and strong base.
  3. Preparation of lyophilic and lyophobic sols.
  4. Kinetic study of the reaction of iodide ions with hydrogen peroxide at room temperature.

Syllabus for JEE (Main) Paper 2A (B.Arch.) - Mathematics, Aptitude Test, and Drawing Test

Part - I MATHEMATICS

UNIT 1: SETS, RELATIONS, AND FUNCTIONS:

Sets and their representation: Union, intersection, and complement of sets and their algebraic properties; Power set; Relation, Type of relations, equivalence relations, functions; one-one, into and onto functions, the composition of functions.

UNIT 2: COMPLEX NUMBERS AND QUADRATIC EQUATIONS:

Complex numbers as ordered pairs of reals, Representation of complex numbers in the form a + ib and their representation in a plane, Argand diagram, algebra of complex number, modulus, and argument (or amplitude) of a complex number, Quadratic equations in real and complex number system and their solutions Relations between roots and co-efficient, nature of roots, the formation of quadratic equations with given roots.

UNIT3: MATRICES AND DETERMINANTS:

Matrices, algebra of matrices, type of matrices, determinants, and matrices of order two and three, evaluation of determinants, area of triangles using determinants, Adjoint, and evaluation of inverse of a square matrix using determinants and, Test of consistency and solution of simultaneous linear equations in two or three variables using matrices.

UNIT 4: PERMUTATIONS AND COMBINATIONS:

The fundamental principle of counting, permutation as an arrangement and combination as section, Meaning of P (n,r) and C (n,r), simple applications.

UNIT 5: BINOMIAL THEOREM AND ITS SIMPLE APPLICATIONS:

Binomial theorem for a positive integral index, general term and middle term, and simple applications.

UNIT 6: SEQUENCE AND SERIES:

Arithmetic and Geometric progressions, insertion of arithmetic, geometric means between two given numbers, Relation between A.M and G.M.

UNIT 7: LIMIT, CONTINUITY, AND DIFFERENTIABILITY:

Real–valued functions, algebra of functions, polynomials, rational, trigonometric, logarithmic, and exponential functions, inverse function. Graphs of simple functions. Limits, continuity, and differentiability. Differentiation of the sum, difference, product, and quotient of two functions. Differentiation of trigonometric, inverse trigonometric, logarithmic, exponential, composite, and implicit functions; derivatives of order up to two, Applications of derivatives: Rate of change of quantities, monotonic-increasing and decreasing functions, Maxima and minima of functions of one variable,

UNIT 8: INTEGRAL CALCULAS:

Integral as an anti-derivative, Fundamental integral involving algebraic, trigonometric, exponential, and logarithms functions. Integrations by substitution, by parts, and by partial functions. Integration using trigonometric identities.

Evaluation of simple integrals of the type

$\int \frac{dx}{x^2+a^2}$, $\int \frac{dx}{\sqrt{x^2 \pm a^2}}$, $\int \frac{dx}{a^2- x^2}$, $\int \frac{dx}{\sqrt{a^2- x^2}}$, $\int \frac{dx}{ax^2+bx+c}$, $\int \frac{dx}{\sqrt{ax^2+ bx+c}}$, $\int \frac{(px+q)dx}{ax^2+bx+c}$,

$\int \frac{(px+q)dx}{\sqrt{ax^2+ bx+c}}$ $\int \sqrt{a^2 \pm x^2}\ dx$, $\int \sqrt{x^2 - a^2}\ dx$

. The fundamental theorem of calculus, properties of definite integrals. Evaluation of definite integrals, determining areas of the regions bounded by simple curves in standard form.

UNIT 9: DIFFRENTIAL EQUATIONS

Ordinary differential equations, their order, and degree, the, solution of differential equation by the method of separation of variables, solution of a homogeneous and linear differential equation of the type

$\frac{dy}{dx} + p(x)y = q(x)$

UNIT 10: CO-ORDINATE GEOMETRY

Cartesian system of rectangular coordinates in a plane, distance formula, sections formula, locus, and its equation, the slope of a line, parallel and perpendicular lines, intercepts of a line on the coordinate axis.

Straight line

Various forms of equations of a line, intersection of lines, angles between two lines, conditions for concurrence of three lines, the distance of a point from a line, co-ordinate of the centroid, orthocentre, and circumcentre of a triangle,

Circle, conic sections

A standard form of equations of a circle, the general form of the equation of a circle, its radius and central, equation of a circle when the endpoints of a diameter are given, points of intersection of a line and a circle with the centre at the origin and sections of conics, equations of conic sections (parabola, ellipse, and hyperbola) in standard forms,

UNIT 11: THREE-DIMENSIONAL GEOMETRY

Coordinates of a point in space, the distance between two points, section formula, directions ratios, and direction cosines, and the angle between two intersecting lines. Skew lines, the shortest distance between them, and its equation. Equations of a line

UNIT 12: VECTOR ALGEBRA

Vectors and scalars, the addition of vectors, components of a vector in two dimensions and three-dimensional space, scalar and vector products,

UNIT 13: STATISTICS AND PROBABILITY

Measures of discretion; calculation of mean, median, mode of grouped and ungrouped data calculation of standard deviation, variance, and mean deviation for grouped and ungrouped data.

Probability: Probability of an event, addition and multiplication theorems of probability, Baye's theorem, probability distribution of a random variate,

UNIT 14: TRIGONOMETRY

Trigonometrical identities and trigonometrical functions, inverse trigonometrical functions, and their properties,

Part –II APTITUDE TEST

UNIT - 1 Awareness of persons. Buildings, Materials.

Objects, Texture related to Architecture and Build-environment, Visualizing three-dimensional objects from two-dimensional drawings. Visualizing. Different sides of three-dimensional objects. Analytical Reasoning Mental Ability (Visual. Numerical and Verbal)

UNIT – 2 Three dimensional- perception: Understanding and appreciation of scale and proportions of objects, building forms and elements, colour texture harmony and contrast Design and drawing of geometrical or abstract shapes and patterns in pencil. Transformation of forms both 2D and 3D union, subtraction rotation, development of surfaces and volumes, Generation of plans, elevations, and 3D views of objects, creating two-dimensional and three-dimensional compositions using given shapes and forms.

Part – III DRAWING TEST

Sketching of scenes and activities from memory of urbanscape (public space, market, festivals, street scenes, monuments, recreational spaces, etc.). landscape (riverfronts. Jungle. Gardens, trees. Plants, etc.) and rural life.

To be conducted in a Drawing sheet.

Note: Candidates are advised to bring pencils. Own geometry box set, crasets and colour pencils, and crayons for the Drawing Test

Syllabus for JEE (Main) Paper 2B (B.Planning.) - Mathematics, Aptitude Test, and Planning

Part - I MATHEMATICS

UNIT 1: SETS, RELATIONS, AND FUNCTIONS:

Sets and their representation: Union, intersection and complement of sets and their algebraic properties; Power set; Relation, Type of relations, equivalence relations, functions; one-one, into and onto functions, the composition of functions.

UNIT 2: COMPLEX NUMBERS AND QUADRATIC EQUATIONS:

Complex numbers as ordered pairs of reals, Representation of complex numbers in the form a + ib and their representation in a plane, Argand diagram, algebra of complex number, modulus, and argument (or amplitude) of a complex number, Quadratic equations in real and complex number system and their solutions Relations between roots and co-efficient, nature of roots, the formation of quadratic equations with given roots.

UNIT3: MATRICES AND DETERMINANTS:

Matrices, algebra of matrices, type of matrices, determinants, and matrices of order two and three, evaluation of determinants, area of triangles using determinants, Adjoint, and evaluation of inverse of a square matrix using determinants and, Test of consistency and solution of simultaneous linear equations in two or three variables using matrices.

UNIT 4: PERMUTATIONS AND COMBINATIONS:

The fundamental principle of counting, permutation as an arrangement and combination as section, Meaning of P (n,r) and C (n,r), simple applications.

UNIT 5: BINOMIAL THEOREM AND ITS SIMPLE APPLICATIONS:

Binomial theorem for a positive integral index, general term and middle term, and simple applications.

UNIT 6: SEQUENCE AND SERIES:

Arithmetic and Geometric progressions, insertion of arithmetic, geometric means between two given numbers, Relation between A.M and G.M.

UNIT 7: LIMIT, CONTINUITY, AND DIFFERENTIABILITY:

Real–valued functions, algebra of functions, polynomials, rational, trigonometric, logarithmic, and exponential functions, inverse function. Graphs of simple functions. Limits, continuity, and differentiability. Differentiation of the sum, difference, product, and quotient of two functions. Differentiation of trigonometric, inverse trigonometric, logarithmic, exponential, composite, and implicit functions; derivatives of order up to two, Applications of derivatives: Rate of change of quantities, monotonic-increasing and decreasing functions, Maxima and minima of functions of one variable,

UNIT 8: INTEGRAL CALCULAS:

Integral as an anti-derivative, Fundamental integral involving algebraic, trigonometric, exponential, and logarithmic functions. Integrations by substitution, by parts, and by partial functions. Integration using trigonometric identities.

Evaluation of simple integrals of the type

$\int \frac{dx}{x^2+a^2}$, $\int \frac{dx}{\sqrt{x^2 \pm a^2}}$, $\int \frac{dx}{a^2- x^2}$, $\int \frac{dx}{\sqrt{a^2- x^2}}$, $\int \frac{dx}{ax^2+bx+c}$, $\int \frac{dx}{\sqrt{ax^2+ bx+c}}$, $\int \frac{(px+q)dx}{ax^2+bx+c}$,

$\int \frac{(px+q)dx}{\sqrt{ax^2+ bx+c}}$ $\int \sqrt{a^2 \pm x^2}\ dx$, $\int \sqrt{x^2 - a^2}\ dx$

. The fundamental theorem of calculus, properties of definite integrals. Evaluation of definite integrals, determining areas of the regions bounded by simple curves in standard form.

UNIT 9: DIFFRENTIAL EQUATIONS

Ordinary differential equations, their order, and degree, the solution of differential equation by the method of separation of variables, solution of a homogeneous and linear differential equation of the type

$\frac{dy}{dx} + p(x)y = q(x)$

UNIT 10: CO-ORDINATE GEOMETRY

Cartesian system of rectangular coordinates in a plane, distance formula, sections formula, locus, and its equation, the slope of a line, parallel and perpendicular lines, intercepts of a line on the coordinate axis.

Straight line

Various forms of equations of a line, intersection of lines, angles between two lines, conditions for concurrence of three lines, the distance of a point form a line, co-ordinate of the centroid, orthocentre, and circumcentre of a triangle,

Circle, conic sections

A standard form of equations of a circle, the general form of the equation of a circle, its radius and central, equation of a circle when the endpoints of a diameter are given, points of intersection of a line and a circle with the centre at the origin and sections of conics, equations of conic sections (parabola, ellipse, and hyperbola) in standard forms,

UNIT 11: THREE-DIMENSIONAL GEOMETRY

Coordinates of a point in space, the distance between two points, section formula, directions ratios, and direction cosines, the angle between two intersecting lines. Skew lines, the shortest distance between them, and its equation. Equations of a line

UNIT 12: VECTOR ALGEBRA

Vectors and scalars, the addition of vectors, components of a vector in two dimensions and three-dimensional space, scalar and vector products,

UNIT 13: STATISTICS AND PROBABILITY

Measures of discretion; calculation of mean, median, mode of grouped and ungrouped data calculation of standard deviation, variance, and mean deviation for grouped and ungrouped data.

Probability: Probability of an event, addition and multiplication theorems of probability, Baye's theorem, probability distribution of a random variate,

UNIT 14: TRIGONOMETRY

Trigonometrical identities and trigonometrical functions, inverse trigonometrical functions, and their properties,

Part –II APTITUDE TEST

UNIT - 1 Awareness of persons. Buildings, Materials, Objects, and Textures related to Architecture and Build-environment, Visualizing three-dimensional objects from two-dimensional drawings. Visualizing. Different sides of three-dimensional objects. Analytical Reasoning Mental Ability (Visual. Numerical and Verbal)

UNIT – 2 Three dimensional- perception: Understanding and appreciation of scale and proportions of objects, building forms and elements, colour texture harmony and contrast Design and drawing of geometrical or abstract shapes and patterns in pencil. Transformation of forms both 2D and 3D union, subtraction rotation, development of surfaces and volumes, Generation of plans, elevations, and 3D views of objects, creating two-dimensional and three-dimensional compositions using given shapes and forms.

Part – III PLANNING

UNIT-1 GENERAL AWARENESS

General knowledge questions and knowledge about prominent cities, development issues, government programs, etc.

UNIT-2 SOCIAL SCIENCES

The idea of nationalism, nationalism in India, pre-modern world, 19th-century global economy, colonialism, and colonial cities, industrialization, resources, and development, types of resources, agriculture, water, mineral resources, industries, national economy; Human Settlements

Power-sharing, federalism, political parties, democracy, the constitution of India

Economic development- economic sectors, globalization, the concept of development, poverty; Population structure, social exclusion, and inequality, urbanization, rural development, colonial cities,

UNIT-3 THINKING SKILLS

Comprehension (unseen passage); map reading skills, scale, distance, direction, area, etc.; critical reasoning; understanding of charts, graphs, and tables; basic concepts of statistics and quantitative reasoning.

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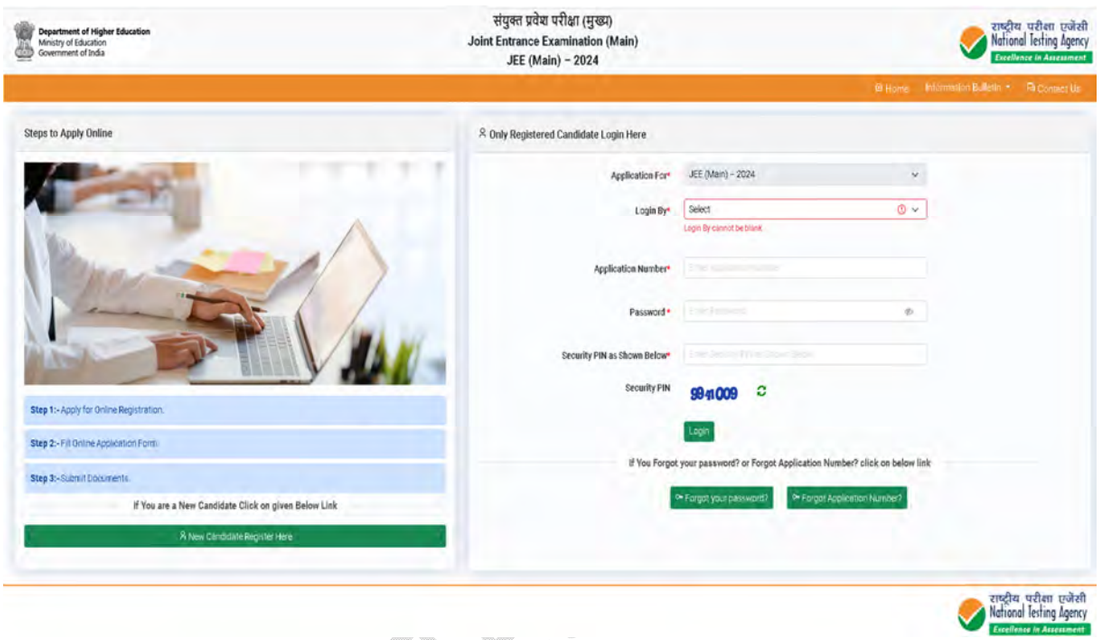
Appendix – VII

Replica of Online Application Form of JEE (Main)-2024 Examination



Department of Higher Education
Ministry of Education
Government of India

संयुक्त प्रवेश परीक्षा (मुख्य)
Joint Entrance Examination (Main)
JEE (Main) – 2024

राष्ट्रीय परीक्षा एजेंसी
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JEE (Main) – 2024

Instructions and Procedure for Online Submission of Application Form

ऑनलाइन आवेदन पत्र प्रस्तुत करने के लिए निर्देश और प्रक्रिया

Download Information Bulletin (Hindi) | Download Information Bulletin (English)

1. Please download and read carefully the Information Bulletin and Instructions/ procedure given therein and below, before you start filling out the Application Form online. कृपया इन्फॉर्मेशन बुलेटिन को डाउनलोड करें और ध्यानपूर्वक पढ़ें, और आवेदन पत्र ऑनलाइन भरने से पहले वहां दिए गए निर्देश और प्रक्रिया को ध्यान से पढ़ें
2. You can apply for JEE (Main)-2024 'ON-LINE' only through the official website of - (https://jeemain.nta.nic.in). आप JEE (Main) के लिए केवल 'ऑनलाइन' आवेदन कर सकते हैं, और वह भी केवल आधिकारिक वेबसाइट (https://jeemain.nta.ac.in/) के माध्यम से **(https://jeemain.nta.ac.in/).**
3. Please ensure your eligibility as per the criteria laid down for JEE(Main), JEE (Advanced), and participating State Institutions (as applicable). *कृपया सुनिश्चित करें कि आप JEE (Main), JEE (Advanced) और योग्य राज्य संस्थानों के लिए निर्धारित मानदंडों के अनुसार पात्र हैं
4. **Examination Fee: The Fee for JEE(Main) - 2024 per Session** is as follows :

Paper	Category	Gender	For Centers	
			In India (Fee in ₹)	Outside India (Fee in ₹)
Paper 1: B.E./B.Tech OR Paper 2A B.Arch OR Paper-2B: B.Planning	General	Male	1000/-	5000/-
		female	800/-	4000/-
	Gen-EWS/ OBC(NCL)	Male	900/-	4500/-
		female	800/-	4000/-
	SC/ST/PwD	Male	500/-	2500/-
		female	500/-	2500/-
	Third Gender		500/-	3000/-
Paper 1: B.E./B.Tech and Paper 2A: B.Arch OR Paper 1 B.E./B.Tech and Paper 2B B.Planning OR Paper 1: B.E./B.Tech, Paper 2A: B.Arch and Paper 2B :B.Planning OR Paper 2A: B.Arch and Paper 2B : B.Planning	General/Gen-EWS/ OBC(NCL)	Male	2000/-	10000/-
		female	1600/-	8000/-
	SC/ST/PwD	Male	1000/-	5000/-
		female	1000/-	5000/-
	Third Gender		1000/-	5000/-
Processing charges and Goods & Service Taxes (GST) are to be paid by the candidate, as applicable.				

5. **Application Procedure: Steps to be followed to apply online.**
आवेदन प्रक्रिया: ऑनलाइन आवेदन करने के लिए पालन करने वाले कदम।
Candidates must read carefully the Instructions (including how to fill up the Application Form online) given in the Information Bulletin available on the NTA Website. Candidates not complying with the Instructions shall be summarily disqualified.
उम्मीदवारों को एनटीए वेबसाइट पर उपलब्ध सूचना बुलेटिन में दिए गए निर्देशों (ऑनलाइन आवेदन पत्र भरने के तरीके सहित) को ध्यान से पढ़ना चाहिए। निर्देशों का अनुपालन नहीं करने वाले उम्मीदवारों को अयोग्य घोषित कर दिया जाएगा

Step 1: Registration Form :
Register for the Online Application Form and note down the system-generated Application Number. The candidate should supply the required details while filling the Online Application Form and is also required to create PASSWORD and choose Security Question and enter his/her Answer. After successful submission of the personal details, an Application number will be generated and it will be used to complete the remaining Steps of the Application Form and will also be required for all future reference/correspondence. This application number will also be used/referred for both Sessions of JEE (Main) - 2024. For subsequent logins, the candidate will be able to login directly with the respective system generated **Application Number** and created **Password.**
ऑनलाइन आवेदन पत्र के लिए पंजीकरण करें और सिस्टम-जनरेटेड एप्लिकेशन नंबर नोट करें। उम्मीदवार को ऑनलाइन आवेदन पत्र भरते समय आवश्यक विवरण प्रदान करना चाहिए और पासवर्ड बनाना और सुरक्षा प्रश्न चुनना और अपना उत्तर दर्ज करना भी आवश्यक है। व्यक्तिगत विवरण सफलतापूर्वक जमा करने के बाद, एक आवेदन संख्या उत्पन्न होगी और इसका उपयोग आवेदन पत्र के शेष चरणों को पूरा करने के लिए किया जाएगा और भविष्य के सभी संदर्भ/पत्राचार के लिए भी इसकी आवश्यकता होगी। इस एप्लिकेशन नंबर का उपयोग जेईई (मेन) - 2024 के दोनों सत्रों के लिए भी किया जाएगा। बाद के लॉगिन के लिए, उम्मीदवार संबंधित सिस्टम द्वारा जेनरेट किए गए एप्लिकेशन नंबर और बनाए गए पासवर्ड के साथ सीधे लॉगिन कर सकेंगे।

Step 2: Application Form :
The Candidates can log in with the system-generated Application Number and pre-created Password for completing the Application Form including filling up of personal details, applying for the Paper, choosing the Examination Cities, providing the details of Educational Qualifications, and uploading the images and documents (if any).
उम्मीदवार व्यक्तिगत विवरण भरने, पेपर के लिए आवेदन करने, परीक्षा शहर चुनने, शैक्षिक योग्यता का विवरण प्रदान करने और छवियों और दस्तावेज (यदि कोई हो) को अपलोड करने सहित आवेदन पत्र को पूरा करने के लिए सिस्टम-जनरेटेड एप्लिकेशन नंबर और पूर्व-निर्मित पासवर्ड के साथ लॉग इन कर सकते हैं।

Upload Scanned Images of Candidate's Photograph, Signature, and PwD Certificate (wherever applicable) :
उम्मीदवार की तस्वीर, हस्ताक्षर और पीडब्ल्यूडी प्रमाणपत्र (जहां भी लागू हो) की स्कैन की गई छवियां अपलोड करें:

I. **The recent photograph should be either in colour or black & white with 80% face (without mask) visible including ears against a white background.**
हाल की फोटो या तो रंग या काले और सफेद में होनी चाहिए, जिसमें 80% चेहरा (मास्क के बिना) और कान सफेद पृष्ठ के साथ।

II. Scanned photograph and signature should be in JPG/JPEG format (clearly legible).
स्कैन की गई तस्वीर और हस्ताक्षर जेपीजी/जेपीईजी प्रारूप (स्पष्ट रूप से सुपाठ्य) में होने चाहिए।

III. The size of the scanned photograph should be between 10 kb to 200 kb (clearly legible).
स्कैन की गई तस्वीर का आकार 10 केबी से 200 केबी (स्पष्ट रूप से पढ़ने योग्य) के बीच होना चाहिए।

IV. The size of the scanned signature should be between 4 kb to 30 kb (clearly legible).
स्कैन किए गए हस्ताक्षर का आकार 4 केबी से 30 केबी (स्पष्ट रूप से पढ़ने योग्य) के बीच होना चाहिए।

V. Size of the scanned copy of PwD certificate between 10 kb to 300 kb (clearly legible). PwD
प्रमाणपत्र की स्कैन की गई कॉपी का आकार 10 केबी से 300 केबी के बीच (स्पष्ट रूप से सुपाठ्य)

Note: The Candidate has to upload only his/ her own photograph, signature, and certificate(s) as mentioned above (and not of anybody else) in a correct/proper manner, **the facility for correction will not be given in the future.** In case, it is found at any time in the future that the Candidate has used/uploaded the photograph, signature, and certificate(s) of someone else in his/her Application Form/Admit Card, or **he/she has tempered his/her Admit Card/Result/Scorecard, these acts of the candidate shall be treated as Unfair Means (UFM) Practices and he/she shall be proceeded with the actions as contemplated under the provisions of the Information Bulletin relating to Unfair Means Practices.**

Please check your photograph and signature before submission of the Application Form. In case the photograph or signature is blurred or not visible to identify the identity of the candidate then, the application will be rejected and no option for correction or revision will be permitted.
[नोट: उम्मीदवार को ऊपर बताए अनुसार केवल अपना फोटो, हस्ताक्षर और प्रमाण पत्र (किसी अन्य का नहीं) सही/उचित तरीके से अपलोड करना होगा, क्योंकि इसमें सुधार की सुविधा नहीं दी जाएगी। यदि भविष्य में किसी भी समय यह पाया जाता है कि उम्मीदवार ने अपने आवेदन पत्र/प्रवेश पत्र में किसी और की तस्वीर, हस्ताक्षर और प्रमाण पत्र का उपयोग/अपलोड किया है, या उसने अपने आवेदन पत्र में छेड़छाड़ की है। उसके प्रवेश पत्र/परिणाम/स्कोरकार्ड में, उम्मीदवार के इन कृत्यों को अनुचित साधन (यूएफएम) प्रथाओं के रूप में माना जाएगा और उसे अनुचित साधन प्रथाओं से संबंधित सूचना बुलेटिन के प्रावधानों के तहत अपेक्षित कार्यों के साथ आगे बढ़ाया जाएगा। कृपया आवेदन पत्र जमा करने से पहले अपनी तस्वीर और हस्ताक्षर जांच लें। यदि उम्मीदवार की पहचान के लिए फोटो या हस्ताक्षर धुंधले हैं या दिखाई नहीं दे रहे हैं, तो आवेदन खारिज कर दिया जाएगा और सुधार या संशोधन के लिए कोई विकल्प नहीं दिया जाएगा।

Step 3: Fee Payment :
After completing Step 1 and Step 2, the candidates have to pay the requisite examination fee. The fee can be submitted only online through Net Banking, Credit Card, Debit Card, UPI, or Paytm Services. Processing charges and GST as applicable are chargeable to the candidate (in addition to the examination fee) by the concerned Bank/Payment Gateway Integrator.
The Confirmation Page of the online Application Form will be generated only after successful payment by the Candidate. In case the Confirmation Page is not generated after payment of fee, then the candidate may have to approach the concerned Bank/Payment Gateway (in the helpline number and e-mail given in the Information Bulletin) for ensuring the successful payment or for obtaining the refund of duplicate / multiple payments.
चरण 1 और चरण 2 को पूरा करने के बाद, उम्मीदवारों को अपेक्षित परीक्षा शुल्क का भुगतान करना होगा। शुल्क केवल नेट बैंकिंग, क्रेडिट कार्ड, डेबिट कार्ड, यूपीआई या पेटीएम सेवाओं के माध्यम से ऑनलाइन जमा किया जा सकता है। संबंधित बैंक/पेमेंट गेटवे इंटीग्रेटर द्वारा उम्मीदवार से प्रोसेसिंग शुल्क और लागू जीएसटी (परीक्षा शुल्क के अतिरिक्त) लिए जाएंगे। ऑनलाइन आवेदन पत्र का पुष्टिकरण पृष्ठ उम्मीदवार द्वारा सफल भुगतान के बाद ही उत्पन्न किया जाएगा। यदि शुल्क के भुगतान के बाद पुष्टिकरण पृष्ठ उत्पन्न नहीं होता है, तो सफल भुगतान सुनिश्चित करने या प्राप्त करने के लिए उम्मीदवार को संबंधित बैंक/भुगतान गेटवे (सूचना बुलेटिन में दिए गए हेल्पलाइन नंबर और ई-मेल में) से संपर्क करना पड़ सकता है। डुप्लिकेट/एकाधिक भुगतान की वापसी।

6. **Important Instructions about PASSWORD**

I. During online form filling, the candidate will be required to choose PASSWORD and Security Question and its Answer. The candidate is advised to record/remember their password for all future logins.
ऑनलाइन फॉर्म भरने के दौरान, उम्मीदवार को पासवर्ड और सुरक्षा प्रश्न और उसका उत्तर चुनना होगा। उम्मीदवार को सलाह दी जाती है कि वे भविष्य में सभी लॉगिन के लिए अपना पासवर्ड रिकॉर्ड/याद रखें

II. For subsequent logins, the candidate will be able to login directly with their respective system-generated Application Number and the chosen Password.
बाद के लॉगिन के लिए, उम्मीदवार अपने संबंधित सिस्टम-जनरेटेड एप्लिकेशन नंबर और चुने हुए पासवर्ड के साथ सीधे लॉगिन करने में सक्षम होंगे।

III. The candidate is advised not to disclose or share their password with anybody. Neither NTA nor NIC will be responsible for the violation or misuse of the password of a candidate.
उम्मीदवार को सलाह दी जाती है कि वे अपना पासवर्ड किसी के साथ न बताए या साझा न करें। किसी उम्मीदवार के पासवर्ड के उल्लंघन या दुरुपयोग के लिए एनटीए जिम्मेदार नहीं होगा।

IV. Candidates can change his/her passwords after login if desired.
उम्मीदवार चाहें तो लॉगिन के बाद अपना पासवर्ड बदल सकते हैं।

V. Candidates should remember to log out at the end of their session so that the particulars of the candidate cannot be tempered with or modified by unauthorized persons.
उम्मीदवारों को अपने सत्र के अंत में लॉग आउट करना याद रखना चाहिए ताकि अनधिकृत व्यक्तियों द्वारा उम्मीदवार के विवरण के साथ छेड़छाड़ या संशोधन न किया जा सके।

The Password must be as per the following Password Policy.

I. Password must be **8 to 13 characters long.**
पासवर्ड 8 से 13 अक्षर लंबा होना चाहिए।

II. Password must have at least **one Upper** case letter.
पासवर्ड में कम से कम एक अपरकेस अक्षर होना चाहिए।

III. Password must have at least **one Lower** case letter.
पासवर्ड में कम से कम एक लोअर केस अक्षर होना चाहिए।

IV. Password must have at least **one numeric value.**
पासवर्ड में कम से कम एक संख्यात्मक मान होना चाहिए.

V. Password must have at least **one special character eg.!@#$%^&*-.**
पासवर्ड में कम से कम एक विशेष अक्षर होना चाहिए जैसे !@#$%^&*-

7. **How to reset your Password:** The following options are available to reset Password

I. Using Security Question and its Answer/ you have chosen during Form filling.
फॉर्म भरने के दौरान आपके द्वारा चुने गए सुरक्षा प्रश्न और उसके उत्तर का उपयोग करना।

II. Using a verification code sent via text message (SMS) to your Registered Mobile No.
आपके पंजीकृत मोबाइल नंबर पर टेक्स्ट संदेश (एसएमएस) के माध्यम से भेजे गए सत्यापन कोड का उपयोग करना।

III. Using a reset link sent via Email to your Registered Email address.
आपके पंजीकृत ईमेल पते पर ईमेल के माध्यम से भेजे गए रीसेट लिंक का उपयोग करना।

8. The Application Number printed on the computer-generated Confirmation Page must be mentioned in all such correspondences. It is therefore essential to note down the application number printed on the Confirmation Page.
ऐसे सभी पत्राचार में कंप्यूटर जनित पुष्टिकरण पृष्ठ पर मुद्रित आवेदन संख्या का उल्लेख किया जाना चाहिए। इसलिए पुष्टिकरण पृष्ठ पर मुद्रित आवेदन संख्या को नोट करना आवश्यक है।

I have downloaded the Information Bulletin of JEE (Main) - 2024, read and understood all the Instructions therein as well as those mentioned above, and will fill up the online Application Form for the JEE (Main) - 2024 Cycles accordingly.
मैंने जेईई (मेन) - 2024 का सूचना बुलेटिन डाउनलोड कर लिया है, उसमें दिए गए सभी निर्देशों के साथ-साथ ऊपर उल्लिखित सभी निर्देशों को पढ़ा और समझा है, और तदनुसार जेईई (मेन) - 2024 के लिए ऑनलाइन आवेदन पत्र भर दिया है।

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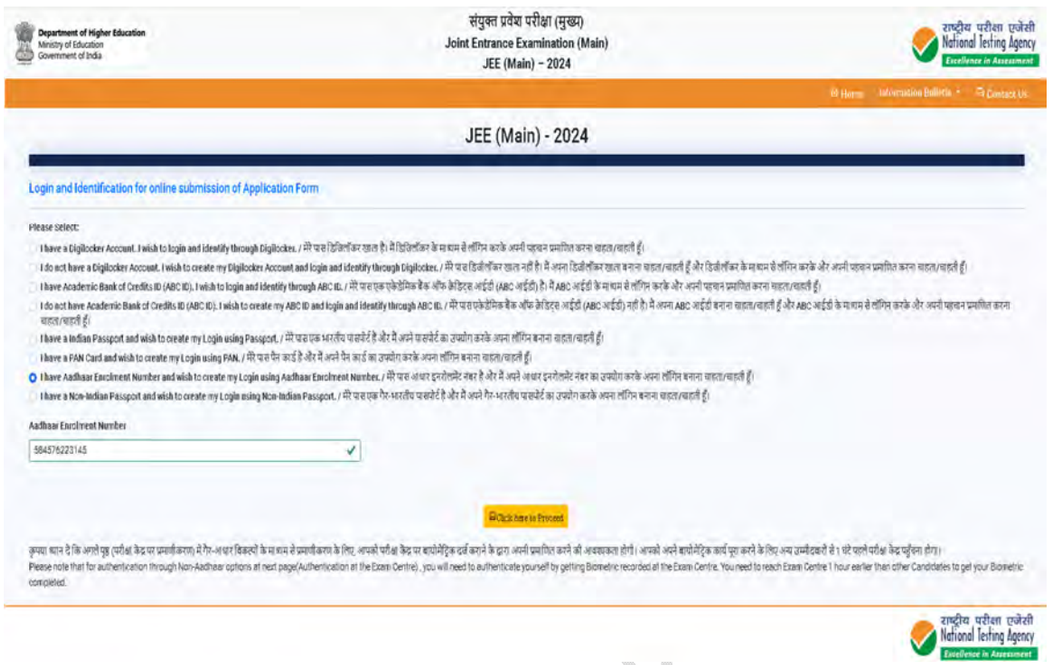
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संयुक्त प्रवेश परीक्षा (मुख्य)
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Login and Identification for online submission of Application Form
Please select:
I have a Digilocker Account. I wish to login and identify through Digilocker. / मेरे पास डिजिलॉकर खाता है। मैं डिजिलॉकर के माध्यम से लॉगिन करके अपनी पहचान प्रमाणित करना चाहता/चाहती हूँ।
I do not have a Digilocker Account. I wish to create my Digilocker Account and login and identify through Digilocker. / मेरे पास डिजिलॉकर खाता नहीं है। मैं अपना डिजिलॉकर खाता बनाना चाहता/चाहती हूँ और डिजिलॉकर के माध्यम से लॉगिन करके और अपनी पहचान प्रमाणित करना चाहता/चाहती हूँ।
I have Academic Bank of Credits ID (ABC ID). I wish to login and identify through ABC ID. / मेरे पास एकेडेमिक बैंक ऑफ क्रेडिट्स आईडी (ABC आईडी) है। मैं ABC आईडी के माध्यम से लॉगिन करके और अपनी पहचान प्रमाणित करना चाहता/चाहती हूँ।
I do not have Academic Bank of Credits ID (ABC ID). I wish to create my ABC ID and login and identify through ABC ID. / मेरे पास एकेडेमिक बैंक ऑफ क्रेडिट्स आईडी (ABC आईडी) नहीं है। मैं अपना ABC आईडी बनाना चाहता/चाहती हूँ और ABC आईडी के माध्यम से लॉगिन करके और अपनी पहचान प्रमाणित करना चाहता/चाहती हूँ।
I have a Indian Passport and wish to create my Login using Passport. / मेरे पास एक भारतीय पासपोर्ट है और मैं अपने पासपोर्ट का उपयोग करके अपना लॉगिन बनाना चाहता/चाहती हूँ।
I have a PAN Card and wish to create my Login using PAN. / मेरे पास पैन कार्ड है और मैं अपने पैन कार्ड का उपयोग करके अपना लॉगिन बनाना चाहता/चाहती हूँ।
I have Aadhaar Enrolment Number and wish to create my Login using Aadhaar Enrolment Number. / मेरे पास आधार इनरोलमेंट नंबर है और मैं अपने आधार इनरोलमेंट नंबर का उपयोग करके अपना लॉगिन बनाना चाहता/चाहती हूँ।
I have a Non-Indian Passport and wish to create my Login using Non-Indian Passport. / मेरे पास एक गैर-भारतीय पासपोर्ट है और मैं अपने गैर-भारतीय पासपोर्ट का उपयोग करके अपना लॉगिन बनाना चाहता/चाहती हूँ।
Aadhaar Enrolment Number
58457623145
Click here to Proceed
कृपया ध्यान दें कि अगले चरण (परीक्षा केंद्र पर प्रमाणीकरण) में गैर-आधार विकल्पों के माध्यम से प्रमाणीकरण के लिए, आपको परीक्षा केंद्र पर बायोमेट्रिक दर्ज कराने के द्वारा अपनी प्रमाणित करने की आवश्यकता होगी। आपको अपने बायोमेट्रिक कार्य पूरा करने के लिए अन्य उम्मीदवारों से 1 घंटे पहले परीक्षा केंद्र पहुँचना होगा।
Please note that for authentication through Non-Aadhaar options at next page(Authentication at the Exam Centre), you will need to authenticate yourself by getting Biometric recorded at the Exam Centre. You need to reach Exam Centre 1 hour earlier than other Candidates to get your Biometric completed.


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Authentication at the Exam Centre
Please Select:
1) I wish to share my Aadhaar and authenticate myself at the Exam Centre through Aadhaar. / मैं अपना आधार साझा करके परीक्षा केंद्र में अपनी पहचान प्रमाणित करना चाहता/चाहती हूँ।
2) I have Aadhaar, but I do not want to authenticate myself at the Exam Centre through Aadhaar. I wish to authenticate through valid Government ID with Photograph (Passport/PAN Card/Ration Card/Driving License/Voter ID Card). / मेरे पास आधार है, लेकिन मैं परीक्षा केंद्र में आधार के माध्यम से अपनी पहचान प्रमाणित नहीं करना चाहता/चाहती हूँ। मैं वैध सरकारी पहचान पत्रिका जिसमें फोटो होती है (पासपोर्ट/पैन कार्ड/राशन कार्ड/ड्राइविंग लाइसेंस/मतदाता पहचान पत्र) के माध्यम से पहचान प्रमाणित करना चाहता/चाहती हूँ।
3) I do not have Aadhaar. I wish to authenticate myself at the Exam Centre through valid Government ID with Photograph (Passport/PAN Card/Ration Card/Driving License/Voter ID Card). / मेरे पास आधार नहीं है। मैं परीक्षा केंद्र में अपनी पहचान प्रमाणित करना चाहता/चाहती हूँ जिसमें फोटो वाली वैध सरकारी पहचान पत्रिका (पासपोर्ट/पैन कार्ड/राशन कार्ड/ड्राइविंग लाइसेंस/मतदाता पहचान पत्र) हो।
Aadhaar Enrolment Number
58457623145
Click here to Proceed
कृपया ध्यान दें कि अगले चरण (परीक्षा केंद्र पर प्रमाणीकरण) में गैर-आधार विकल्पों के माध्यम से प्रमाणीकरण के लिए, आपको परीक्षा केंद्र पर बायोमेट्रिक दर्ज कराने के द्वारा अपनी प्रमाणित करने की आवश्यकता होगी। आपको अपने बायोमेट्रिक कार्य पूरा करने के लिए अन्य उम्मीदवारों से 1 घंटे पहले परीक्षा केंद्र पहुँचना होगा।
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National Testing Agency
Excellence in Assessment
Aadhaar Enrolment Number :
Personal Details
RENU
15
March
2003
Male
Any Other Valid Govt Identity with photograph
Present Address
PARTAPUR MEERUT
PARTAPUR
INDIA
UTTAR PRADESH
Meerut
250103
Permanent Address
Same As Present Address
Choose Password
What is your birth city?
163
Security Pin
Enter Security Pin(Case Sensitive)*
Submit

Review the following particulars carefully. If you would like to change any particulars entered, you may do so by pressing 'EDIT REGISTRATION FORM' button or press 'SUBMIT And SEND OTP' button

(व्यक्तिगत विवरण) Personal Details

अभ्यर्थी का नाम (Candidate's Name)	HARSH CHIKARA	अभ्यर्थी की जन्म तिथि (Candidate's Date of Birth)	15-03-2000
पिता / अभिभावक का नाम (Father / Guardian Name)	YOGESH	माता / अभिभावक का नाम (Mother / Guardian Name)	RENU
पहचान के प्रकार (Identity Type)	Any Other Valid Govt Identity with photograph	पहचान संख्या (Identification Number)	584576223145
लिंग (Gender)	Male		

(वर्तमान पता) Present Address

पता (Premises No/ Name)	PARTAPUR MEERUT	उप-स्थानीयता (Sub-Locality)(Optional)	
स्थानीयता (Locality)	PARTAPUR	देश (Country)	INDIA
राज्य (State)	UTTAR PRADESH	जिला (District)	Meerut
पिन कोड (Pin Code)	250103	ईमेल पता (Email Address)	hc1@yopmail.com
मोबाइल नंबर (Mobile Number)	91-8433451005	वैकल्पिक संपर्क सूत्र (Alternate Contact No.) (Optional)	

(स्थायी पता) Permanent Address

अभ्यर्थी का नाम (Candidate's Name)	HARSH CHIKARA	अभ्यर्थी की जन्म तिथि (Candidate's Date of Birth)	15-03-2000
पिता / अभिभावक का नाम (Father / Guardian Name)	YOGESH	माता / अभिभावक का नाम (Mother / Guardian Name)	RENU
पहचान के प्रकार (Identity Type)	Any Other Valid Govt Identity with photograph	पहचान संख्या (Identification Number)	584576223145
लिंग (Gender)	Male		

(वर्तमान पता) Present Address

पता (Premises No/ Name)	PARTAPUR MEERUT	उप-स्थानीयता (Sub-Locality)(Optional)	
स्थानीयता (Locality)	PARTAPUR	देश (Country)	INDIA
राज्य (State)	UTTAR PRADESH	जिला (District)	Meerut
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पिता / अभिभावक का नाम (Father / Guardian Name)	YOGESH	माता / अभिभावक का नाम (Mother / Guardian Name)	RENU
पहचान के प्रकार (Identity Type)	Any Other Valid Govt Identity with photograph	पहचान संख्या (Identification Number)	584576223145
लिंग (Gender)	Male		

(वर्तमान पता) Present Address

पता (Premises No/ Name)	PARTAPUR MEERUT	उप-स्थानीयता (Sub-Locality)(Optional)	
स्थानीयता (Locality)	PARTAPUR	देश (Country)	INDIA
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पिता / अभिभावक का नाम (Father / Guardian Name)	YOGESH	माता / अभिभावक का नाम (Mother / Guardian Name)	RENU
पहचान के प्रकार (Identity Type)	Any Other Valid Govt Identity with photograph	पहचान संख्या (Identification Number)	584576223140
लिंग (Gender)	Male		

(वर्तमान पता) Present Address

पता (Premises No/ Name)	PARTAPUR MEERUT	उप-स्थानीयता (Sub-Locality)(Optional)	
स्थानीयता (Locality)	PARTAPUR	देश (Country)	INDIA
राज्य (State)	UTTAR PRADESH	जिला (District)	Meerut
पिन कोड (Pin Code)	250103	ईमेल पता (Email Address)	hc1@yopmail.com
मोबाइल नंबर (Mobile Number)	91-8433451005	वैकल्पिक संपर्क सूत्र (Alternate Contact No.) (Optional)	

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अभ्यर्थी का नाम (Candidate's Name)	HARSH CHIKARA	अभ्यर्थी की जन्म तिथि (Candidate's Date of Birth)	15-03-2000
पिता / अभिभावक का नाम (Father / Guardian Name)	YOGESH	माता / अभिभावक का नाम (Mother / Guardian Name)	RENU
पहचान के प्रकार (Identity Type)	Any Other Valid Govt Identity with photograph	पहचान संख्या (Identification Number)	584576223145
लिंग (Gender)	Male		

(वर्तमान पता) Present Address

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पिता / अभिभावक का नाम (Father / Guardian Name)	YOGESH	माता / अभिभावक का नाम (Mother / Guardian Name)	RENU
पहचान के प्रकार (Identity Type)	Any Other Valid Govt Identity with photograph	पहचान संख्या (Identification Number)	584576223145
लिंग (Gender)	Male		

(वर्तमान पता) Present Address

पता (Premises No/ Name)	PARTAPUR MEERUT	उप-स्थानीयता (Sub-Locality)(Optional)	
स्थानीयता (Locality)	PARTAPUR	देश (Country)	INDIA
राज्य (State)	UTTAR PRADESH	जिला (District)	Meerut
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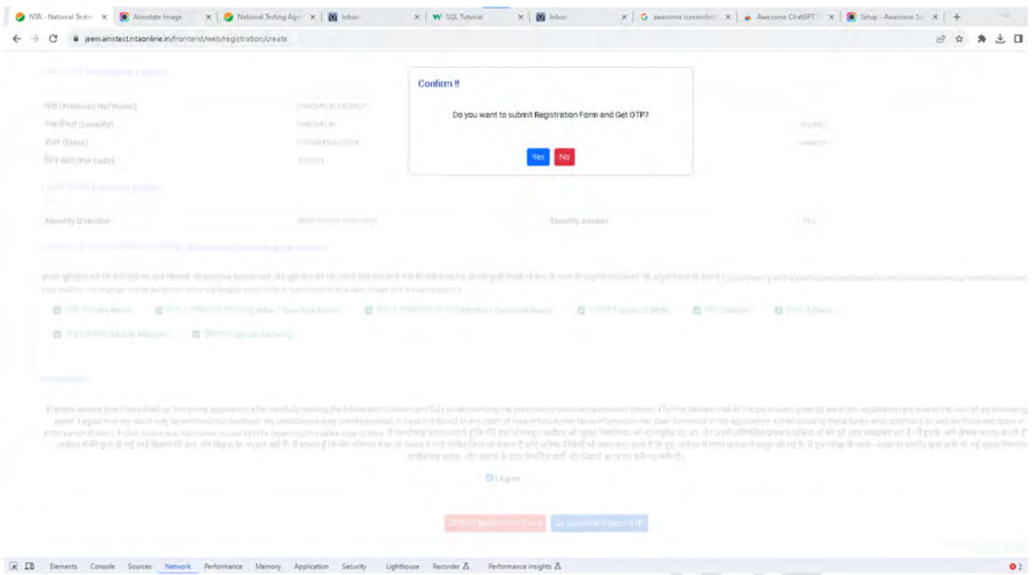
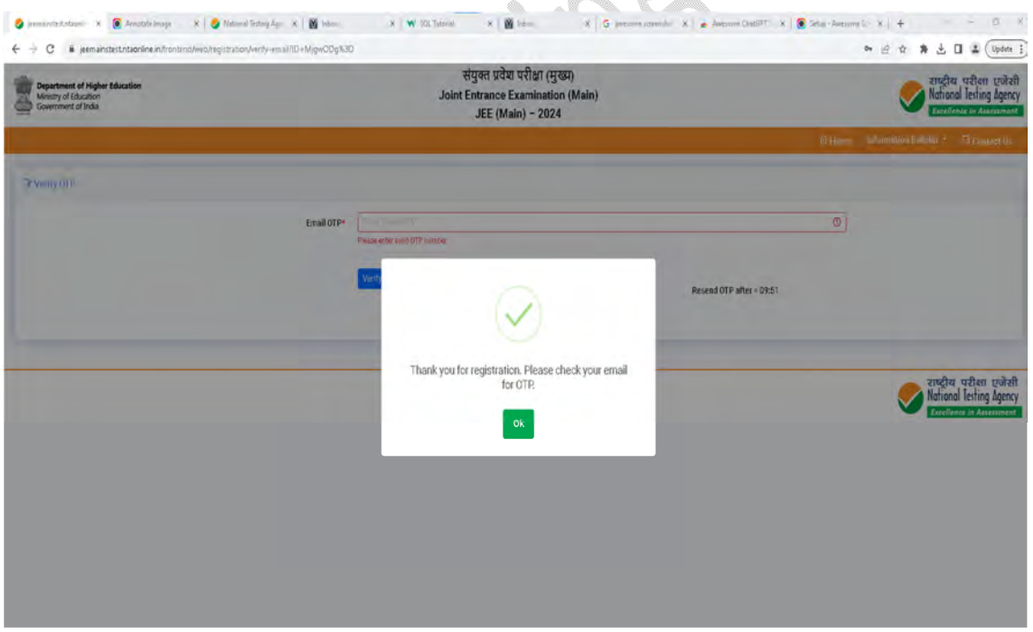
(स्थायी पता) Permanent Address

स्थानीयता (Locality)	PARTAPUR	देश (Country)	INDIA
राज्य (State)	UTTAR PRADESH	जिला (District)	Meerut
पिन कोड (Pin Code)	250103	ईमेल पता (Email Address)	hc1@yopmail.com
मोबाइल नंबर (Mobile Number)	91-8433451005	वैकल्पिक संपर्क सूत्र (Alternate Contact No.) (Optional)	

(स्थायी पता) Permanent Address


Confirm !!
Do you want to submit Registration Form and Get OTP?
Yes
No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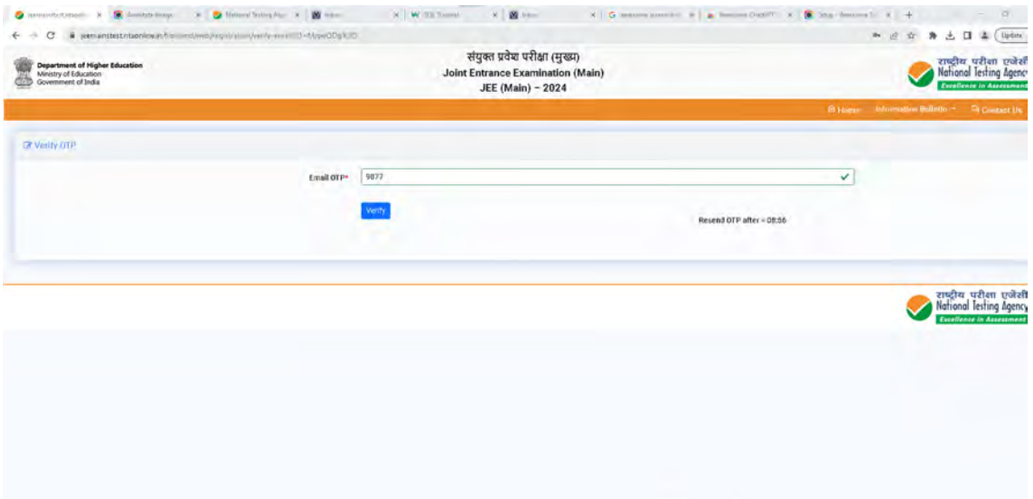
National Testing Agency
Email OTP*
Resend OTP after - 09:51
Thank you for registration. Please check your email for OTP.
Ok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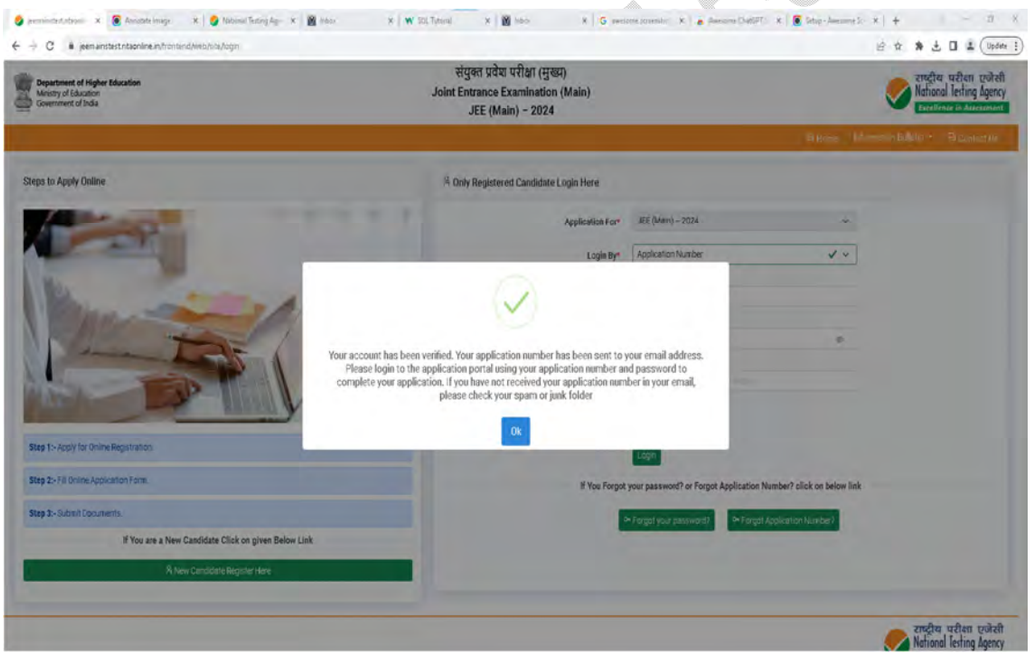
National Testing Agency
Verify OTP
Email OTP*
9877
Verify
Resend OTP after - 08:56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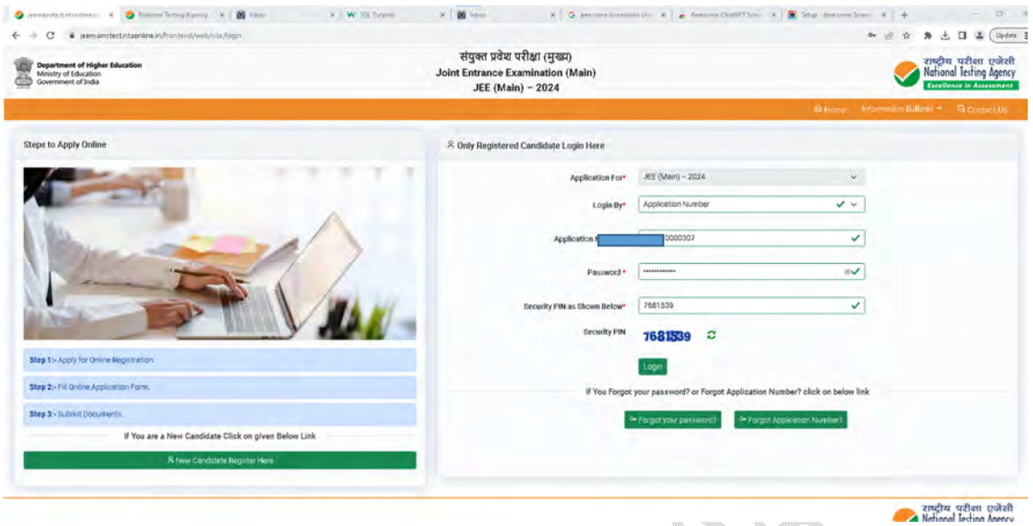
Only Registered Candidate Login Here
Application For*
JEE (Main) – 2024
Login By*
Application Number
Your account has been verified. Your application number has been sent to your email address. Please login to the application portal using your application number and password to complete your application. If you have not received your application number in your email, please check your spam or junk folder
Ok
Step 1:- Apply for Online Registration
Step 2:- Fill Online Application Form.
Step 3:- Submit Documents.
If You are a New Candidate Click on given Below Link
New Candidate Register Here
If You Forgot your password? or Forgot Application Number? click on below link
Forgot your password?
Forgot Application Number?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Steps to Apply Online
Step 1:- Apply for Online Registration.
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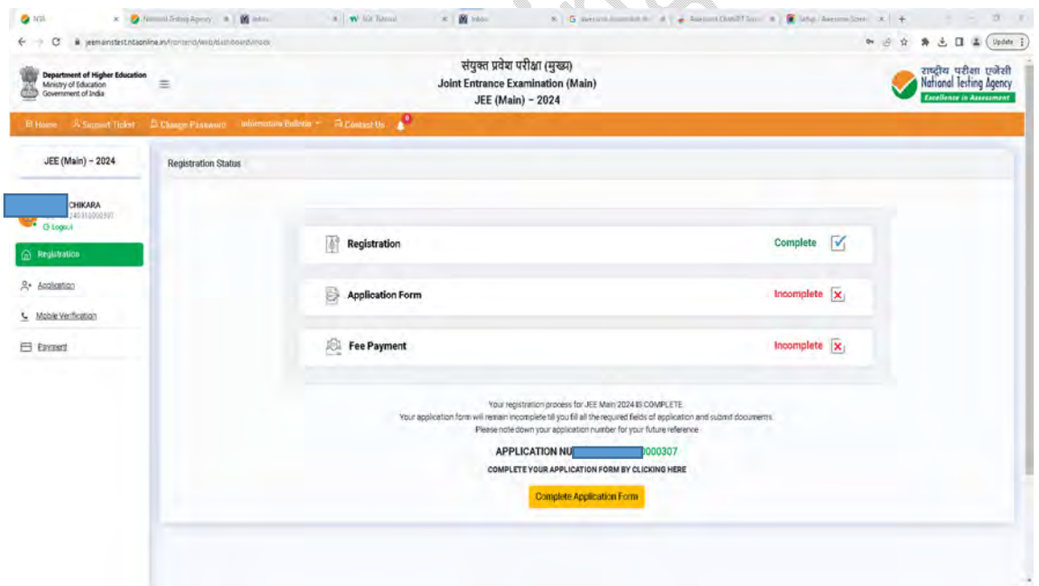
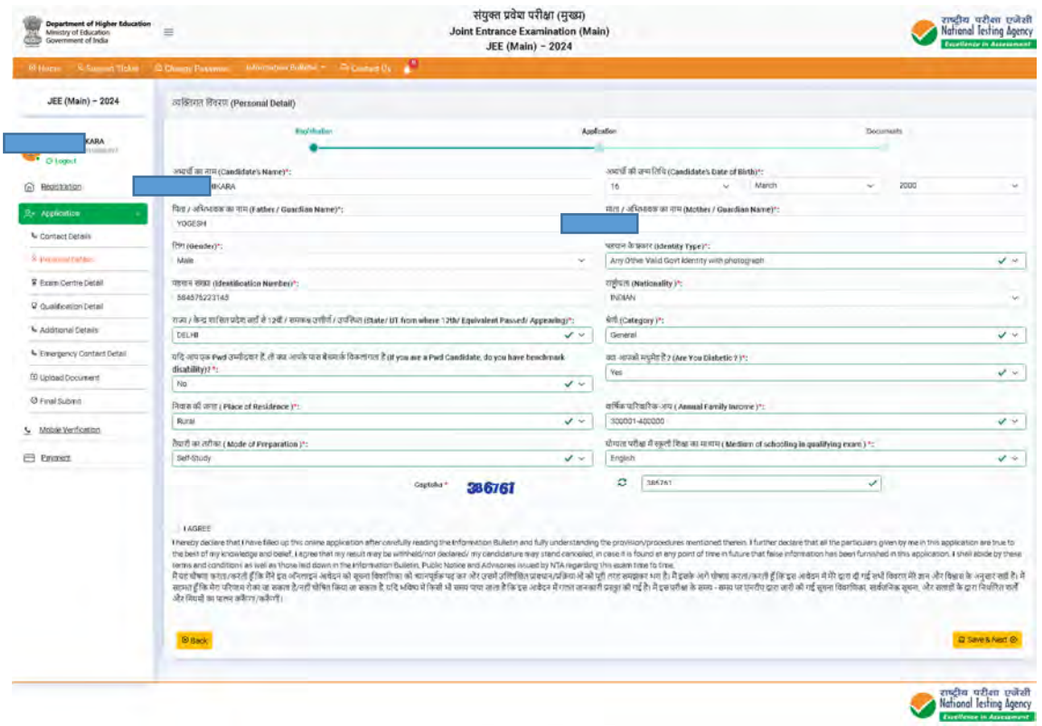
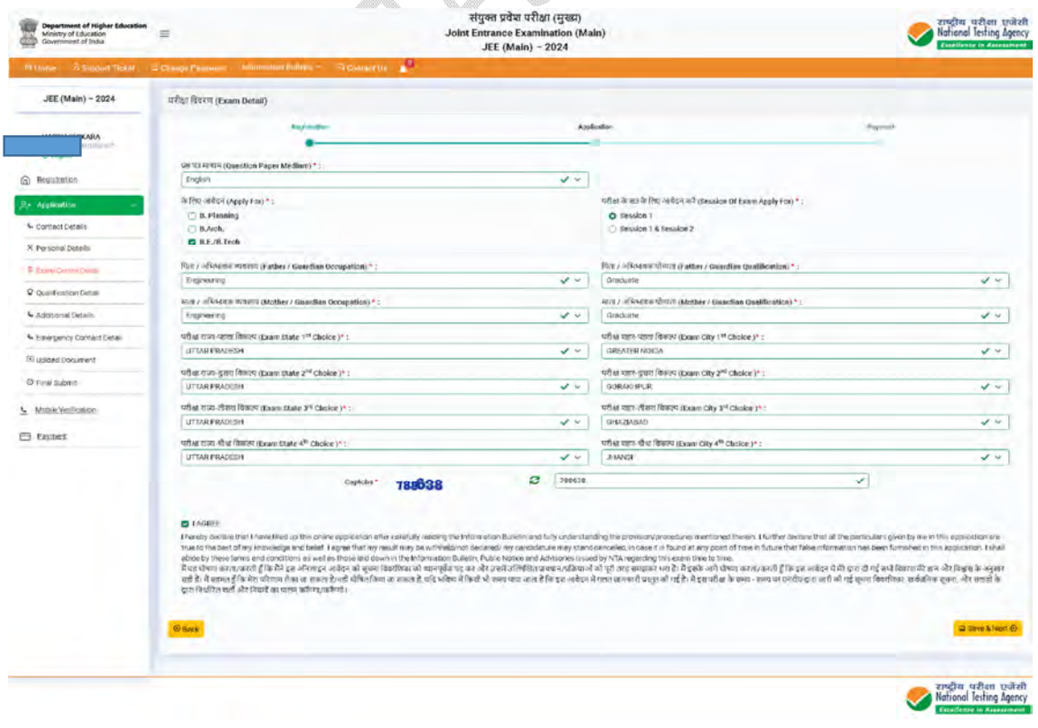
If You are a New Candidate Click on given Below Link
New Candidate Register Here
Only Registered Candidate Login Here
Application For*
JEE (Main) – 2024
Login By*
Application Number
Password *
Security PIN as Shown Below*
7681539
Security PIN
Login
If You Forgot your password? or Forgot Application Number? click on below link
Forgot your password?
Forgot Application Number?


संयुक्त प्रवेश परीक्षा (मुख्य)
Joint Entrance Examination (Main)
JEE (Main) – 2024
Department of Higher Education
Ministry of Education
Government of India
राष्ट्रीय परीक्षा एजेंसी
National Testing Agency
JEE (Main) – 2024
CHIKARA
Logout
Registration
Application
Mobile Verification
Payment
Registration Status
Registration
Complete
Application Form
Incomplete
Fee Payment
Incomplete
Your registration process for JEE Main 2024 IS COMPLETE.
Your application form will remain incomplete till you fill all the required fields of application and submit documents.
Please note down your application number for your future reference
COMPLETE YOUR APPLICATION FORM BY CLICKING HERE
Complete Application Form


संयुक्त प्रवेश परीक्षा (मुख्य)
Joint Entrance Examination (Main)
JEE (Main) – 2024
राष्ट्रीय परीक्षा एजेंसी
National Testing Agency
JEE (Main) – 2024
व्यक्तिगत विवरण (Personal Detail)
Registration
Application
Contact Details
Exam Centre Detail
Qualification Detail
Additional Details
Emergency Contact Detail
Upload Document
Final Submit
Mobile Verification
Payment
I AGREE
Back
Save & Next


संयुक्त प्रवेश परीक्षा (मुख्य)
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परीक्षा विवरण (Exam Detail)
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Personal Details
Exam Centre Detail
Qualification Detail
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Emergency Contact Detail
Upload Document
Final Submit
Mobile Verification
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I AGREE
Back
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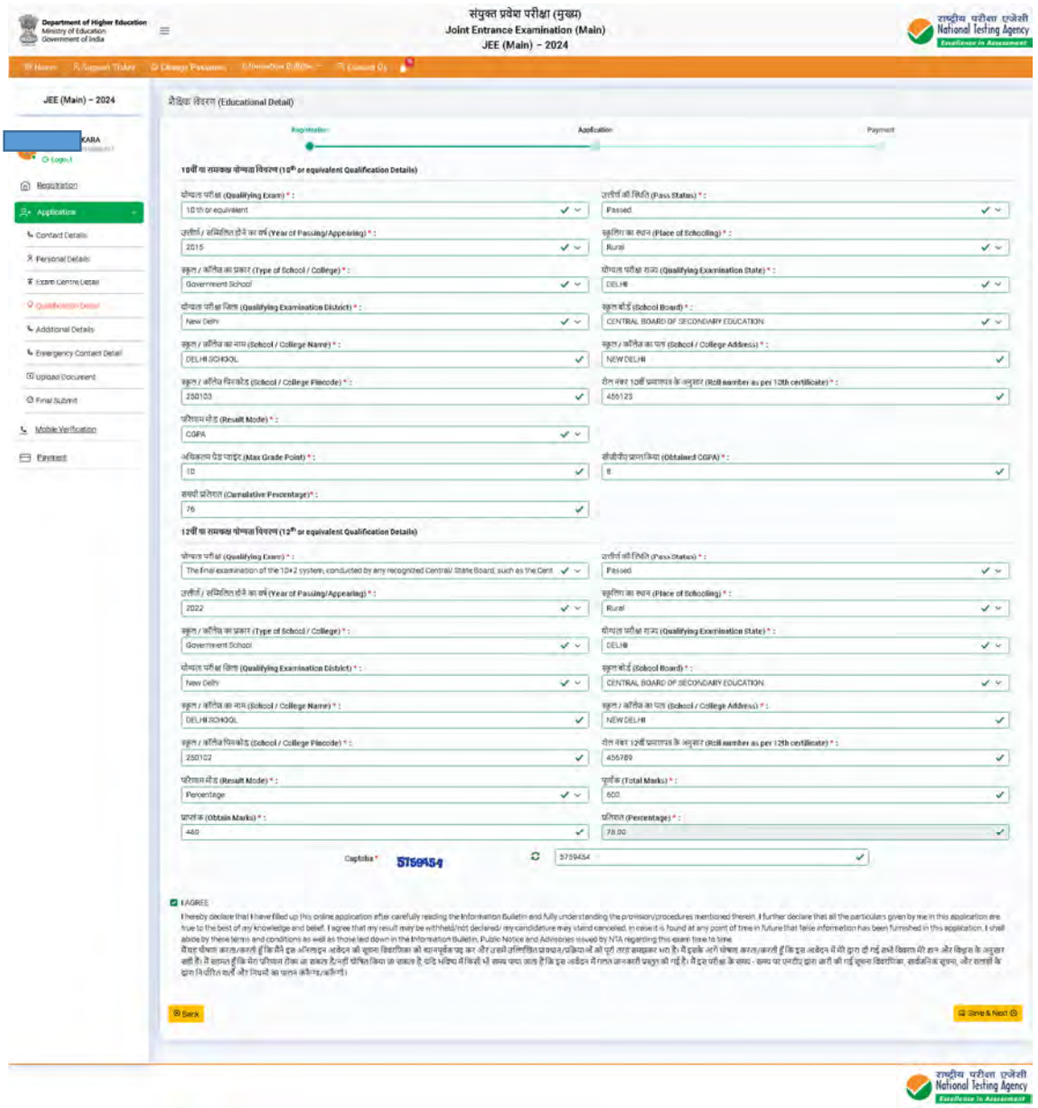
Department of Higher Education
Ministry of Education
Government of India
संयुक्त प्रवेश परीक्षा (मुख्य)
Joint Entrance Examination (Main)
JEE (Main) – 2024
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National Testing Agency
JEE (Main) – 2024
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Personal Details
Exam Centre Detail
Additional Details
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Mobile Verification
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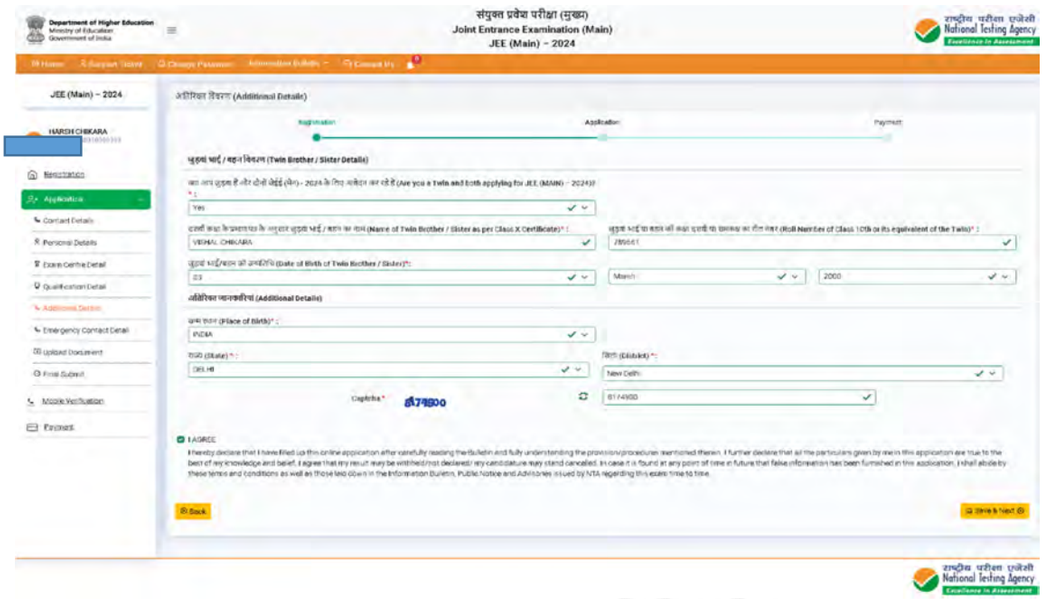
शैक्षिक विवरण (Educational Detail)
Registration
Application
Payment
10वीं या समकक्ष योग्यता विवरण (10th or equivalent Qualification Details)
योग्यता परीक्षा (Qualifying Exam) * :
10 th or equivalent
उत्तीर्ण की स्थिति (Pass Status) * :
Passed
उत्तीर्ण / उपस्थित होने का वर्ष (Year of Passing/Appearing) * :
2015
स्कूलिंग का स्थान (Place of Schooling) * :
Rural
स्कूल / कॉलेज का प्रकार (Type of School / College) * :
Government School
योग्यता परीक्षा राज्य (Qualifying Examination State) * :
DELHI
योग्यता परीक्षा जिला (Qualifying Examination District) * :
New Delhi
स्कूल बोर्ड (School Board) * :
CENTRAL BOARD OF SECONDARY EDUCATION
स्कूल / कॉलेज का नाम (School / College Name) * :
DELHI SCHOOL
स्कूल / कॉलेज का पता (School / College Address) * :
NEW DELHI
स्कूल / कॉलेज पिनकोड (School / College Pincode) * :
250103
रोल नंबर 10वीं प्रमाणपत्र के अनुसार (Roll number as per 10th certificate) * :
456123
परिणाम मोड (Result Mode) * :
CGPA
अधिकतम ग्रेड पाइंट (Max Grade Point) * :
10
सीजीपीए प्राप्त किया (Obtained CGPA) * :
8
समग्र प्रतिशत (Cumulative Percentage)* :
76
12वीं या समकक्ष योग्यता विवरण (12th or equivalent Qualification Details)
योग्यता परीक्षा (Qualifying Exam) * :
The Final examination of the 10+2 system, conducted by any recognized Central/ State Board, such as the Cent
उत्तीर्ण की स्थिति (Pass Status) * :
Passed
उत्तीर्ण / उपस्थित होने का वर्ष (Year of Passing/Appearing) * :
2022
स्कूलिंग का स्थान (Place of Schooling) * :
Rural
स्कूल / कॉलेज का प्रकार (Type of School / College) * :
Government School
योग्यता परीक्षा राज्य (Qualifying Examination State) * :
DELHI
योग्यता परीक्षा जिला (Qualifying Examination District) * :
New Delhi
स्कूल बोर्ड (School Board) * :
CENTRAL BOARD OF SECONDARY EDUCATION
स्कूल / कॉलेज का नाम (School / College Name) * :
DELHI SCHOOL
स्कूल / कॉलेज का पता (School / College Address) * :
NEW DELHI
स्कूल / कॉलेज पिनकोड (School / College Pincode) * :
250102
रोल नंबर 12वीं प्रमाणपत्र के अनुसार (Roll number as per 12th certificate) * :
456789
परिणाम मोड (Result Mode) * :
Percentage
पूर्णांक (Total Marks) * :
600
प्राप्तांक (Obtain Marks) * :
480
प्रतिशत (Percentage) * :
78.00
Captcha *
5759454
I AGREE
I hereby declare that I have filled up this online application after carefully reading the Information Bulletin and fully understanding the provision/procedures mentioned therein. I further declare that all the particulars given by me in this application are true to the best of my knowledge and belief. I agree that my result may be withheld/not declared/ my candidature may stand cancelled, in case it is found at any point of time in future that false information has been furnished in this application. I shall abide by these terms and conditions as well as those laid down in the Information Bulletin, Public Notice and Advisories issued by NTA regarding this exam time to time.
Back
Save & Next
राष्ट्रीय परीक्षा एजेंसी
National Testing Agency


संयुक्त प्रवेश परीक्षा (मुख्य)
Joint Entrance Examination (Main)
JEE (Main) – 2024
राष्ट्रीय परीक्षा एजेंसी
National Testing Agency
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Payment
Twin Brother / Sister Details
Additional Details
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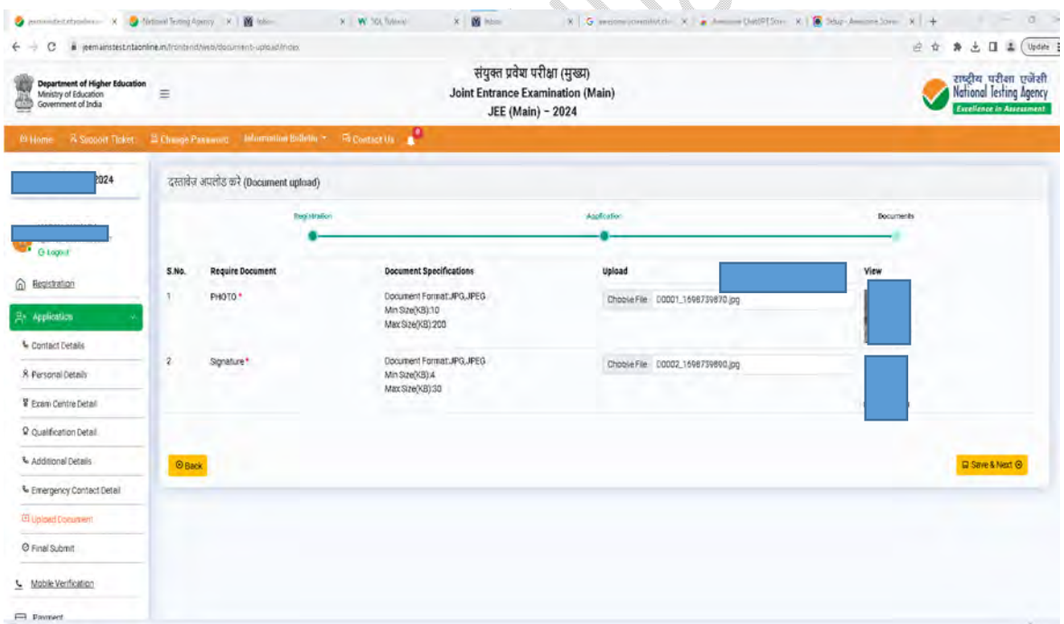
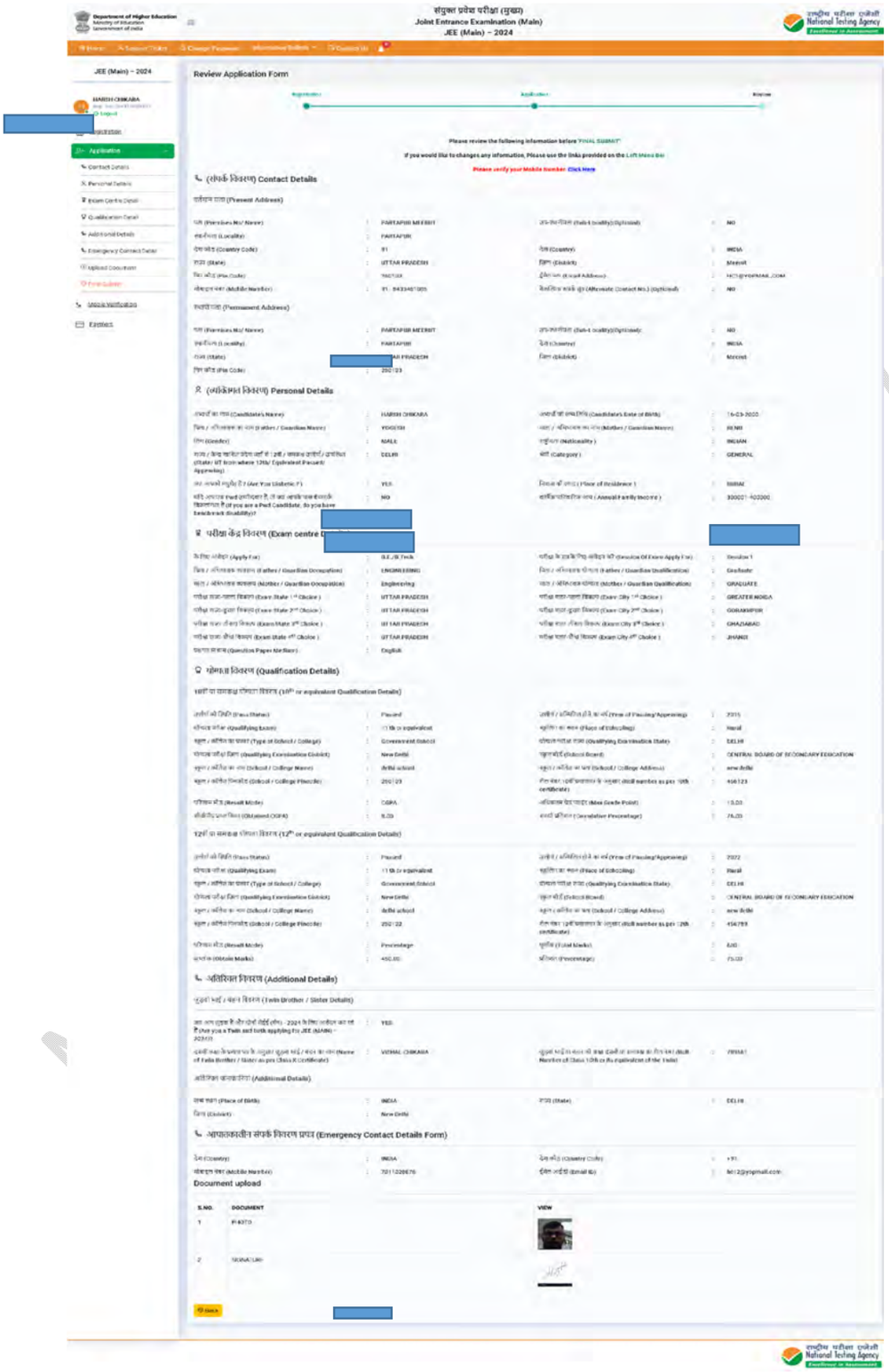
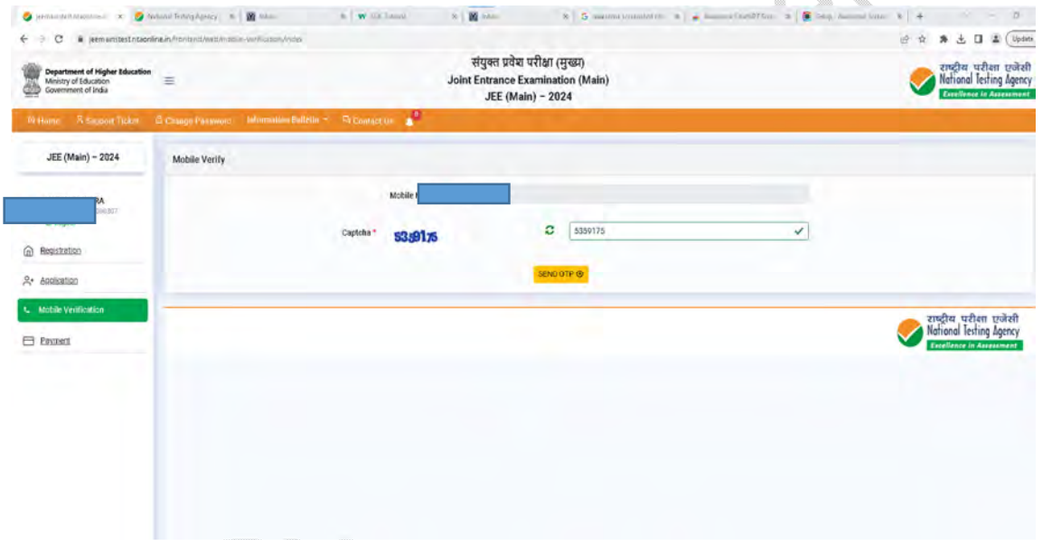

संयुक्त प्रवेश परीक्षा (मुख्य)
Joint Entrance Examination (Main)
JEE (Main) – 2024
राष्ट्रीय परीक्षा एजेंसी
National Testing Agency
Excellence in Assessment
दस्तावेज अपलोड करें (Document upload)
Registration
Application
Documents
S.No.
Require Document
Document Specifications
Upload
View
PHOTO
Signature
Choose File
Back
Save & Next


संयुक्त प्रवेश परीक्षा (मुख्य)
Joint Entrance Examination (Main)
JEE (Main) – 2024
JEE (Main) – 2024
Review Application Form
Please review the following information before 'FINAL SUBMIT'
Please verify your Mobile Number Click Here
(संपर्क विवरण) Contact Details
(व्यक्तिगत विवरण) Personal Details
परीक्षा केंद्र विवरण (Exam centre
योग्यता विवरण (Qualification Details)
अतिरिक्त विवरण (Additional Details)
आपातकालीन संपर्क विवरण प्रपत्र (Emergency Contact Details Form)
Document upload


अतिरिक्त जानकारियां (Additional Details)
जन्म स्थान (Place of Birth) : INDIA
राज्य (State) : DELHI
जिला (District) : New Delhi
आपातकालीन संपर्क विवरण प्रपत्र (Emergency Contact Details Form)
देश (Country) : INDIA
देश कोड (Country Code) : +91
मोबाइल नंबर (Mobile Number) : 7011028676
ईमेल आईडी (Email ID) : ltc12@yopmail.com
Document upload
S.NO.
DOCUMENT
VIEW
1
PHOTO
2
SIGNATURE
Back


Department of Higher Education
Ministry of Education
Government of India
संयुक्त प्रवेश परीक्षा (मुख्य)
Joint Entrance Examination (Main)
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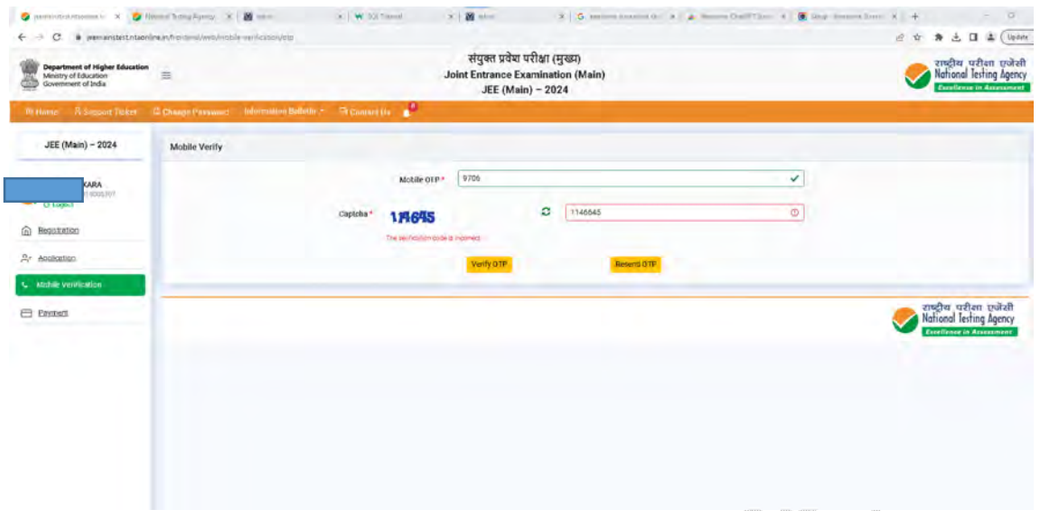
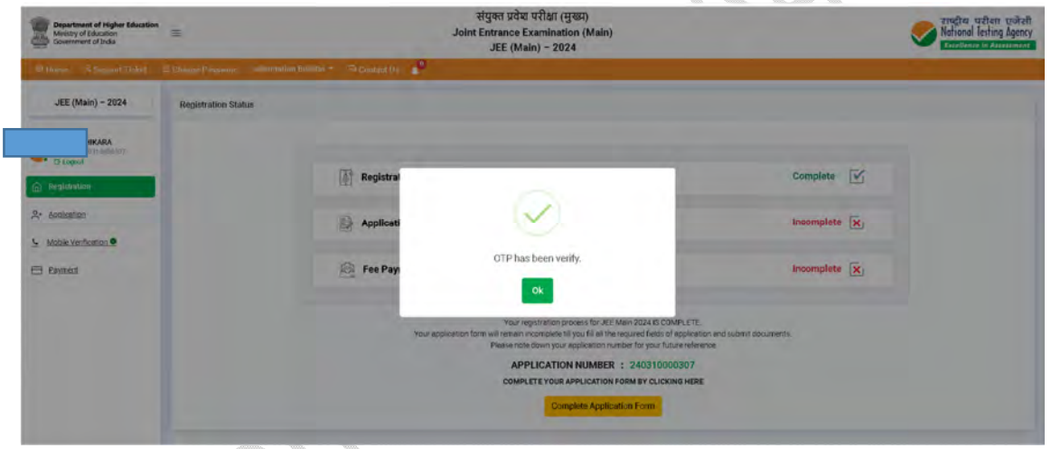
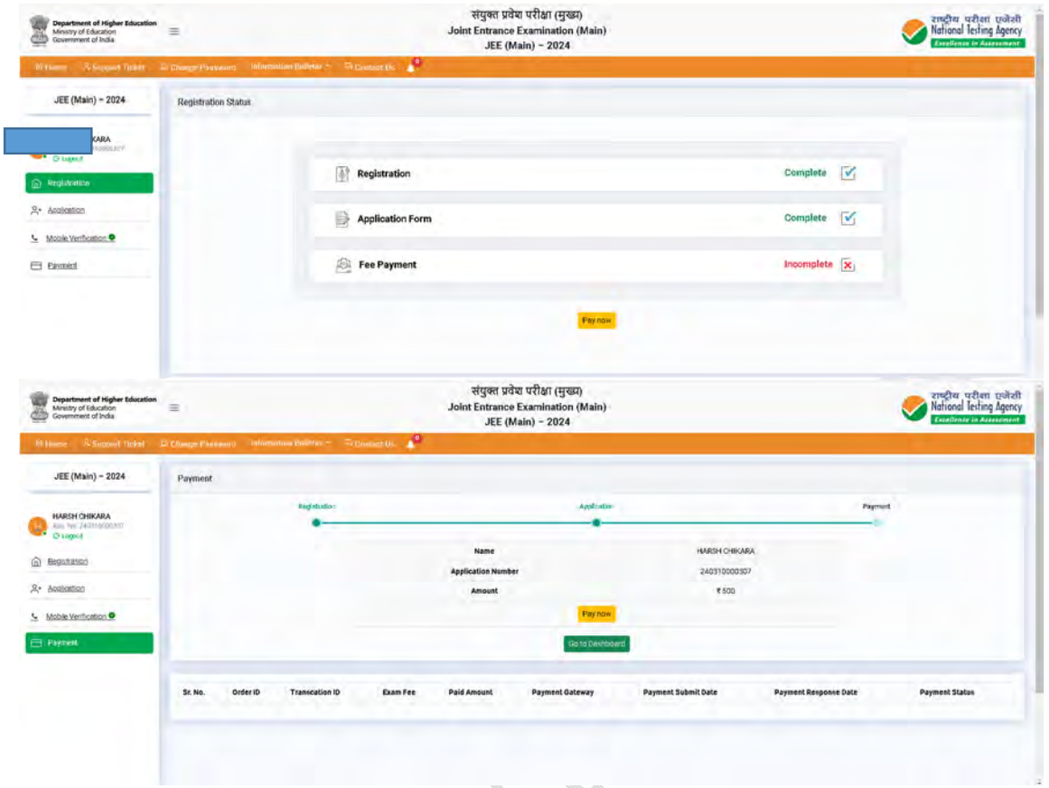
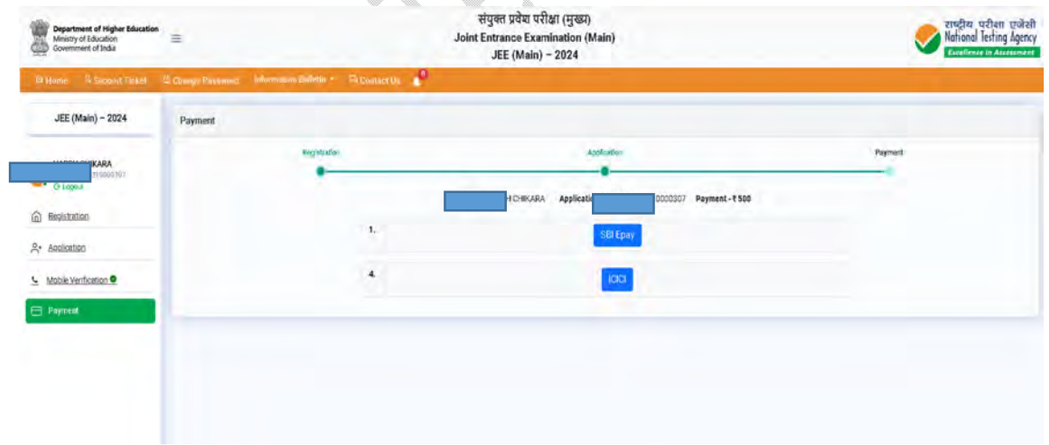
Excellence in Assessment
Home
Support Ticket
Change Password
Information Bulletin
Contact Us
JEE (Main) – 2024
Registration
Application
Mobile Verification
Payment
Mobile Verify
Mobile
Captcha *
5339175
SEND OTP


संयुक्त प्रवेश परीक्षा (मुख्य)
Joint Entrance Examination (Main)
JEE (Main) – 2024
राष्ट्रीय परीक्षा एजेंसी
National Testing Agency
JEE (Main) – 2024
Mobile Verify
Mobile OTP *
9706
Captcha *
1146645
Verify OTP
Resend OTP
Registration
Application
Mobile Verification
Payment


संयुक्त प्रवेश परीक्षा (मुख्य)
Joint Entrance Examination (Main)
JEE (Main) – 2024
राष्ट्रीय परीक्षा एजेंसी
National Testing Agency
JEE (Main) – 2024
Registration Status
Complete
Incomplete
Incomplete
OTP has been verify.
Ok
APPLICATION NUMBER : 240310000307
COMPLETE YOUR APPLICATION FORM BY CLICKING HERE
Complete Application Form


संयुक्त प्रवेश परीक्षा (मुख्य)
Joint Entrance Examination (Main)
JEE (Main) – 2024
JEE (Main) – 2024
Registration Status
Registration
Complete
Application Form
Complete
Fee Payment
Incomplete
Pay now
Payment
Name
HARSH CHIKARA
Application Number
240310000307
Amount
₹ 500
Pay now
Go to Dashboard
Sr. No.
Order ID
Transcation ID
Exam Fee
Paid Amount
Payment Gateway
Payment Submit Date
Payment Response Date
Payment Status


संयुक्त प्रवेश परीक्षा (मुख्य)
Joint Entrance Examination (Main)
JEE (Main) – 2024
JEE (Main) – 2024
Payment
Payment - ₹ 500
SBI Epay
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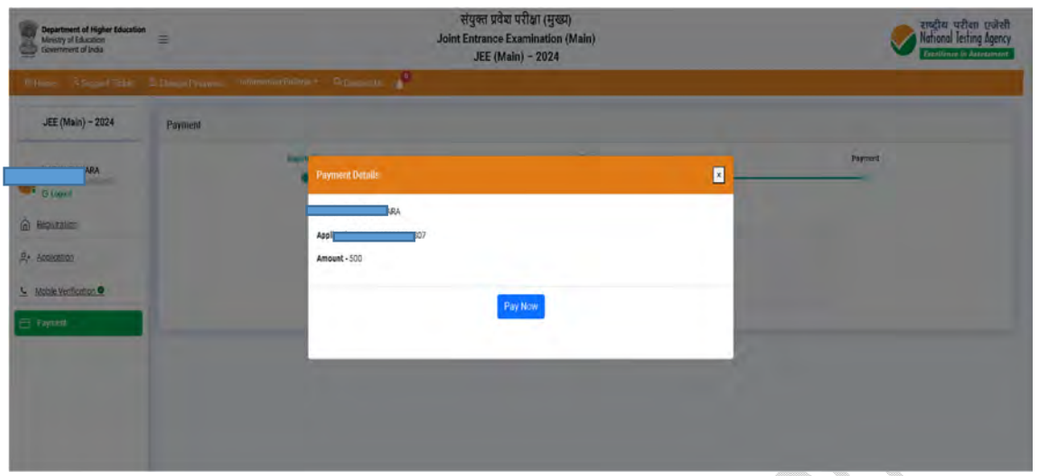
Department of Higher Education
Ministry of Education
Government of India
संयुक्त प्रवेश परीक्षा (मुख्य)
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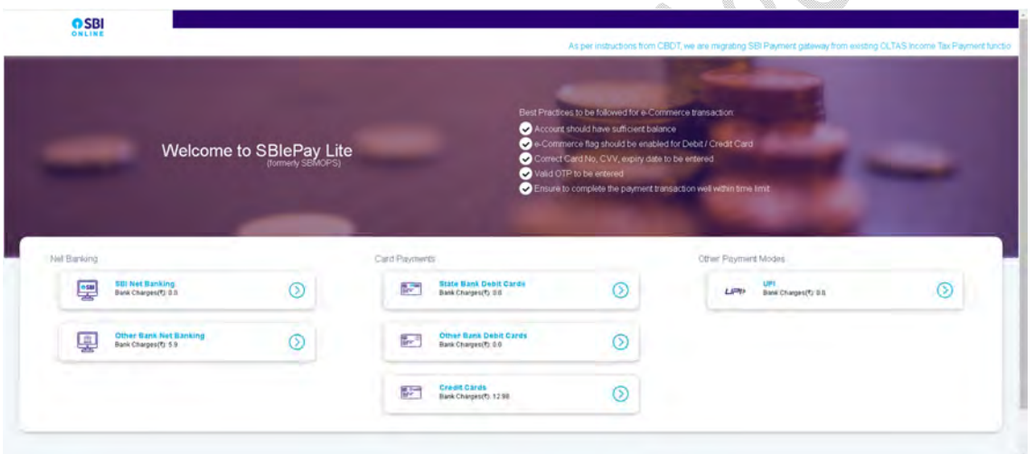
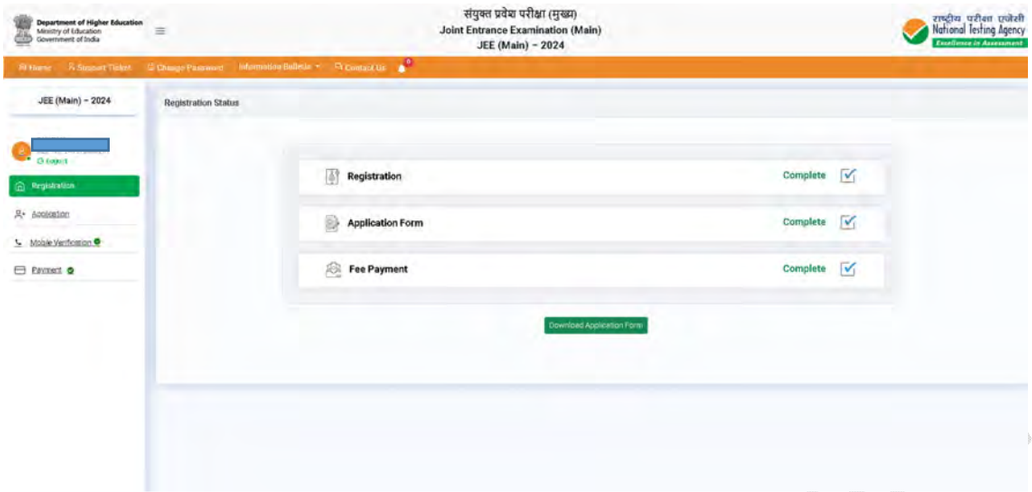
राष्ट्रीय परीक्षा एजेंसी
National Testing Agency
JEE (Main) - 2024
Payment
Payment Details
Amount - 500
Pay Now


SBI ONLINE
Welcome to SBIePay Lite
(formerly SBIMOPS)
Best Practices to be followed for e-Commerce transaction
Account should have sufficient balance
e-Commerce flag should be enabled for Debit / Credit Card
Correct Card No, CVV, expiry date to be entered
Valid OTP to be entered
Ensure to complete the payment transaction well within time limit
Net Banking
SBI Net Banking
Other Bank Net Banking
Card Payments
State Bank Debit Cards
Other Bank Debit Cards
Credit Cards
Other Payment Modes
UPI



Department of Higher Education
Ministry of Education
Government of India

संयुक्त प्रवेश परीक्षा (मुख्य)
Joint Entrance Examination (Main)
JEE (Main) – 2024

राष्ट्रीय परीक्षा एजेंसी
National Testing Agency
Excellence in Assessment

APPLICATION NUMBER	[redacted]281		

DO NOT SEND THIS PAGE TO NATIONAL TESTING AGENCY (NTA).

THE CANDIDATE IS REQUESTED TO RETAIN THE PRINTOUT OF THE CONFIRMATION PAGE FOR FUTURE REFERENCE.

व्यक्तिगत ब्योरा (PERSONAL DETAILS)

अभ्यर्थी का नाम (Candidate's N[redacted]TIK		अभ्यर्थी की जन्म तिथि (Candidate's Date of Birth)	19-01-1990
माता / अभिभावक का नाम (Mot[redacted]MI Guardian Name)		लिंग (Gender)	MALE
पिता / अभिभावक का नाम (Fath[redacted]AT Guardian Name)		राष्ट्रीयता (Nationality)	INDIAN
श्रेणी (Category)	GENERAL		
निवास की जगह (Place of Residence)	RURAL		
वार्षिक पारिवारिक आय (Annual Family Income)	300001-400000		
क्या आपको मधुमेह है ? (Are You Diabetic ?)	NO		
तैयारी का तरीका (Mode of Preparation)	SELF-STUDY		
योग्यता परीक्षा में स्कूली शिक्षा का माध्यम (Medium of schooling in qualifying exam)	NA		

के लिए आवेदन (Apply For)

के लिए आवेदन (Apply For)	B.E./B.Tech
पिता / अभिभावक व्यवसाय (Father / Guardian Occupation)	Engineering
पिता / अभिभावक योग्यता (Father / Guardian Qualification)	Graduate
माता / अभिभावक व्यवसाय (Mother / Guardian Occupation)	Engineering
माता / अभिभावक योग्यता (Mother / Guardian Qualification)	Graduate
प्रश्न पत्र माध्यम (Question Paper Medium)	English
परीक्षा के सत्र के लिए आवेदन करें (Session Of Exam Apply For)	Session 1
परीक्षा राज्य/शहर - पहली पसंद (Exam State/City - 1st Choice)	UTTAR PRADESH - AGRA
परीक्षा राज्य/शहर - दूसरी पसंद (Exam State/City - 2nd Choice)	UTTAR PRADESH - GREATER NOIDA
परीक्षा राज्य/शहर - तीसरी पसंद (Exam State/City - 3rd Choice)	UTTAR PRADESH - GHAZIPUR
परीक्षा राज्य/शहर - चौथी पसंद (Exam State/City - 4th Choice)	UTTAR PRADESH - FIROZABAD

अतिरिक्त जानकारियां (Additional Details)

क्या आप जुड़वां हैं ? (Are You Twin ?)	NO

वर्तमान पता (Present Address)

परिसर संख्या/नाम (Premises No/ Name), उपस्थानीयता (Sub-Locality), स्थानीयता (Locality)		UTTAR PARDESH , MEERUT
देश कोड (Country Code)	+91	[redacted]
जिला (District), राज्य (Satte), देश (Country)		MEERUT , UTTAR PRADESH , INDIA

स्थायी पता राज्य (Permananet Address State)

राज्य (State)	UTTAR PRADESH

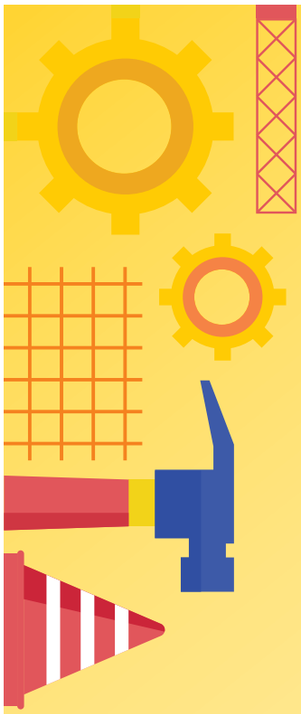
उम्मीदवार द्वारा अपलोड की गई छवियां (IMAGES UPLOADED BY THE CANDIDATE)

PHOTO	[redacted]
SIGNATURE	[redacted]

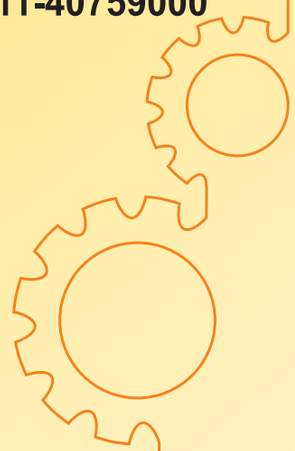
घोषणा (Declaration)

I declare that information furnished by me in the application form is true in all respect and nothing is concealed. In case any entry or information is found to be false, this shall entail automatic cancellation of my admission besides rendering me liable to such actions as deemed fit by the University. I hereby undertake that I have carefully gone through the eligibility conditions prescribed in the prospectus for the programme. I am applying after satisfying that I meet the eligibility conditions. If at any stage it is found that I do not fullfill the minimum prescribed criteria, my admission, if granted, shall stand cancelled and I shall have no right to admission whatsoever.

IP Address : 125.63.102.166 **Date of Downloading : 31-10-2023 10:58:33 AM**



011-40759000



INFORMATION BULLETIN

National Testing Agency

(An autonomous organization under the Department of Higher Education, Ministry of Education, Government of India)

Address for Correspondence
First Floor, NSIC-MDBP Building,
Okhla Industrial Estate, New Delhi - 110020

Help Line: For Technical support, contact following during working days between 10.00 a.m. to 5.00 p.m.

www.nta.ac.in
http:// jeemain.nta.ac.in

e-mail: jeemain@nta.ac.in