# JEE(Advanced) 2020

# Information Brochure



















































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# PART-I: THE INSTITUTES

#### 1. INDIAN INSTITUTES OF TECHNOLOGY

Indian Institutes of Technology (IITs) are institutions of national importance established through Acts of Parliament for fostering excellence in education. Over the years, IITs have created a world class educational platform that is dynamically sustained through quality teaching and internationally acclaimed research with excellent infrastructure and the best available minds. The faculty and alumni of IITs occupy key positions in academia and industry, both in India and abroad, and continue to make considerable impacts on all sections of the society. At present, there are twenty-three IITs across the country.

The primary objectives of IITs are as follows:

- To create an environment that encourages freedom of thought and pursuit of excellence and inculcates the necessary vision and self-discipline to achieve excellence.
- To build a solid foundation of scientific and technical knowledge and to prepare competent and motivated engineers and scientists.
- To kindle an entrepreneurial spirit among the students.
- To prepare the students to become outstanding professionals and contribute to nation-building.

Admission into various undergraduate programs (see **2. ACADEMIC PROGRAMS**) across IITs is through the Joint Entrance Examination (Advanced). The Joint Entrance Examination (Advanced) 2020 and the subsequent admission process to the IITs shall be governed by the rules contained in this document, read in conjunction with the Business Rules of the Joint Seat Allocation Authority (to be published separately).

#### ZONES, NAMES, LOCATIONS AND ABBREVIATIONS OF THE TWENTY-THREE IITS

Zone	Institute	City	Abbreviation
	Indian Institute of Technology Kharagpur	Kharagpur	IITKGP*
East Zone	Indian Institute of Technology Bhubaneswar	Bhubaneswar	IITBBS
East Zone	Indian Institute of Technology (ISM) Dhanbad	Dhanbad	IIT (ISM)
	Indian Institute of Technology Bhilai	Bhilai	IITBH
Control	Indian Institute of Technology Kanpur	Kanpur	IITK*
Central Zone	Indian Institute of Technology (BHU) Varanasi	Varanasi	IIT (BHU)
	Indian Institute of Technology Indore	Indore	IITI
North-	Indian Institute of Technology Delhi	New Delhi	IITD*
Central	Indian Institute of Technology Jammu	Jammu	IITJM
Zone	Indian Institute of Technology Jodhpur	Jodhpur	IITJ
North-	Indian Institute of Technology Guwahati	Guwahati	IITG*
East Zone	Indian Institute of Technology Patna	Patna	IITP
NI a malla	Indian Institute of Technology Roorkee	Roorkee	IITR*
North Zone	Indian Institute of Technology Mandi	Mandi	IITMandi
	Indian Institute of Technology Ropar	Ropar	IITRPR
	Indian Institute of Technology Madras	Chennai	IITM*
South	Indian Institute of Technology Hyderabad	Hyderabad	IITH
Zone	Indian Institute of Technology Palakkad	Palakkad	IITPKD
	Indian Institute of Technology Tirupati	Tirupati	IITTP
	Indian Institute of Technology Bombay	Mumbai	IITB*
West	Indian Institute of Technology Dharwad	Dharwad	IITDWD
Zone	Indian Institute of Technology Gandhinagar	Gandhinagar	IITGN
	Indian Institute of Technology Goa	Goa	IITGOA

<sup>\*</sup> Zonal Coordinating IITs to conduct JEE (Advanced) 2020 examination.

#### 2. ACADEMIC PROGRAMS

Through JEE (Advanced), IITs offer admission into undergraduate courses leading to a Bachelor's, Integrated Master's or Bachelor-Master Dual Degree in Engineering, Sciences or Architecture. Both Bachelor's and Master's degrees are awarded to candidates enrolled in the dual degree programs upon successful completion of the course curriculum. In some of the IITs, students enrolled into the 4-year Bachelor's program have the option to pursue B.Tech. (Honors) and/or B.Tech. with Minors. Dual Degree students may also pursue a Minor. Further, in some IITs B. Tech. students also have the option to pursue Interdisciplinary Dual Degree, with Bachelors in parent Department and Master's in some other Department. All the above options require fulfilment of certain academic performance related criteria. The types of academic programs offered at IITs and their minimum duration are given on the next page.

However, not all the listed programs and courses are available in all the institutes. The relevant programs and courses offered in 2019-20 are given in **Annexure-III: COURSES OFFERED IN THE ACADEMIC YEAR 2019-20.** The programs that will be offered in the academic year 2020-21 will be announced at the time of seat allocation (i.e. filling-in of choices for admission).

The programs are credit-based and thus offer the flexibility to progress at one's own pace. A minimum level of performance is essential for satisfactory progress. The medium of instruction is English in all the programs.

All Indian nationals who satisfy the eligibility criteria (see **Section 11**) can appear in JEE (Advanced). The successful candidates meeting the Class XII (or equivalent) performance criterion (see **Section 26**) are eligible for admission into IITs. While allotting seats, policies, as per Government of India rules, are followed depending on candidates' category and/or nationality.

## TYPE OF ACADEMIC PROGRAMS OFFERED AT IITS WITH THEIR MINIMUM DURATION\*

B.Tech.	Bachelor of Technology	4 years
B.S.	Bachelor of Science	4 years
B.Arch.	Bachelor of Architecture	5 years
Dual Degree B.TechM.Tech.	Dual Degree Bachelor of Technology and Master of Technology	5 years
Dual Degree B.SM.S.	Dual Degree Bachelor of Science and Master of Science	5 years
Integrated M.Tech.	Integrated Master of Technology	5 years
Integrated M.Sc.	Integrated Master of Science	5 years

<sup>\*</sup>Only those academic programs for which admission is based on JEE (Advanced) examination are shown here. These Institutes also have other academic programs, viz., B.Des., M.Tech., M.Sc., M.Sc.Tech., M.Des., Ph.D., etc. with different admission criteria.

#### 3. RESERVATION OF SEATS

Indian nationals belonging to certain categories are admitted under the seats reserved for them in accordance with the rules of the Government of India. The categories and the extent of reservation are as follows:

- General Category belonging to Economically Weaker Section (GEN-EWS) 10% of seats in every course. The benefit of reservation will be given only to those General category candidates who satisfy the condition given in the OM No. 20013/01/2018-BC-II dated January 17, 2019 issued by the Ministry of Social Justice and Empowerment.
- Other Backward Classes belonging to the Non-Creamy Layer (OBC-NCL) 27% of seats in every course. OBCs should be listed in the current updated central list of OBCs (<a href="http://www.ncbc.nic.in">http://www.ncbc.nic.in</a>). OBCs present in the state list but not covered in the central list of OBCs (as per the list in <a href="http://www.ncbc.nic.in">http://www.ncbc.nic.in</a>) are not

eligible to claim the reservation. The criteria for Non-Creamy Layer (OBC-NCL) will be as per the notification of Government of India.

Candidates belonging to the creamy layer of OBC are **NOT** entitled for reservation. Such candidates are treated as belonging to the general (GEN), i.e. unreserved category, and they will be eligible only for the OPEN seats – *the seats for which all candidates are eligible*.

- Scheduled Caste (SC) -15% of seats in every course.
- Scheduled Tribe (ST) 7.5% of seats in every course.

The benefit of reservation will be given only to those castes and tribes that are mentioned in the respective central list of corresponding states published by the Government of India (websites: <a href="http://www.socialjustice.nic.in">http://www.socialjustice.nic.in</a> and <a href="https://ncst.nic.in">https://ncst.nic.in</a>).

• Persons with Disability (PwD) - 5% seats in each of OPEN, GEN-EWS, OBC-NCL, SC and ST category seats.

Benefit would be given to those who have at least 40% impairment irrespective of the type of disability i.e., locomotor, visual or SEVERE dyslexic.

Leprosy-cured candidates who are otherwise fit to pursue the courses are also included in this sub-category.

Candidates belonging to the GEN-EWS, OBC-NCL, SC, ST and PwD categories will be declared as qualified on the basis of a relaxed criterion (see **22. RANK LISTS**).

Unfilled seats reserved under GEN-EWS and OBC-NCL category will be dereserved to OPEN category seats. However, seats remaining vacant under the SC and ST categories shall **NOT** be de-reserved to any category. The reservation for PwD candidates is horizontal and hence, unfilled seats will be de-reserved to the respective categories i.e., unfilled SC-PwD seats will be converted to the SC category seats and so on.

The category of a candidate as entered in the database, which will be made available by the JEE Apex Board [which conducts JEE (Main) 2020 examination], will be final and shall remain same in JEE (Advanced) 2020 examination and requests for change of category will NOT be entertained.

Candidates must note that the benefit of reservation will be given to them subject to verification of documents. If it is discovered at any stage that a candidate has used a false / fake / incorrect document, or has furnished false, incorrect or incomplete information, in order to avail the benefit of reservation, then such a candidate shall be excluded from all admission processes. In case such a candidate has already been given admission, then the admission shall stand cancelled.

#### 4. DEFENCE SERVICE CANDIDATES

Defence Service (DS) candidates are children of defence / paramilitary personnel killed or permanently disabled in action during war or peacetime operations. Two seats are available for preferential allotment in each Institute for DS candidates. To avail this preferential allotment, a DS candidate must be in the Common Rank List of JEE (Advanced) 2020 (see **22. RANK LISTS).** 

#### 5. FOREIGN NATIONALS

Candidates who are **NOT** citizens of India (by birth or naturalized) and **have studied** (**are studying**) **abroad at 10+2 level or equivalent** at the time of registering for JEE (Advanced) 2020, are treated as foreign nationals. Seats allotted to such foreign nationals are supernumerary with a cap of 10% of total number of seats in every course.

Foreign nationals are outside the ambit of reservation of seats under the GEN-EWS, OBC-NCL, SC, ST and PwD (Persons with Disability) categories as specified herein.

These candidates are **NOT** required to write JEE (Main) 2020 and may register for JEE (Advanced) 2020 directly subject to fulfilment of other eligibility criteria. The relevant information for foreign candidates is available at the following link: <a href="https://jeeadv.ac.in/foreign.php">https://jeeadv.ac.in/foreign.php</a>

The seats allotted to candidates who **have studied** (are studying) in India at 10+2 level or equivalent AND are not citizens of India (by birth or naturalized) BUT are OCI/PIO card holders (OR their parents are OCI/PIO card holders OR their parents are Indian nationals) at the time of registering for JEE(Advanced) 2020, will be under OPEN category, but not supernumerary. These candidates are outside the ambit of reservation of seats under the GEN-EWS, OBC-NCL, SC, ST and PwD categories as specified herein. These candidates are also required to write JEE(Main) 2020 and qualify for JEE(Advanced) 2020 under the OPEN category.

However, the seats allotted to candidates who have studied (are studying) in India at 10+2 level or equivalent AND are not citizens of India (by birth or naturalized) AND are NOT OCI/PIO card holders (AND their parents are also NOT OCI/PIO card holders AND their parents are also NOT Indian nationals) at the time of registering for JEE(Advanced) 2020, will be supernumerary. These candidates are outside the ambit of reservation of seats under the GEN-EWS, OBC-NCL, SC, ST and PwD categories as specified herein. These candidates are also required to write JEE(Main) 2020 and qualify for JEE(Advanced) 2020 under the OPEN category.

#### 6. SUPERNUMERARY SEATS FOR FEMALE CANDIDATES

A decision has been taken at the level of the IIT Council to, inter alia, improve the gender balance in the undergraduate programs at the IITs to at least 20% in 2020-21

by creating supernumerary seats specifically for female candidates, without any reduction in the number of seats that was made available to gender neutral candidates in the previous academic year (i.e. academic year 2019-2020). Accordingly, to achieve this objective, and in accordance with the directions of the Ministry of Human Resource Development, Government of India, supernumerary seats will thus be created and offered to female candidates for improving the gender balance in the undergraduate programs in IITs. These supernumerary seats will be offered (a) to only those female candidates who are declared qualified in JEE (Advanced) - 2020, and, (b) strictly based on the performance in JEE (Advanced) - 2020.

The reservation policy as per Government of India norms as existing at present will be applicable to these supernumerary seats as well. The detailed procedure for implementation of the above shall be set out in the Business Rules of the Joint Seat Allocation Authority (JoSAA), 2020.

#### 7. OTHER INSTITUTES

Some centrally funded institutes have used JEE (Advanced) ranks in the past. These include:

- Indian Institute of Science, Bangalore (IISc)
- Indian Institutes of Science Education and Research (IISERs) located in Berhampur, Bhopal, Kolkata, Mohali, Pune, Thiruvananthapuram and Tirupati
- Indian Institute of Space Science and Technology (IIST), Thiruvananthapuram
- Rajiv Gandhi Institute of Petroleum Technology (RGIPT), Rae Bareli
- Indian Institute of Petroleum & Energy, Visakhapatnam

Candidates should contact these institutes directly for additional information regarding admission.

# PART-II: THE EXAMINATION

#### 8. THE EXAMINATION

The Joint Entrance Examination (Advanced) 2020 [JEE (Advanced) 2020] will be conducted by the seven Zonal Coordinating (ZC) IITs under the guidance of the Joint Admission Board (JAB) 2020. The performance of a candidate in JEE (Advanced) 2020 will form the basis for admission to the Bachelor's, Integrated Master's and Dual Degree programs (entry at the 10+2 level) in all the IITs in the academic year 2020-21. The decisions of the JAB 2020 will be final in all matters related to JEE (Advanced) 2020 and admission to IITs in the academic year 2020-21.

#### 9. SCHEDULE OF JEE (ADVANCED) 2020

The examination consists of two papers (Paper 1 and Paper 2) of three hours duration each. **Both the papers are compulsory.** The examination will be held as per the following schedule:

Date of Examination	Sunday, September 27, 2020
Paper 1	09:00 IST to 12:00 IST
Paper 2	14:30 IST to 17:30 IST

It may be noted that the schedule will remain the same even if September 27, 2020 is declared a public holiday.

All PwD candidates are eligible for one hour compensatory time, i.e., the end time will be 13:00 IST for Paper 1 and 18:30 IST for Paper 2. Please see clause 15 for additional information.

#### 10. JEE (MAIN) 2020

Indian nationals who wish to appear in JEE (Advanced) 2020 must write B.E./B.Tech. paper of JEE (Main) 2020 which was/will be held in the month of January 2020 and September 2020. Further information about JEE (Main) 2020 may be obtained from the website <a href="https://jeemain.nta.nic.in">https://jeemain.nta.nic.in</a>.

# 11. ELIGIBILITY CRITERIA FOR INDIAN NATIONALS FOR APPEARING IN JEE (ADVANCED) 2020

All the candidates <u>must simultaneously fulfil each and every one of the following five criteria</u> to appear in JEE (Advanced) 2020.

<u>Criterion 1 – Performance in JEE (Main) 2020</u>: Candidates should be among the top 2,50,000\* successful candidates (including all categories) in B.E./B.Tech. Paper of JEE (Main) 2020.

The percentages of various categories of candidates to be shortlisted are: 10% for GEN-EWS, 27% for OBC-NCL, 15% for SC, 7.5% for ST and the remaining 40.5% is OPEN for all. Within each of these five categories, 5% horizontal reservation is available for PwD candidates.

The following table shows the order to be followed while choosing top 2,50,000\* candidates in various categories based on the performance in B.E./B.Tech. Paper of JEE (Main) 2020.

Category-wise distribution of top 2,50,000\* candidates (Criterion 1)

Order	Category	Number of "Top" candidates		
1	OPEN	96187	101250	
2	OPEN-PwD	5063	101250	
3	GEN-EWS	23750	25000	
4	GEN-EWS-PwD	1250	25000	
5	OBC-NCL	64125	67500	
6	OBC-NCL-PwD	3375		
7	SC	35625	27500	
8	SC-PwD	1875	37500	
9	ST	17812	10750	
10	ST-PwD	938	18750	

<sup>\*</sup>The total number of candidates can be slightly greater than 2,50,000 in the presence of "tied" ranks/scores in any category.

<u>Criterion 2 – Age limit</u>: Candidates should have been born on or after October 1, 1995. Five years relaxation is given to SC, ST and PwD candidates, i.e., these candidates should have been born on or after October 1, 1990.

<u>Criterion 3 – Number of attempts</u>: A candidate can attempt JEE (Advanced) maximum of two times in two consecutive years.

<u>Criterion 4 – Appearance in Class XII (or equivalent) examination</u>: A candidate should have appeared for the Class XII (or equivalent) examination for the first time in either 2019 or 2020 with Physics, Chemistry and Mathematics as compulsory subjects.

However, if the examination Board of Class XII (or equivalent) declares the results for the academic year 2017-18 after June 2018, then the candidates of that board who appeared for their Class XII exam in 2018 are also eligible to appear in JEE (Advanced) 2020, provided they meet the other eligibility criteria. In case, the examination Board of Class XII (or equivalent) declared the results for the academic year 2017-18 before June 2018 but the result of a particular candidate was withheld, then the candidate will not be eligible to appear in JEE (Advanced) 2020.

<u>Criterion 5 – Earlier admission at IITs</u>: A candidate should **NOT** have been admitted in an IIT irrespective of whether or not he/she continued in the program **OR** accepted an IIT seat by reporting at a reporting centre in the past. Candidates whose admission at IITs was cancelled after joining any IIT are also **NOT** eligible to appear in JEE (Advanced) 2020.

Candidates who have been admitted to a preparatory course in any of the IITs for the first time in 2019 can appear in JEE (Advanced) 2020.

The candidates who paid seat acceptance fee in 2019 but (i) did not report at any reporting centre OR, (ii) withdrew before the last round of seat allotment, OR, (iii) had their seat cancelled (for whatever reason) before the last round of seat allotment for IITs, during the joint seat allocation in 2019, are eligible to appear in JEE (Advanced) 2020.

However, in all of the above cases, the candidate is also required to fulfil the conditions mentioned from Criterion 1 to Criterion 4.

### Eligibility criteria for foreign candidates can be found at: https://jeeadv.ac.in/foreign.php

#### 12. REGISTRATION FOR JEE (ADVANCED) 2020

Eligibility: All Indian nationals must simultaneously satisfy each and every one of the five eligibility criteria [see 11. ELIGIBILITY CRITERIA FOR APPEARING IN JEE (ADVANCED) 2020]. Registration will be cancelled if, at a later date, it is found that the candidate does not meet any of these five eligibility criteria.

**Registration Portal:** Candidates MUST register for appearing in JEE (Advanced) 2020. Registration is only through the online registration portal where detailed instructions for registration will be provided.

For online registration	https://jeeadv.ac.in	
Online registration begins	Saturday, September 12, 2020 (Afternoon)	
Online registration closes	Thursday, September 17, 2020 17:00 IST	
Last date for fee payment for registered candidates	Friday, September 18, 2020 upto 17:00 IST	

**Registration Procedure:** The procedure consists of three steps.

Step-1: After login, provide the basic data and the choices of the cities for the examination [See 19. CITIES AND TOWNS WHERE JEE (ADVANCED) 2020 WILL BE HELD]. The candidate will have the option of adding an additional mobile phone number and an additional email id, in addition to the number(s) provided during JEE (Main) 2020 registration. Please note that all the correspondence regarding JEE (Advanced) 2020 will be sent to the registered mobile number by SMS and/or to the registered email id by email. Candidates are therefore, advised to ensure that the correct mobile number and email address are entered by them.

- Step-2: Upload the scanned copies of all requisite documents [See 15. DOCUMENTS REQUIRED FOR REGISTRATION].
- Step-3: Pay registration fee [See 13. REGISTRATION FEE FOR JEE (ADVANCED) 2020]. Registration fee is NEITHER refundable NOR transferable.

Foreign candidates may check the link: <a href="https://jeeadv.ac.in/foreign.php">https://jeeadv.ac.in/foreign.php</a>

#### 13. REGISTRATION FEE FOR JEE (ADVANCED) 2020

	Female Candidates (all categories)	INR 1400
Indian Nationals	SC, ST, PwD Candidates	INR 1400
	All Other Candidates	INR 2800
Equaign Nationals	Candidates from SAARC countries	USD 75
Foreign Nationa	Candidates from Non-SAARC countries	USD 150

- The registration fee shown above DOES NOT INCLUDE service charges, processing fees and any other charges that the payment gateway/banks may levy.
- Detailed instructions related to the payment of registration fee will be provided at the time of JEE (Advanced) 2020 registration on the online registration portal.

#### 14. SERVICES OF A SCRIBE

• The services of a scribe (amanuensis) are available ONLY to those PwD candidates who are visually impaired OR dyslexic (severe) OR have disability in the upper limbs or have lost fingers / hands thereby preventing them from properly operating the Computer Based Test platform as per office

memorandum of the Ministry of Social Justice and Empowerment F.No. 34-02/2015-DD-III dated August 29, 2018. PwD candidates who desire to avail the services of a scribe need to opt for this during the online registration of JEE (Advanced) 2020.

- To avail the services of scribe, the candidate should request the Chairman, JEE (Advanced) 2020, of the respective zonal coordinating IIT in the prescribed format (FORM-SCRIBE). The requisition, along with a copy of the PwD certificate (FORM-PwD [II/III/IV, whichever is applicable]) OR copy of the certificates of Dyslexic candidate (FORM- DYSLEXIC 1 and DYSLEXIC 2), whichever is applicable, must be uploaded at the time of online registration for JEE (Advanced) 2020. The formats for the request letter and PwD/Dyslexic certificate are given in **Annexure-II: CERTIFICATE FORMATS**.
- Zonal coordinating IITs will make arrangements, through the Centre Head (CH)/Deputy Centre Head (DCH) of the Examination Centre, to provide a panel of scribes (amanuenses). Scribes will be students of Class XI from the science stream with Mathematics as one of the subject. The PwD/dyslexic (severe) candidate has to choose a scribe from this panel. The candidates will NOT be allowed to bring their own scribes.
- The candidate will be allowed to meet the panel of scribes one day prior to the
  examination i.e., on Saturday, September 26, 2020, in the presence of the IIT
  Representatives (IRs), Centre Head/Deputy Centre Head (CH/DCH) and an
  Invigilator, and choose her/his scribe.
- If it is found at any stage that a candidate has used the services of a scribe but does not possess the extent of disability that warrants the use of a scribe, she/he will be excluded from the process of evaluation, ranking and admission. In case such a candidate has already been admitted to any IIT, her/his admission will be cancelled.

#### 15. DOCUMENTS REQUIRED FOR REGISTRATION

Given below is a list of certificates whose scanned copies are to be uploaded at the time of online registration for JEE (Advanced) 2020. The formats of the certificates, which are indicated in the brackets, are given in **Annexure-II**:

#### CERTIFICATE FORMATS.

#### All candidates

- (1) Class X certificate if the date of birth is mentioned in it OR birth certificate.
- (2) Class XII (or equivalent examination) certificate (for those who appeared for this examination in 2019/2020 or whose Board declared the Class XII (or equivalent examination) result after June 2018).
- (3) If the name is not same as in the Class X certificate, gazette notification showing the change of name.

#### For Candidates seeking admission under the GEN-EWS category

GEN-EWS certificate (FORM-GEN-EWS) should have been issued on or after April 01, 2020 in consonance with the latest guidelines of the Government of India. If any GEN-EWS candidate fails to collect the GEN-EWS certificate (issued on or after April 01, 2020) before online registration, he/she may upload a declaration (Declaration in Lieu of GEN-EWS Certificate) to that effect.

#### For Candidates seeking admission under the OBC-NCL category

OBC-NCL certificate (FORM-OBC-NCL) should have been issued on or after April 01, 2020 in consonance with the latest guidelines of the Government of India. If any OBC-NCL candidate fails to collect the OBC-NCL certificate (issued on or after April 01, 2020) before online registration, he/she may upload a declaration (Declaration in Lieu of OBC-NCL

Certificate) to that effect. Visit <a href="http://www.ncbc.nic.in">http://www.ncbc.nic.in</a> for latest guidelines and updates on the Central List of State-wise OBCs.

#### For Candidates seeking admission under the SC or ST category

Caste (for SC) or tribe (for ST) certificate (FORM-SC/ST), as per the latest guidelines of the Government of India.

#### For Candidates seeking admission under the PwD category

Physical Disability certificate (FORM-PwD II/III/IV whichever is applicable]) issued by the notified medical authority.

Dyslexic candidate needs to submit FORM-DYSLEXIC 1 and 2 instead of FORM-PwD. The certificate must mention 'SEVERE' under Dyslexia category to enable the candidate to get the benefit of PwD category.

Individual IITs constitute medical boards at the time of admission to test the candidate's level of disability. The opinion of such medical board shall be final and on this basis, the benefit of PwD category may be allowed or withheld.

#### For Candidates needing the services of a scribe

Request letter to the Chairman of the respective zonal coordinating IIT (FORM-SCRIBE).

#### For Candidates seeking admission under the DS category

Certificate (FORM-DS) issued by a competent authority in the Directorate of Resettlement and Rehabilitation, New Delhi under the Ministry of Defence or the Ministry of Home Affairs, Govt. of India.

#### Foreign candidates may check the link:

https://jeeadv.ac.in/foreign.php

For candidates whose Class XII examination Board is outside India or not listed in Section 25 (See 25. EXAMINATIONS CONSIDERED AS EQUIVALENT TO CLASS XII), a certificate from the Association of Indian Universities to the effect that the examination qualified by the candidates is equivalent to the Class XII examination.

#### 16. ADMIT CARD

• Candidates who successfully registered for JEE (Advanced) 2020 can download the admit card from the online registration portal: https://jeeadv.ac.in

Portal for downloading admit card	https://jeeadv.ac.in	
	Monday, September 21, 2020, 10:00 IST	
Admit card downloading schedule	to	
	Sunday, September 27, 2020, 09:00 IST	

- The admit card will bear the following details of the candidate: Name, Roll number for JEE (Advanced) 2020, photograph, signature, date of birth, address for correspondence and category.
- In addition, the admit card will have the name and address of the examination centre allotted to the candidate.
- Candidates should carefully examine the entries in the admit card and in case of any discrepancy, contact the Chairman, JEE (Advanced) 2020 of the respective zonal coordinating IIT.
- In case of any problem in downloading the admit card, the candidate should immediately contact the Chairman, JEE (Advanced) 2020 of their respective zonal coordinating IIT.
- A printout of the downloaded admit card along with an original and valid photo identity card (any one of Aadhaar, School ID, Driving License, Voter ID, Passport, PAN Card) MUST be produced at the time of examination, without which, the candidate will not be allowed to appear for the examination.

#### 17. QUESTION PAPERS

- JEE (Advanced) 2020 will consist of two question papers: Paper 1 and Paper 2 of three hours duration each. **Both papers are compulsory.**
- Each question paper will consist of three separate sections, viz., Physics, Chemistry and Mathematics. The syllabi are given in **Annexure-I: SYLLABI**.
- The question papers will consist of questions designed to test comprehension, reasoning and analytical ability of candidates.
- Negative marks may be awarded for incorrect answers for some of the questions. Details of the marking scheme will be provided in the "Instructions to Candidates" section at the time of examination.
- The candidates must carefully read and adhere to the detailed instructions given in the question papers available at the time of examination.
- The question papers will be in English and Hindi languages. The candidates will have the option to choose (and also switch between) the preferred language anytime during the examination.
- Although sufficient care will be taken for the correctness of questions, in the
  event that a question(s) needs to be dropped, full marks for that question(s) will
  be awarded to ALL candidates.

#### 18. MODE OF EXAMINATION

The JEE (Advanced) 2020 examination will be conducted only in the Computer Based Test (CBT) mode. To attain familiarity with the CBT mode candidates are advised to take mock tests available on the website <a href="https://jeeadv.ac.in">https://jeeadv.ac.in</a>.

Every candidate will be allotted a computer terminal (node) at the test centre. The welcome login screen for the CBT will display photograph of the candidate allotted the particular computer. For login, the candidate will have to enter his/her JEE

(Advanced) 2020 roll number as login-id and enter his/her date of birth as password (e.g. if the candidate's date of birth is April 6, 2001, the password he/she need to enter would be 06042001 (**ddmmyyyy** format)).

After login, the candidate would be able to see the detailed instructions for the examination. Candidates are advised to go through the instructions very carefully regarding the type of questions and marking scheme. At the designated time of start of the examination, the candidates will be able to proceed and see the questions on the computer screen. Candidates will have the option to choose (and also switch/toggle between) his/her preferred language (English or Hindi) during the entire period of the examination.

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 on the chosen option(s) using the computer mouse. Candidates will have the option to change/modify answers already entered anytime during the entire duration of the examination.

In case the computer/mouse allotted to any candidate malfunctions anytime 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 of 3 hours (180 minutes) [4 hours (240 minutes) for PwD candidates] to answer the questions in each paper.

#### **18.1 General Instructions for CBT:**

- 1. Total duration of each paper of JEE (Advanced) 2020 examination is of 3 hours (180 minutes) [4 hours (240 minutes) for PwD candidates] duration.
- 2. The on-screen computer clock counter of every candidate will be set at the server. The countdown timer in the top right side of 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. Candidate will not be required to end or submit the examination.

- 3. The Question Palette displayed on the right side of screen will show the status of each question using one of the following symbols:
  - 1 You have not visited the question yet.
  - You have not answered the question.
  - You have answered the question.
  - 4 You have NOT answered the question, but have marked the question for review.
  - The question(s) "Answered and Marked for Review" will be considered for evaluation.
- 4. The "Marked for Review" status for a question indicates that candidate would like to have a relook at that question again. A candidate has the option of answering a question and simultaneously marking the question "Marked for Review"; for those cases the 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.
- 5. Candidate can click on the ">" arrow which appears to the left of question palette to collapse the question palette thereby maximizing the question viewing window. To view the question palette again, candidate can click on "<" which appears on the right side of question window.
- 6. Candidate can change the preferred language (English or Hindi) for displaying the questions, anytime during the duration of the examination, by clicking on the dropdown menu in "View In" icon provided on the right side of the screen.

- 7. Candidate 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.
- 8. The full paper can be viewed by clicking the "Question Paper" icon on the top right corner of the screen.
- 9. Scribble Pads for doing rough work/calculations will be provided to the candidates at the start of each paper. The Scribble Pads would have a Header page for the candidate to write down his/her Name and Registration Number. Candidates are allowed to take their signed Scribble Pads back with them at the end of each paper of the examination.

#### 18.2 Navigating to a Question:

To navigate between sections of the question paper, candidate needs to click on the preferred section from all the displayed sections.

To navigate between questions within a section, 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 & Next" to save the answer of any question. Clicking on "Save & 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 & Next" to mark a question for review (without answering it) and proceed to the next question.

#### 18.3 Answering a Question:

1. 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 & Next" button.
- d) To mark the question for review (without answering it), click on the "Mark for Review & Next" button.
- 2. Procedure for answering questions that require inputs from on-screen virtual keyboard (numeric or otherwise):
  - a) Candidate will have to use the on-screen virtual keyboard (that would be displayed just below the question statement of these type of questions) and the attached computer mouse to enter his/her answer in the space provided for answer.
  - b) The answer can be changed, if required, anytime during the test. To save the answer, the candidate MUST click on the "Save & Next" button.
  - c) To mark the question for review (without answering it), click on the "Mark for Review & Next" button.

Candidate will have the option to change previously saved answer of 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.

#### 18.4 Navigating through sections:

- 1. 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 candidate is currently viewing will be highlighted.
- 2. After clicking the "Save & Next" button on the last question for a section, candidate will automatically be taken to the first question of the next section.
- 3. Candidate can shuffle between sections and questions within sections anytime during the examination as per the convenience only during the time stipulated.
- 4. Candidate can view the corresponding section summary as part of the legend that appears in every section above the question palette.

#### 19. CITIES AND TOWNS WHERE JEE (ADVANCED) 2020 WILL BE HELD

JEE (Advanced) 2020 will be held in selected cities and towns in India. Candidates have to compulsorily choose eight (8) cities / towns of their choice at the time of online registration. Efforts will be made to allot the city / town from among the candidate's choice but a different city / town may be allotted under exceptional circumstances. Request for change of city / town will NOT be entertained under any circumstances. A tentative list of cities/towns where JEE (Advanced) 2020 examination will be held is given in the following table. The final list of examination cities/towns would be notified in the registration portal before the start of the online JEE (Advanced) 2020 registration.

#### TENTATIVE LIST OF CITIES AND TOWNS FOR JEE (ADVANCED) 2020

City/Town	Code
IIT BOMBAY ZOI	NE
GOA	
Panaji	101
GUJARAT	
Ahmedabad	102
Anand	103
Bhavnagar	104
Gandhinagar	105
Himatnagar	106
Mehsana	107
Rajkot	108
Surat	109
Vadodara	110
Vapi	111
KARNATAKA	•
Belgaum	112
Bengaluru	113
Davangere	114
Dharwad	115
Gulbarga	116
Hubali	117
Mangalore	118
Mysore	119
Shimoga	120
Tumkur	121
Udupi/Manipal	122
MAHARASHTRA	
Ahmednagar	123
Akola	124
Amravati	125
Aurangabad	126
Chandrapur	127
Jalgaon	128
Kolhapur	129
Mumbai	130
Nagpur	131
Nanded	132
Nashik	133
Navi Mumbai	134
PALGHAR	135
Pune	136
Raigarh	137
Sangli	138
Satara	139
Solapur	140
Thane	141
Vasai	141
Virar	143
viiai	143

OWNS FOR JEE (ADVANCED) 202		
City/Town	Code	
IIT DELHI ZONE		
DELHI NCR	Т	
Delhi (East)	201	
Delhi (North)	202	
Delhi (South)	203	
Delhi (West)	204	
Faridabad	205	
Greater Noida	206	
Gurugram	207	
Noida	208	
JAMMU and KASHMIR		
Jammu	209	
Srinagar	210	
RAJASTHAN		
Ajmer	211	
Alwar	212	
Bikaner	213	
Jaipur	214	
Jodhpur	215	
Kota	216	
Sikar	217	
Sri Ganganagar	218	
Udaipur	219	
-		
IIT GUWAHATI ZO	NE	
ARUNACHAL PRADESH		
Naharlagun	301	
ASSAM		
Dibrugarh	302	
Guwahati	303	
Jorhat	304	
Silchar	305	
Tezpur	306	
<b>.</b>		
BIHAR		
Arrah	307	
Aurangabad	308	
Bhagalpur	309	
Bihar Sharif	310	
Chhapra	311	
Darbhanga	312	
Gaya	313	
Muzaffarpur	314	
Patna	315	
Purnea	316	
Samastipur	317	
Samasupui	31/	

o: /=	
City/Town	Code
MANIPUR	240
Imphal	318
MEGHALAYA	
Shillong	319
Silliong	319
MIZORAM	
Aizawl	320
7 (120 44)	320
NAGALAND	
Dimapur	321
<b>'</b>	
SIKKIM	l .
Gangtok	322
TRIPURA	
Agartala	323
WEST BENGAL	T
Siliguri	324
IIT KANPUR ZON	IE
MADHYA PRADESH	
Bhopal	401
Indore	402
Jabalpur	403
Sagar	404
Satna	405
Ujjain	406
UTTAR PRADESH	
Faizabad	407
Gorakhpur	408
Jhansi	409
Kanpur	410
Lucknow	411
Prayagraj (Allahabad)	412
Varanasi	413
IIT KHARAGPUR ZO	ONE
ANDAMAN & NICOBAR	SLANDS
Port Blair	501
ANDHRA PRADESH	ı
Srikakulam	502
Visakhapatnam	503
Vizianagaram	504
CHHATTISGARH	T =
Bhilai	505
Bilaspur	506

#### © JEE (Advanced) 2020 - Information Brochure

City/Town	Code	
Raipur	507	
JHARKHAND		
Bokaro	508	
Dhanbad	509	
Hazaribagh	510	
Jamshedpur	511	
Ranchi	512	
ODISHA		
Berhampur (Ganjam)	513	
Bhubaneswar	514	
Cuttack	515	
Rourkela	516	
Sambalpur	517	
WEST BENGAL		
Asansol	518	
Baharampur	519	
(Murshidabad)	319	
Durgapur	520	
Kalyani (Nadia)	521	
Kharagpur	522	
Kolkata (North)	523	
KOIKata (NOITII)	323	
Kolkata (South)	524	
Kolkata (South)	524	
Kolkata (South)  IIT MADRAS ZOI	524	
Kolkata (South)  IIT MADRAS ZOI ANDHRA PRADESH	524 NE	
Kolkata (South)  IIT MADRAS ZOI  ANDHRA PRADESH  Amalapuram	524 NE 601	
IIT MADRAS ZOI ANDHRA PRADESH Amalapuram Ananthapur	524 NE 601 602	
Kolkata (South)  IIT MADRAS ZOI ANDHRA PRADESH Amalapuram Ananthapur Bhimavaram	524 NE 601 602 603	
Kolkata (South)  IIT MADRAS ZOI ANDHRA PRADESH Amalapuram Ananthapur Bhimavaram Chirala	524 NE 601 602 603 604	
Kolkata (South)  IIT MADRAS ZOI ANDHRA PRADESH  Amalapuram Ananthapur Bhimavaram Chirala Chittoor	524 NE 601 602 603 604 605	
Kolkata (South)  IIT MADRAS ZOI ANDHRA PRADESH  Amalapuram  Ananthapur  Bhimavaram  Chirala  Chittoor  Eluru	524 601 602 603 604 605 606	
IIT MADRAS ZOI ANDHRA PRADESH Amalapuram Ananthapur Bhimavaram Chirala Chittoor Eluru Gudlavalleru	524 601 602 603 604 605 606 607	
IIT MADRAS ZOO ANDHRA PRADESH Amalapuram Ananthapur Bhimavaram Chirala Chittoor Eluru Gudlavalleru Gudur	601 602 603 604 605 606 607 608	
IIT MADRAS ZOI ANDHRA PRADESH Amalapuram Ananthapur Bhimavaram Chirala Chittoor Eluru Gudlavalleru Gudur Guntur	524 601 602 603 604 605 606 607 608 609	
IIT MADRAS ZOI ANDHRA PRADESH Amalapuram Ananthapur Bhimavaram Chirala Chittoor Eluru Gudlavalleru Gudur Guntur Kadapa	524 601 602 603 604 605 606 607 608 609 610	
IIT MADRAS ZOI ANDHRA PRADESH Amalapuram Ananthapur Bhimavaram Chirala Chittoor Eluru Gudlavalleru Gudur Guntur Kadapa Kakinada	601 602 603 604 605 606 607 608 609 610 611	
IIT MADRAS ZOO ANDHRA PRADESH Amalapuram Ananthapur Bhimavaram Chirala Chittoor Eluru Gudlavalleru Gudur Guntur Kadapa Kakinada Kanchikacharla	524 601 602 603 604 605 606 607 608 609 610 611 612	
IIT MADRAS ZOI ANDHRA PRADESH Amalapuram Ananthapur Bhimavaram Chirala Chittoor Eluru Gudlavalleru Gudur Guntur Kadapa Kakinada Kanchikacharla Kavali	524 601 602 603 604 605 606 607 608 609 610 611 612 613	
IIT MADRAS ZOI ANDHRA PRADESH Amalapuram Ananthapur Bhimavaram Chirala Chittoor Eluru Gudlavalleru Gudur Guntur Kadapa Kakinada Kanchikacharla Kavali Kurnool	601 602 603 604 605 606 607 608 609 610 611 612 613 614	
IIT MADRAS ZOO ANDHRA PRADESH Amalapuram Ananthapur Bhimavaram Chirala Chittoor Eluru Gudlavalleru Gudur Guntur Kadapa Kakinada Kanchikacharla Kavali Kurnool Machilipatnam	524 601 602 603 604 605 606 607 608 609 610 611 612 613 614 615	
IIT MADRAS ZOO ANDHRA PRADESH Amalapuram Ananthapur Bhimavaram Chirala Chittoor Eluru Gudlavalleru Gudur Guntur Kadapa Kakinada Kanchikacharla Kavali Kurnool Machilipatnam Markapur	524  601 602 603 604 605 606 607 608 609 610 611 612 613 614 615 616	
IIT MADRAS ZOO ANDHRA PRADESH Amalapuram Ananthapur Bhimavaram Chirala Chittoor Eluru Gudlavalleru Gudur Guntur Kadapa Kakinada Kanchikacharla Kavali Kurnool Machilipatnam	524 601 602 603 604 605 606 607 608 609 610 611 612 613 614 615 616 617	
Kolkata (South)  IIT MADRAS ZOI ANDHRA PRADESH  Amalapuram Ananthapur Bhimavaram Chirala Chittoor Eluru Gudlavalleru Gudur Guntur Kadapa Kakinada Kanchikacharla Kavali Kurnool Machilipatnam Markapur Mylavaram Narasaraopet	524 601 602 603 604 605 606 607 608 609 610 611 612 613 614 615 616 617 618	
IIT MADRAS ZOI ANDHRA PRADESH Amalapuram Ananthapur Bhimavaram Chirala Chittoor Eluru Gudlavalleru Gudur Guntur Kadapa Kakinada Kanchikacharla Kavali Kurnool Machilipatnam Markapur Mylavaram	524  601 602 603 604 605 606 607 608 609 610 611 612 613 614 615 616 617 618 619	
Kolkata (South)  IIT MADRAS ZOI ANDHRA PRADESH  Amalapuram Ananthapur Bhimavaram Chirala Chittoor Eluru Gudlavalleru Gudur Guntur Kadapa Kakinada Kanchikacharla Kavali Kurnool Machilipatnam Markapur Mylavaram Narasaraopet	601 602 603 604 605 606 607 608 609 610 611 612 613 614 615 616 617 618	

City/Town	Code
Rajahmundry	622
Surampalem	623
Tadepalligudem	624
Tirupathi	625
Tiruvuru	626
Vijayawada	627
KERALA	
Alappuzha	628
Kannur	629
Kasaragod	630
Kochi	631
Kollam	632
Kottayam	633
Kozhikode	634
Malappuram	635
Palakkad	636
Thiruvananthapuram	637
Thrissur	638
TITISSUI	038
PUDUCHERRY	
Puducherry	639
TAMIL NADU	T
Chennai	640
Coimbatore	641
Madurai	642
Salem	643
Tiruchirapalli	644
Tirunelveli	645
Vellore	646
TELANGANA	
Adilabad	647
Hyderabad	648
Jangaon	649
Karimnagar	650
Khammam	651
Kodad	652
Mahabubnagar	653
Medak	654
Nalgonda	655
Nizamabad	656
Palvoncha	657
Sathupally	658
Siddipet	659
Suryapet	660
Warangal	661
** al aligai	001

City/Town	Code		
IIT ROORKEE ZON	NE		
CHANDIGARH			
Chandigarh	701		
Chanalbarn	701		
HARYANA			
Ambala	702		
Hisar	703		
Jind	703		
Karnal	705		
Kurukshetra	706		
Panipat	707		
Sonipat	708		
Yamunanagar	709		
HIMACHAL PRADESH			
Hamirpur	710		
Kangra	711		
Shimla	712		
MADHYA PRADESH			
Gwalior	713		
PUNJAB			
Amritsar	714		
Bathinda	715		
Jalandhar	716		
Ludhiana	717		
Mohali	718		
Patiala	719		
UTTARAKHAND			
Dehradun	720		
Haldwani	721		
Haridwar	722		
Roorkee	723		
UTTAR PRADESH			
Agra	724		
Aligarh	725		
Bareilly	726		
Ghaziabad	727		
Mathura	728		
Meerut	729		
Moradabad	730		
Muzaffarnagar	731		
<u>~</u>			

#### 20. IMPORTANT INSTRUCTIONS

- Candidates MUST carry a printed copy of the downloaded admit card and their original and valid photo identity card (any one of Aadhaar, School ID, Driving License, Voter ID, Passport, PAN Card) for the examination. Only candidates having a valid admit card and photo identity card will be allowed to write the examination.
- The candidate's identity will be verified by invigilators as well as IIT representatives. If the identity of the candidate is in doubt, the candidate may not be allowed to appear in the examination. However, the authorities at their discretion may provisionally permit the candidate to appear in the examination after completing certain formalities. No extra time will be allowed for completing the examination in lieu of the time taken for completing these formalities. In such cases where the candidate is permitted to provisionally appear in the examination, the decision of the Organising Chairman, JEE (Advanced) on the issue, shall be final.
- Impersonation and / or use of unfair means in the examination is a serious offence and will lead to disqualification of the candidate from JEE (Advanced)
   2020 and all admission related processes. It may also lead to legal action against such candidates.
- Only pens, pencils, drinking water in transparent bottle, downloaded admit card and an original photo identity card are allowed to be taken inside the examination hall. Candidates will **NOT** be allowed to carry any electronic devices (e.g. mobile phones, smart phones, calculators, iPAD, tabs, digital watches, usb drives, etc.), abacus, slide rule, log books, study material of any type, geometry box, written or white (blank) paper/piece of paper, wallets, etc. to the examination hall. Candidates are advised not to wear items containing metals such as rings, bracelet, earrings, pendants or clothes with big buttons.

- Candidates **MUST** wear mask and carry hand sanitizer (up to 50 mL in a transparent bottle). Candidates must maintain all social distancing protocols.
- Candidates must report to the examination centres well in advance, and carry out the requisite formalities which will be mentioned in the admit card. Examination centres shall remain open from 07:00 IST. Candidates arriving at the examination centre after commencement of the examination in each paper (09:00 IST for Paper 1 and 14:30 IST for Paper 2) will not be allowed to take the examination under any circumstances.
- Candidates are required to be present in the examination hall for the entire duration of each paper. They CANNOT leave the examination hall before 12:00 IST for Paper 1 and before 17:30 IST for Paper 2.
- **Both Paper 1 and Paper 2 are compulsory.** Therefore, the responses of ONLY those candidates who have appeared in both Paper 1 and Paper 2 will be evaluated/graded.

## 21. TRANSMISSION OF CANDIDATE RESPONSES AND ONLINE DISPLAY OF ANSWER KEYS

- The responses of the candidates who have appeared for both Paper 1 and Paper 2, recorded during the exam, will be available for them to view, download and print from the JEE(Advanced) 2020 candidate portal (to visit candidate portal, go to <a href="https://jeeadv.ac.in">https://jeeadv.ac.in</a>).
- Provisional answer key is ONLY tentative and is subject to change.
- The provisional answer keys for both Paper 1 and Paper 2 will be displayed on the JEE (Advanced) 2020 online portal. After the display of provisional answer keys, the candidates may submit their feedback, if any, on the candidate portal, after considering which a final answer key will be displayed on the website, as per the following schedule and the marks will be awarded in accordance with the final answer key:

Copy of candidate responses to be available on the JEE (Advanced) 2020 website	Tuesday, September 29, 2020, 10:00 IST to Wednesday, September 30, 2020, 17:00 IST
Online display of provisional answer keys at <a href="https://jeeadv.ac.in">https://jeeadv.ac.in</a>	Tuesday, September 29, 2020, 10:00 IST
Receiving feedback from candidates on provisional answer keys through candidate portal	Tuesday, September 29, 2020, 10:00 IST to Wednesday, September 30, 2020, 17:00 IST
Online display of final answer keys at <a href="https://jeeadv.ac.in">https://jeeadv.ac.in</a>	Monday, October 05, 2020

#### 22. RANK LISTS

- Only candidates who appear in both Paper 1 and Paper 2 will be considered for ranking.
- The marks obtained by a candidate in Physics in JEE (Advanced) 2020 will be equal to the marks scored in Physics part of Paper 1 plus the marks scored in Physics part of Paper 2. Marks obtained in Chemistry and Mathematics will be calculated in the same way.
- The aggregate marks obtained by a candidate in JEE (Advanced) 2020 is the sum of the marks awarded to him/her in Physics, Chemistry and Mathematics.
- Rank lists are prepared based on the aggregate marks in JEE (Advanced) 2020.
- If the aggregate marks scored by two or more candidates are the same, then the following tie-break policy will be used for awarding ranks:
  - **Step 1:** Candidates having higher positive marks will be awarded higher rank.

If the tie breaking criterion at Step 1 fails to break the tie, then the following criterion at Step 2 will be followed.

**Step 2:** Higher rank will be assigned to the candidate who has obtained higher marks in Mathematics. If this does not break the tie,

higher rank will be assigned to the candidate who has obtained higher marks in Physics. If there is a tie even after this, candidates will be assigned the same rank.

- Rank lists for preparatory courses (see section 28. PREPARATORY COURSES) will be prepared for SC, ST, and PwD candidates in all categories who satisfy the prescribed relaxed criteria given below.
- A candidate who qualifies in more than one category will be considered in all the categories to which he/she belongs for the purpose of ranking.
- There will be no waiting list for ranking.
- Only those candidates who score the minimum prescribed marks in each subject
  and also in aggregate will be included in the rank list. The minimum prescribed
  marks vary with the category as shown in the following table.

#### Minimum percentage of marks prescribed for inclusion in the rank list

Rank List	Minimum percentage of marks in each subject	Minimum percentage of aggregate marks
Common rank list (CRL)	10.0	35.0
GEN-EWS rank list	9.0	31.5
OBC-NCL rank list	9.0	31.5
SC rank list	5.0	17.5
ST rank list	5.0	17.5
Common-PwD rank list (CRL-PwD)	5.0	17.5
GEN-EWS-PwD rank list	5.0	17.5
OBC-NCL-PwD rank list	5.0	17.5
SC-PwD rank list	5.0	17.5
ST-PwD rank list	5.0	17.5
Preparatory course rank lists	2.5	8.75

NOTE: (i) CRL is the rank list in which all candidates (across all categories) will be given ranks. (ii) Minimum percentage of aggregate marks may be lowered subsequently, if required, as per the MHRD directive (F.No. 28-8/2017-T.S.-I) dated June 13, 2018.

#### 23. RESULTS OF JEE (ADVANCED) 2020

- Results will be declared on Monday, October 05, 2020 10:00 IST. Category-wise All India Ranks (AIR) of successful candidates will be available through the JEE (Advanced) 2020 online portal after the results are declared. Text messages will also be sent to the candidates to their registered mobile numbers.
- Individual rank cards will **NOT** be sent to candidates.
- Qualifying in JEE (Advanced) 2020, filling up choices and/or participating in the joint seat allocation process do not guarantee a candidate to get admission in IITs. Admission will depend on the availability of seats during various rounds of seat allocation.

#### 24. ARCHITECTURE APTITUDE TEST FOR B. ARCH. PROGRAM

- B. Arch. program is available at IIT (BHU) Varanasi, IIT Kharagpur and IIT Roorkee only. Candidates desirous of joining the B. Arch. (Architecture) program will have to PASS in the Architecture Aptitude Test (AAT). Only those candidates who have qualified in JEE (Advanced) 2020 are eligible to appear in AAT 2020.
- Apart from passing the Architecture Aptitude Test (AAT), the performance in Class XII (or equivalent) board examination (mentioned in Section 26) will remain same for B. Arch. Program admission.
- Syllabus for AAT is given in **Annexure-I: SYLLABI.**
- Candidates must register online at the JEE(Advanced) 2020 online portal for AAT.
- AAT will be conducted in all 23 (twenty three) IITs.
- The test will consist of one paper of three hours duration.
- The question paper for AAT will be available only in English language.
- No separate admit card will be issued for AAT. The original admit card of JEE (Advanced) 2020 should be produced in the AAT examination hall, along with

original photo identity card.

- Candidates should bring their own drawing and colouring aids.
- The Joint Implementation Committee of JEE (Advanced) 2020 will decide the cut-off marks for passing AAT.
- Results of AAT will be declared on the JEE (Advanced) 2020 online portal.
- Candidates securing marks above the cut-off will be declared PASS in the test.
   There is no separate ranking in the AAT. There is no separate cut-off for students of any category.
- Allotment of seat will be solely based on the category-wise All India Rank in the JEE (Advanced) 2020 and B. Arch. program will be offered only to those candidates declared PASS in the AAT.

#### **Schedule of AAT**

Portal for AAT Registration	https://jeeadv.ac.in	
Registration for AAT	Monday, October 05, 2020, 10:00 IST to Tuesday, October 06, 2020, 17:00 IST	
Architecture Aptitude Test	Thursday, October 08, 2020 09:00 to 12:00 IST (Candidate must reach exam centre by 08:30 IST)	
Declaration of AAT Results	Sunday, October 11, 2020	

# PART-III: ADMISSION

#### 25. EXAMINATIONS CONSIDERED AS EQUIVALENT TO CLASS XII

- The final examination of the 10+2 system, conducted by a Central or State Board recognized by the Association of Indian Universities (AIU).
- Intermediate or two-year Pre-University examination conducted by a Board or University recognized by the Association of Indian Universities.
- Final examination of the two-year course of the Joint Services Wing of the National Defence Academy.
- Senior Secondary School Examination conducted by the National Institute of Open Schooling with a minimum of five subjects.
- Any Public School, Board or University examination in India or in a foreign country recognized as equivalent to the 10+2 system by the AIU.
- H.S.C. vocational examination.
- A Diploma recognized by the All India Council for Technical Education (AICTE) or a State Board of Technical Education of at least 3 years duration.
- General Certificate Education (GCE) examination (London, Cambridge or Sri Lanka) at the Advanced (A) level.
- High School Certificate Examination of the Cambridge University or International Baccalaureate Diploma of the International Baccalaureate Office, Geneva.

Candidates who have completed Class XII (or equivalent) examination outside India or from a Board not specified above should produce a certificate from the AIU to the effect that the examination they have passed is equivalent to the Class XII examination.

In case the Class XII examination is not a public examination, the candidate must have passed at least one public (Board or Pre-University) examination earlier.

#### 26. PERFORMANCE IN CLASS XII (OR EQUIVALENT) BOARD EXAMINATION

Candidates must **PASS** class XII exam with the following subjects:

- i. Physics
- ii. Chemistry
- iii. Mathematics
- iv. A language
- v. Any subject other than the above four

#### Foreign candidates may follow the link

https://jeeadv.ac.in/foreign.php for eligibility criteria.

#### **27. JOINT SEAT ALLOCATION**

- The seats across IITs, NITs, IIITs and other Govt. Funded Technical Institutes (GFTIs) will be offered and allocated through a common process by the Joint Seat Allocation Authority (JoSAA).
- All the candidates who are eligible for admission will have to participate in the
  joint seat allocation process by filling in their preferential choices of the courses
  and institutes.
- The detailed instructions for filling-in the choices and the seat allotment procedure will be made available by JoSAA through Seat Allotment Business Rules Brochure.
- The schedule of the joint seat allocation will be announced separately by JoSAA 2020.
- The list of courses that will be offered by the IITs for admission for the academic year 2020-21will be made available at the time of online filling-in of choices.

#### 28. PREPARATORY COURSES

- The seats reserved for SC, ST and PwD candidates which remain vacant will be allotted to the candidates of respective categories for admission to a preparatory course of 1-year duration on the basis of relaxed admission criteria (see 22. RANK LISTS).
- Admission is given to the candidates in the preparatory course provided (i) the seats reserved for the respective category are vacant, (ii) candidates satisfy minimum norms, and (iii) candidates have not accepted a seat in the preparatory course earlier.
- Selected IITs will run preparatory courses of one-year duration for SC, ST and PwD candidates intended to prepare them to pursue the academic program (for Academic Year 2021-22) to which they have been allocated. At the end of this course, candidates are declared as 'pass' or 'fail'. The institute at which one-year preparatory course is run for a candidate may be different from the institute allocated to the candidate for their academic program.
- On successful completion of the course, the candidates will be offered direct admission in July 2021 (Academic Year 2021-22) to the already allotted undergraduate course.
- Candidates admitted to the preparatory course are also eligible to appear in JEE (Advanced) 2021 subject to fulfilling other eligibility criteria.
- Filling-in of choices for preparatory courses is through the same online portal.

#### 29. ADDITIONAL REQUIREMENTS FOR CERTAIN COURSES

Those who opt for B.Tech. in Mining Engineering / Mining Machinery
 Engineering / Petroleum Engineering OR B.Tech.-M.Tech. Dual Degree in
 Mining Engineering / Mining Safety Engineering OR Integrated M.Tech. in
 Applied Geology / Applied Geophysics OR Integrated M.Sc. in Applied

Geology / Exploration Geophysics, should not have any form of colour blindness. A certificate to this effect from a govt. registered medical practitioner has to be uploaded at the time of online reporting for seat acceptance. IITs may constitute a medical board to test the validity of the candidate's medical condition.

• The standards of visual acuity with or without glasses will be adhered to strictly for candidates seeking admission to Mining Engineering as per DGMS Circular 14 of 1972. Persons with one-eyed vision are not permitted to work underground. Candidates with these limitations are not allowed to opt for admission to Mining Engineering and Mining Machinery Engineering.

#### 30. GENDER RESTRICTION FOR MINING ENGINEERING PROFESSION

- Section 46 (1) of the Mines Act, 1952 states that
   "No woman shall, notwithstanding anything contained in any other law, be employed
  - (a) in any part of a mine which is below ground,
  - (b) in any mine above ground except between 6:00 and 19:00 hrs."

However, female candidates will be admitted to Mining Engineering or Mining Machinery Engineering related courses at IIT (ISM) Dhanbad, IIT Kharagpur and IIT (BHU) Varanasi.

#### 31. LIST OF COURSES OFFERED BY IITS IN THE ACADEMIC YEAR 2019-20

The relevant courses offered by IITs in the academic year 2019-20 are given in **Annexure** – **III**. Some of the courses have additional requirements and these are marked as AR. The courses to be offered by the various Institutes in 2020 may vary. A few of the courses offered in 2019 may not be offered at all or may be modified (course title and/or content). It is also possible that a few new courses will

be offered. The additional requirements may also change. The final list will be made available at the time of filling-in of the choices for seat allocation.

#### **32. IMPORTANT DATES**

Important dates of various activities regarding JEE (Advanced) 2020 are presented in **Annexure - IV**.

#### 33. GRIEVANCES

All stages of JEE (Advanced) 2020 will be conducted with transparency. Should there be any grievance relating to JEE (Advanced) 2020, the candidate can write to the Chairman of the Zonal IIT, or to the Organizing Chairman of JEE (Advanced) 2020 for clarification at the addresses given in **Annexure - V**. The decision taken on such grievances by the Chairman of the Zonal IIT or the Organizing Chairman of JEE (Advanced) 2020 shall be final.

# **Annexures**

# **Annexure-I Syllabi**

#### **CHEMISTRY**

#### **Physical chemistry**

#### **General topics**

Concept of atoms and molecules; Dalton's atomic theory; Mole concept; Chemical formulae; Balanced chemical equations; Calculations (based on mole concept) involving common oxidation-reduction, neutralisation, and displacement reactions; Concentration in terms of mole fraction, molarity, molality and normality.

#### Gaseous and liquid states

Absolute scale of temperature, ideal gas equation; Deviation from ideality, van der Waals equation; Kinetic theory of gases, average, root mean square and most probable velocities and their relation with temperature; Law of partial pressures; Vapour pressure; Diffusion of gases.

#### Atomic structure and chemical bonding

Bohr model, spectrum of hydrogen atom, quantum numbers; Wave-particle duality, de Broglie hypothesis; Uncertainty principle; Qualitative quantum mechanical picture of hydrogen atom, shapes of *s*, *p* and *d* orbitals; Electronic configurations of elements (up to atomic number 36); Aufbau principle; Pauli's exclusion principle and Hund's rule; Orbital overlap and covalent bond; Hybridisation involving *s*, *p* and *d* orbitals only; Orbital energy diagrams for homonuclear diatomic species; Hydrogen bond; Polarity in molecules, dipole moment (qualitative aspects only); VSEPR model and shapes of molecules (linear, angular, triangular, square planar, pyramidal, square pyramidal, trigonal bipyramidal, tetrahedral and octahedral).

#### **Energetics**

First law of thermodynamics; Internal energy, work and heat, pressure-volume work; Enthalpy, Hess's law; Heat of reaction, fusion and vapourization; Second law of thermodynamics; Entropy; Free energy; Criterion of spontaneity.

#### Chemical equilibrium

Law of mass action; Equilibrium constant, Le Chatelier's principle (effect of concentration, temperature and pressure); Significance of  $\Delta G$  and  $\Delta G^0$  in chemical equilibrium; Solubility product, common ion effect, pH and buffer solutions; Acids and bases (Bronsted and Lewis concepts); Hydrolysis of salts.

#### **Electrochemistry**

Electrochemical cells and cell reactions; Standard electrode potentials; Nernst equation and its relation to  $\Delta G$ ; Electrochemical series, emf of galvanic cells; Faraday's laws of electrolysis; Electrolytic conductance, specific, equivalent and molar conductivity, Kohlrausch's law; Concentration cells.

#### **Chemical kinetics**

Rates of chemical reactions; Order of reactions; Rate constant; First order reactions; Temperature dependence of rate constant (Arrhenius equation).

#### **Solid state**

Classification of solids, crystalline state, seven crystal systems (cell parameters a, b, c,  $\alpha$ ,  $\beta$ ,  $\gamma$ ), close packed structure of solids (cubic), packing in fcc, bcc and hcp lattices; Nearest neighbours, ionic radii, simple ionic compounds, point defects.

#### **Solutions**

Raoult's law; Molecular weight determination from lowering of vapour pressure, elevation of boiling point and depression of freezing point.

#### **Surface chemistry**

Elementary concepts of adsorption (excluding adsorption isotherms); Colloids: types, methods of preparation and general properties; Elementary ideas of emulsions, surfactants and micelles (only definitions and examples).

#### **Nuclear chemistry**

Radioactivity: isotopes and isobars; Properties of  $\alpha$ ,  $\beta$  and  $\gamma$  rays; Kinetics of radioactive decay (decay series excluded), carbon dating; Stability of nuclei with respect to proton-neutron ratio; Brief discussion on fission and fusion reactions.

#### **Inorganic chemistry**

#### Isolation/preparation and properties of the following non-metals

Boron, silicon, nitrogen, phosphorus, oxygen, sulphur and halogens; Properties of allotropes of carbon (only diamond and graphite), phosphorus and sulphur.

#### Preparation and properties of the following compounds

Oxides, peroxides, hydroxides, carbonates, bicarbonates, chlorides and sulphates of sodium, potassium, magnesium and calcium; Boron: diborane, boric acid and borax; Aluminium: alumina, aluminium chloride and alums; Carbon: oxides and oxyacid (carbonic acid); Silicon: silicones, silicates and silicon carbide; Nitrogen: oxides, oxyacids and ammonia; Phosphorus: oxides, oxyacids (phosphorus acid, phosphoric acid) and phosphine; Oxygen: ozone and hydrogen peroxide; Sulphur: hydrogen sulphide, oxides, sulphurous acid, sulphuric acid and sodium thiosulphate; Halogens: hydrohalic acids, oxides and oxyacids of chlorine, bleaching powder; Xenon fluorides.

#### **Transition elements (3d series)**

Definition, general characteristics, oxidation states and their stabilities, colour (excluding the details of electronic transitions) and calculation of spin-only magnetic moment; Coordination compounds: nomenclature of mononuclear coordination compounds, cis-trans and ionisation isomerisms, hybridization and geometries of mononuclear coordination compounds (linear, tetrahedral, square planar and octahedral).

#### Preparation and properties of the following compounds

Oxides and chlorides of tin and lead; Oxides, chlorides and sulphates of Fe<sup>2+</sup>, Cu<sup>2+</sup> and Zn<sup>2+</sup>; Potassium permanganate, potassium dichromate, silver oxide, silver nitrate, silver thiosulphate.

#### Ores and minerals

Commonly occurring ores and minerals of iron, copper, tin, lead, magnesium, aluminium, zinc and silver.

#### **Extractive metallurgy**

Chemical principles and reactions only (industrial details excluded); Carbon reduction method (iron and tin); Self reduction method (copper and lead); Electrolytic reduction method (magnesium and aluminium); Cyanide process (silver and gold).

#### Principles of qualitative analysis

Groups I to V (only Ag<sup>+</sup>, Hg<sup>2+</sup>, Cu<sup>2+</sup>, Pb<sup>2+</sup>, Bi<sup>3+</sup>, Fe<sup>3+</sup>, Cr<sup>3+</sup>, Al<sup>3+</sup>, Ca<sup>2+</sup>, Ba<sup>2+</sup>, Zn<sup>2+</sup>, Mn<sup>2+</sup> and Mg<sup>2+</sup>); Nitrate, halides (excluding fluoride), sulphate and sulphide.

#### **Organic chemistry**

#### **Concepts**

Hybridisation of carbon;  $\sigma$  and  $\pi$ -bonds; Shapes of simple organic molecules; Structural and geometrical isomerism; Optical isomerism of compounds containing up to two asymmetric centres, (R,S and E,Z nomenclature excluded); IUPAC nomenclature of simple organic compounds (only hydrocarbons, mono-functional and bi-functional compounds); Conformations of ethane and butane (Newman projections); Resonance and hyperconjugation; Keto-enoltautomerism; Determination of empirical and molecular formulae of simple compounds (only combustion method); Hydrogen bonds: definition and their effects on physical properties of alcohols and carboxylic acids; Inductive and resonance effects on

acidity and basicity of organic acids and bases; Polarity and inductive effects in alkyl halides; Reactive intermediates produced during homolytic and heterolytic bond cleavage; Formation, structure and stability of carbocations, carbanions and free radicals.

#### Preparation, properties and reactions of alkanes

Homologous series, physical properties of alkanes (melting points, boiling points and density); Combustion and halogenation of alkanes; Preparation of alkanes by Wurtz reaction and decarboxylation reactions.

#### Preparation, properties and reactions of alkenes and alkynes

Physical properties of alkenes and alkynes (boiling points, density and dipole moments); Acidity of alkynes; Acid catalysed hydration of alkenes and alkynes (excluding the stereochemistry of addition and elimination); Reactions of alkenes with KMnO<sub>4</sub> and ozone; Reduction of alkenes and alkynes; Preparation of alkenes and alkynes by elimination reactions; Electrophilic addition reactions of alkenes with X<sub>2</sub>, HX, HOX and H<sub>2</sub>O (X=halogen); Addition reactions of alkynes; Metal acetylides.

#### **Reactions of benzene**

Structure and aromaticity; Electrophilic substitution reactions: halogenation, nitration, sulphonation, Friedel-Crafts alkylation and acylation; Effect of o-, m- and p-directing groups in monosubstituted benzenes.

#### **Phenols**

Acidity, electrophilic substitution reactions (halogenation, nitration and sulphonation); Reimer-Tieman reaction, Kolbe reaction.

#### **Characteristic reactions of the following (including those mentioned above)**

Alkyl halides: rearrangement reactions of alkyl carbocation, Grignard reactions, nucleophilic substitution reactions; Alcohols: esterification, dehydration and

oxidation, reaction with sodium, phosphorus halides, ZnCl<sub>2</sub>/concentrated HCl, conversion of alcohols into aldehydes and ketones; Ethers: Preparation by Williamson's Synthesis; Aldehydes and Ketones: oxidation, reduction, oxime and hydrazone formation; aldol condensation, Perkin reaction; Cannizzaro reaction; haloform reaction and nucleophilic addition reactions (Grignard addition); Carboxylic acids: formation of esters, acid chlorides and amides, ester hydrolysis; Amines: basicity of substituted anilines and aliphatic amines, preparation from nitro compounds, reaction with nitrous acid, azo coupling reaction of diazonium salts of aromatic amines, Sandmeyer and related reactions of diazonium salts; carbylamine reaction; Haloarenes: nucleophilic aromatic substitution in haloarenes and substituted haloarenes (excluding Benzyne mechanism and Cine substitution).

#### **Carbohydrates**

Classification; mono- and di-saccharides (glucose and sucrose); Oxidation, reduction, glycoside formation and hydrolysis of sucrose.

### Amino acids and peptides

General structure (only primary structure for peptides) and physical properties.

#### Properties and uses of some important polymers

Natural rubber, cellulose, nylon, teflon and PVC.

#### **Practical organic chemistry**

Detection of elements (N, S, halogens); Detection and identification of the following functional groups: hydroxyl (alcoholic and phenolic), carbonyl (aldehyde and ketone), carboxyl, amino and nitro; Chemical methods of separation of monofunctional organic compounds from binary mixtures.

#### **MATHEMATICS**

#### Algebra

Algebra of complex numbers, addition, multiplication, conjugation, polar representation, properties of modulus and principal argument, triangle inequality, cube roots of unity, geometric interpretations.

Quadratic equations with real coefficients, relations between roots and coefficients, formation of quadratic equations with given roots, symmetric functions of roots.

Arithmetic, geometric and harmonic progressions, arithmetic, geometric and harmonic means, sums of finite arithmetic and geometric progressions, infinite geometric series, sums of squares and cubes of the first n natural numbers.

Logarithms and their properties.

Permutations and combinations, binomial theorem for a positive integral index, properties of binomial coefficients.

#### **Matrices**

Matrices as a rectangular array of real numbers, equality of matrices, addition, multiplication by a scalar and product of matrices, transpose of a matrix, determinant of a square matrix of order up to three, inverse of a square matrix of order up to three, properties of these matrix operations, diagonal, symmetric and skew-symmetric matrices and their properties, solutions of simultaneous linear equations in two or three variables.

#### **Probability**

Addition and multiplication rules of probability, conditional probability, Bayes Theorem, independence of events, computation of probability of events using permutations and combinations.

#### **Trigonometry**

Trigonometric functions, their periodicity and graphs, addition and subtraction formulae, formulae involving multiple and sub-multiple angles, general solution of trigonometric equations.

Relations between sides and angles of a triangle, sine rule, cosine rule, half-angle formula and the area of a triangle, inverse trigonometric functions (principal value only).

#### **Analytical geometry**

<u>Two dimensions</u>: Cartesian coordinates, distance between two points, section formulae, shift of origin.

Equation of a straight line in various forms, angle between two lines, distance of a point from a line; Lines through the point of intersection of two given lines, equation of the bisector of the angle between two lines, concurrency of lines; Centroid, orthocentre, incentre and circumcentre of a triangle.

Equation of a circle in various forms, equations of tangent, normal and chord.

Parametric equations of a circle, intersection of a circle with a straight line or a circle, equation of a circle through the points of intersection of two circles and those of a circle and a straight line.

Equations of a parabola, ellipse and hyperbola in standard form, their foci, directrices and eccentricity, parametric equations, equations of tangent and normal. Locus problems.

<u>Three dimensions</u>: Direction cosines and direction ratios, equation of a straight line in space, equation of a plane, distance of a point from a plane.

#### **Differential calculus**

Real valued functions of a real variable, into, onto and one-to-one functions, sum, difference, product and quotient of two functions, composite functions, absolute value, polynomial, rational, trigonometric, exponential and logarithmic functions.

Limit and continuity of a function, limit and continuity of the sum, difference, product and quotient of two functions, L'Hospital rule of evaluation of limits of functions.

Even and odd functions, inverse of a function, continuity of composite functions, intermediate value property of continuous functions.

Derivative of a function, derivative of the sum, difference, product and quotient of two functions, chain rule, derivatives of polynomial, rational, trigonometric, inverse trigonometric, exponential and logarithmic functions.

Derivatives of implicit functions, derivatives up to order two, geometrical interpretation of the derivative, tangents and normals, increasing and decreasing functions, maximum and minimum values of a function, Rolle's theorem and Lagrange's mean value theorem.

#### **Integral calculus**

Integration as the inverse process of differentiation, indefinite integrals of standard functions, definite integrals and their properties, fundamental theorem of integral calculus.

Integration by parts, integration by the methods of substitution and partial fractions, application of definite integrals to the determination of areas involving simple curves.

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

#### **Vectors**

Addition of vectors, scalar multiplication, dot and cross products, scalar triple products and their geometrical interpretations.

#### **PHYSICS**

#### General

Units and dimensions, dimensional analysis; least count, significant figures; Methods of measurement and error analysis for physical quantities pertaining to the following experiments: Experiments based on using Vernier calipers and screw gauge (micrometer), Determination of g using simple pendulum, Young's modulus by Searle's method, Specific heat of a liquid using calorimeter, focal length of a concave mirror and a convex lens using u-v method, Speed of sound using resonance column, Verification of Ohm's law using voltmeter and ammeter, and specific resistance of the material of a wire using meter bridge and post office box.

#### **Mechanics**

Kinematics in one and two dimensions (Cartesian coordinates only), projectiles; Uniform circular motion; Relative velocity.

Newton's laws of motion; Inertial and uniformly accelerated frames of reference; Static and dynamic friction; Kinetic and potential energy; Work and power; Conservation of linear momentum and mechanical energy.

Systems of particles; Centre of mass and its motion; Impulse; Elastic and inelastic collisions.

Law of gravitation; Gravitational potential and field; Acceleration due to gravity; Motion of planets and satellites in circular orbits; Escape velocity.

Rigid body, moment of inertia, parallel and perpendicular axes theorems, moment of inertia of uniform bodies with simple geometrical shapes; Angular momentum; Torque; Conservation of angular momentum; Dynamics of rigid bodies with fixed axis of rotation; Rolling without slipping of rings, cylinders and spheres; Equilibrium of rigid bodies; Collision of point masses with rigid bodies.

Linear and angular simple harmonic motions.

Hooke's law, Young's modulus.

Pressure in a fluid; Pascal's law; Buoyancy; Surface energy and surface tension, capillary rise; Viscosity (Poiseuille's equation excluded), Stoke's law; Terminal

velocity, Streamline flow, equation of continuity, Bernoulli's theorem and its applications.

Wave motion (plane waves only), longitudinal and transverse waves, superposition of waves; Progressive and stationary waves; Vibration of strings and air columns; Resonance; Beats; Speed of sound in gases; Doppler effect (in sound).

#### Thermal physics

Thermal expansion of solids, liquids and gases; Calorimetry, latent heat; Heat conduction in one dimension; Elementary concepts of convection and radiation; Newton's law of cooling; Ideal gas laws; Specific heats ( $C_v$  and  $C_p$  for monoatomic and diatomic gases); Isothermal and adiabatic processes, bulk modulus of gases; Equivalence of heat and work; First law of thermodynamics and its applications (only for ideal gases); Blackbody radiation: absorptive and emissive powers; Kirchhoff's law; Wien's displacement law, Stefan's law.

#### **Electricity and magnetism**

Coulomb's law; Electric field and potential; Electrical potential energy of a system of point charges and of electrical dipoles in a uniform electrostatic field; Electric field lines; Flux of electric field; Gauss's law and its application in simple cases, such as, to find field due to infinitely long straight wire, uniformly charged infinite plane sheet and uniformly charged thin spherical shell.

Capacitance; Parallel plate capacitor with and without dielectrics; Capacitors in series and parallel; Energy stored in a capacitor.

Electric current; Ohm's law; Series and parallel arrangements of resistances and cells; Kirchhoff's laws and simple applications; Heating effect of current.

Biot-Savart's law and Ampere's law; Magnetic field near a current-carrying straight wire, along the axis of a circular coil and inside a long straight solenoid; Force on a moving charge and on a current-carrying wire in a uniform magnetic field.

Magnetic moment of a current loop; Effect of a uniform magnetic field on a current loop; Moving coil galvanometer, voltmeter, ammeter and their conversions.

Electromagnetic induction: Faraday's law, Lenz's law; Self and mutual inductance; RC, LR and LC circuits with d.c. and a.c. sources.

#### **Optics**

Rectilinear propagation of light; Reflection and refraction at plane and spherical surfaces; Total internal reflection; Deviation and dispersion of light by a prism; Thin lenses; Combinations of mirrors and thin lenses; Magnification.

Wave nature of light: Huygen's principle, interference limited to Young's double-slit experiment.

#### **Modern physics**

Atomic nucleus;  $\alpha$ ,  $\beta$  and  $\gamma$  radiations; Law of radioactive decay; Decay constant; Half-life and mean life; Binding energy and its calculation; Fission and fusion processes; Energy calculation in these processes.

Photoelectric effect; Bohr's theory of hydrogen-like atoms; Characteristic and continuous X-rays, Moseley's law; de Broglie wavelength of matter waves.

#### **ARCHITECTURE APTITUDE TEST**

#### Freehand drawing

This would comprise of simple drawing depicting the total object in its right form and proportion, surface texture, relative location and details of its component parts in appropriate scale. Common domestic or day-to-day life usable objects like furniture, equipment, etc., from memory.

#### **Geometrical drawing**

Exercises in geometrical drawing containing lines, angles, triangles, quadrilaterals, polygons, circles, etc. Study of plan (top view), elevation (front or side views) of simple solid objects like prisms, cones, cylinders, cubes, splayed surface holders, etc.

#### **Three-dimensional perception**

Understanding and appreciation of three-dimensional forms with building elements, colour, volume and orientation. Visualization through structuring objects in memory.

#### Imagination and aesthetic sensitivity

Composition exercise with given elements. Context mapping. Creativity check through innovative uncommon test with familiar objects. Sense of colour grouping or application.

#### **Architectural awareness**

General interest and awareness of famous architectural creations – both national and international, places and personalities (architects, designers, etc.) in the related domain.

# Annexure-II CERTIFICATE FORMATS

#### **FORM-GEN-EWS**

## INCOME & ASSET CERTIFICATE TO BE PRODUCED BY ECONOMICALLY WEAKER SECTIONS

Certificate No	ate No Date:				
VA	LID FOR TH	E YEAR			
1. This is to conson/daughter/wife of			1	permanent	resident of
	, Villag	e/Street			Post Office
D	istrict		in the	State/Unio	on Territory
Piı	n Code	whose pl	notograph in	attested be	low belongs to
Economically Weaker Sect Rs. 8 lakh (Rupees Eight I own or possess any of the f	Lakh only) for	the financial ye			
I. 5 acres of agricult	tural land and a	bove;			
II. Residential flat of	f 1000 sq. ft. an	d above;			
III. Residential plot of	of 100 sq. yards	and above in no	tified munic	ipalities;	
IV. Residential plot municipalities.	of 200 sq.	yards and abo	ve in areas	other tha	n the notified
2. Shri/Smt./Kumari _		1-	alongs to th	Δ	casta which is
not recognized as a Schedu					
	٦		th seal of Of	ficer	
			Des	ignation	
_ = === <u>8</u>					
Recent Passport size attested photograph of the applicant		ne income and a ould be require below the rank	ed to be cert	ified by an	officer not

<sup>\*</sup> Note1: Income covered all sources i.e. salary, agricultural, business, profession, etc.

<sup>\*\*</sup> Note2: The term "Family" for this purpose includes the person, who seeks benefit of reservation, his/her parents and siblings below the age of 18 years as also his/her spouse and children below the age of 18 years.

<sup>\*\*\*</sup> Note3: The property held by a "Family" in different locations or different places/cities have been clubbed while applying the land or property holding test to determine EWS status.

FORM-OBC-NCL

#### **OBC-NCL Certificate Format**

#### FORM OF CERTIFICATE TO BE PRODUCED BY OTHER BACKWARD CLASSES (NCL) APPLYING FOR ADMISSION TO CENTRAL EDUCATIONAL INSTITUTIONS (CEIs), UNDER THE GOVERNMENT OF INDIA

This is to certify that Shri/Smt./Kum*	Son/
	of Village/
Town*	
State/Union Territory	
cor	nmunity that is recognized as a backward class
	Social Justice and Empowerment's Resolution No.
date	ed***
Shri/Smt./Kum	and/or
his/her family ordinarily reside(s) in the	District/Division of
	Union Territory. This is also to certify that he/she
does NOT belong to the persons/sections (Cr	eamy Layer) mentioned in Column 3 of the Schedule
to the Government of India, Department of	Personnel & Training O.M. No. 36012/22/93- Estt.
(SCT) dated 08/09/93 which is modified	vide OM No. 36033/3/2004 Estt.(Res.) dated
09/03/2004, further modified vide OM No.	36033/3/2004-Estt. (Res.) dated 14/10/2008, again
further modified vide OM No.36036/2/201	13-Estt (Res) dtd. 30/05/2014, and again further
modified vide OM No. 36033/1/2013-Estt (Res	s) dtd. 13/09/2017.
	District Magistrate /
	Deputy Commissioner /
Data di	Any other Competent Authority
Dated:	
Seal	
* Please delete the word(s) which are	not applicable.
** As listed in the Annexure (for FORM	M-OBC-NCL)

- The authority issuing the certificate needs to mention the details of Resolution of Government of India, in which the caste of the candidate is mentioned as OBC.

#### NOTE:

- (a) The term 'Ordinarily resides' used here will have the same meaning as in Section 20 of the Representation of the People Act, 1950.
- (b) The authorities competent to issue Caste Certificates are indicated below:
  - (i) District Magistrate/ Additional Magistrate/ Collector/ Deputy Commissioner/ Additional Deputy Commissioner/ Deputy Collector/ Ist Class Stipendiary Magistrate/ Sub-Divisional magistrate/ Taluka Magistrate/ Executive Magistrate/ Extra Assistant Commissioner (not below the rank of Ist Class Stipendiary Magistrate).
  - (ii) Chief Presidency Magistrate / Additional Chief Presidency Magistrate / Presidency Magistrate.
  - (iii) Revenue Officer not below the rank of Tehsildar' and
  - (iv) Sub-Divisional Officer of the area where the candidate and/or his family resides

### ANNEXURE for FORM-OBC-NCL

Sl. No.	Resolution No.	Date of Notification
1	No.12011/68/93-BCC(C)	13.09.1993
2	No.12011/9/94-BCC	19.10.1994
3	No.12011/7/95-BCC	24.05.1995
4	No.12011/96/94-BCC	09.03.1996
5	No.12011/44/96-BCC	11.12.1996
6	No.12011/13/97-BCC	03.12.1997
7	No.12011/99/94-BCC	11.12.1997
8	No.12011/68/98-BCC	27.10.1999
9	No.12011/88/98-BCC	06.12.1999
10	No.12011/36/99-BCC	04.04.2000
11	No.12011/44/99-BCC	21.09.2000
12	No.12015/9/2000-BCC	06.09.2001
13	No.12011/1/2001-BCC	19.06.2003
14	No.12011/4/2002-BCC	13.01.2004
15	No.12011/9/2004-BCC	16.01.2006
16	No.12011/14/2004-BCC	12.03.2007
17	No.12011/16/2007-BCC	12.10.2007
18	No.12019/6/2005-BCC	30.07.2010
19	No. 12015/2/2007-BCC	18.08.2010
20	No.12015/15/2008-BCC	16.06.2011
21	No.12015/13/2010-BC-II	08.12.2011
22	No.12015/5/2011-BC-II	17.02.2014

#### FORM-SC/ST

#### **SC/ST Certificate Format**

# FORM OF CERTIFICATE TO BE PRODUCED BY SCHEDULED CASTES (SC) AND SCHEDULED TRIBES (ST) CANDIDATES

1. This is to certify that Shri/ Shirma	ati/ Kumari*			son/daughter*
of	0	f Village/Town*		
District/Division*		_ of State/Union Terr	itory*	belongs
to the	Sched	luled Caste / Schedule	d Tribe* under :-	
* The Constitution (Scheduled Castes) Orde	er, 1950			
* The Constitution (Scheduled Tribes) Orde	r, 1950			
* The Constitution (Scheduled Castes) (L		1		
* The Constitution (Scheduled Tribes) (Unio	on Territories) Order, 1951			
As amended by the Scheduled Castes and Sc 966, the State of Himachal Pradesh Act, 1970 Amendment) Act, 1976 and the Scheduled Ca	0, the North Eastern Àreas (Re	eorganisation) Act, 1971, the	e Scheduled Castes and Sc	
* The Constitution (Jammu and Kashmir) Sch	neduled Castes Order, 1956;			
* The Constitution (Andaman and Nicobar Isl 1976;	ands) Scheduled Tribes Order	r, 1959, as amended by the	Scheduled Castes and Sch	neduled Tribes Order (Amendment) A
* The Constitution (Dadara and Nagar Hav	eli) Scheduled Castes Order	r, 1962;		
* The Constitution (Dadara and Nagar Haveli	i) Scheduled Tribes Order, 196	62;		
* The Constitution (Pondicherry) Scheduled (	Castes Order, 1964;			
* The Constitution (Uttar Pradesh) Scheduled	d Tribes Order, 1967;			
* The Constitution (Goa, Daman and Diu) Sc	heduled Castes Order, 1968;			
* The Constitution (Goa, Daman and Diu) Sc	heduled Tribes Order, 1968;			
* The Constitution (Nagaland) Scheduled Tril				
* The Constitution (Sikkim) Scheduled Caste	s Order, 1978;			
* The Constitution (Sikkim) Scheduled Tribes	3 Order, 1978;			
* The Constitution (Jammu and Kashmir) Sch	neduled Tribes Order, 1989;			
* The Constitution (Scheduled Castes) Order	(Amendment) Act, 1990;			
* The Constitution (Scheduled Tribes) Order				
* The Constitution (Scheduled Tribes) Order	(Second Amendment) Act, 199	91.		
2. # This certificate is issued on	the basis of the Sched	duled Castes / Sched	duled Tribes* Certifica	ate issued to Shri /Shrimati*
				of the State State/Unior
Territory*				
Scheduled Tribe* in the State /		•	_	
Correction Tibe in the State /	Official Territory		issued by the	dated
3. Shri/ Shrimati/ Kumari *		and / or* his	/ hor* family ordinarii	ly reside(s)** in Village/Town
			-	
0ī	Dis	trict/Division" of the St	ate Union Territory" of	:
			Sign	ature:
			Dosic	nation
			Desig	(with seal of the Office
Ota ta	// / · · · · · · · · · · · · · · · · ·			(with sear of the Office
	e/Union Territory*			
Date:				
Please delete the word(s) which are not a Applicable in the case of SC/ST Persons wh MPORTANT NOTES	applicable.  no have migrated from another	r State/UT.		
"ha tama "ardinarily radi -!-/-\**"! !- ""	have the come	Continu 20 of the De	antation of the Decele A :	1050 Officers
The term "ordinarily reside(s)**" used here will	have the same meaning as in	n Section 20 of the Represe	entation of the People Act,	1950. Officers
he term "ordinarily reside(s)**" used here will ompetent to issue Caste/Tribe certificates: . District Magistrate / Additional District Mag Stipendiary Magistrate / City Magistr	gistrate / Collector / Deputy Co	ommissioner / Additional Do	eputy Commissioner / Depu	uty Collector / Ist Class

Revenue Officers not below the rank of Tehsildar.

6. Certificate issued by any other authority will be rejected.

Sub-divisional Officer of the area where the candidate and/ or his family normally reside(s). Administrator / Secretary to Administrator / Development Officer (Lakshadweep Island).

FORM-PwD (II)

#### Form-II Disability Certificate

(In cases of amputation or complete permanent paralysis of limbs and in cases of blindness)

# (NAME AND ADDRESS OF THE MEDICAL AUTHORITY ISSUING THE CERTIFICATE) (See rule 4)

Recent PP size Attested Photograph (Showing face only) of the person with disability				
Certificate No			Date:	
This is to certify that I have care son/wife/da	•			
Date of Birth (DD/MM/YY)				
Registratio	n No		permanent resident o	of House
No	Ward/Village/ S	treet		
Post Office		District		
State				
satisfied that:				
<ol> <li>he/she is a case of:         <ul> <li>locomotor disability</li> <li>blindness</li> <li>(Please tick as applicable</li> </ul> </li> <li>the diagnosis in his/her case</li> </ol>	•			
3. He/ She has				percent
(in words) permanent physi (part of body) as per guideli	•		ation to his/her	
4. The applicant has submitted	•	•	oof of residence:-	
Nature of Documen	t Date of Issue	Details of auth	ority issuing certificate	
(Signature and Seal of Authorised	Cignaton, of notic	fied Medical Auth	ovitu)	
Signature/Thumb	Signatory of floti	ned Medical Adti	ionty)	
impression of the				
person in whose favour disability certificate is				
issued.				

FORM-PwD(III)

# Form-III Disability Certificate (In cases of multiple disabilities)

## (NAME AND ADDRESS OF THE MEDICAL AUTHORITY ISSUING THE CERTIFICATE) (See rule 4)

Recent	PP	size
Attested		
Photogra	aph	
(Showin	g	face
only) of the person		
with disability		

Certificate No		Date:	
This is to certify that I	have carefully examined Shri/Smt./Ku	m	
SO	on/ wife/daughter of Shri		
Date of	Birth (DD/MM/YY)	Age_	years,
male/female	Registration No		
permanent resident o	f House No	War	d/Village/Street
	Post Office		District
	State		
whose photograph is	affixed above, and are satisfied that:		

1. He/she is a Case of **Multiple Disability.** His/her extent of permanent physical impairment/ disability has been evaluated as per guidelines (to be specified) for the disabilities ticked below, and shown against the relevant disability in the table below:

S. No.	Disability	Affected Part of Body	Diagnosis	Permanent physical impairment/mental disability (in %)
1	Locomotor disability	@		
2	Low vision	#		
3	Blindness	Both Eyes		
4	Hearing impairment	£		
5	Mental retardation	Х		
6	Mental-illness	Х		

- @ e.g. Left/Right/both arms/legs
- # e.g. Single eye/both eyes
- £ e.g. Left/Right/both ears

2.	2. In the light of the above, his/her overall permanent physical impairment as per guidelines			
	(to be specified), is as foll	ows:		
	In figures:	percent		
	In words:		percent	
3.	The above condition is proimprove.	ogressive/ non-progressive/	likely to improve/ not likely to	
4.			_ months, and therefore this certificate	
5.	The applicant has submitt	ted the following document	as proof of residence:	
	Nature of Document	Date of Issue	Details of authority issuing certificate	
6.	Signature and seal of the	Medical Authority:		
Ν	lame and Seal of Member	Name of Seal of Member	Name and Seal of the Chairperson	
ir p fa	signature/Thumb mpression of the person in whose avour disability ertificate is ssued.			

FORM-PwD(IV)

## Form-IV Disability Certificate

(In cases other than those mentioned in Forms II and III)

# (NAME AND ADDRESS OF THE MEDICAL AUTHORITY ISSUING THE CERTIFICATE) (See rule 4)

Recent	PP	size
Attested		
Photogra	aph	
(Showin	g	face
only) of	the p	erson
with disa	ability	rst.

Certificate No		Date:
This is to certify that I	have carefully examined Shri/Smt./Kur	n
sc	on/ wife/daughter of Shri	
Date of	Birth (DD/MM/YY)	Age years
male/female	Registration No.	
permanent resident of	f House No	Ward/Village/Street
	Post Office	District
<del></del>	State	
whose photograph is a	affixed above, and am satisfied that he	/she is a case of disability.

1. His/her extent of percentage of physical impairment/disability has been evaluated as per guidelines (to be specified) and is shown against the relevant disability in the table below:

S. No.	Disability	Affected Part of Body	Diagnosis	Permanent physical impairment/mental disability (in %)
1	Locomotor disability	@		
2	Low vision	#		
3	Blindness	Both Eyes		
4	Hearing impairment	£		
5	Mental retardation	Х		
6	Mental-illness	Х		

(Please strike out the disabilities which are not applicable.)

@ - e.g. Left/Right/both arms/legs

# - e.g. Single eye/both eyes

#### £ - e.g. Left/Right/both ears

2.	The above condition is progressive/ n	non-progressive/	likely to improve,	not likely to
	improve.			

5. Reassessifient of alsomitty is	3.	Reassessment	of	disability	is:
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a. not necessary

Or

- b. is recommended/after \_\_\_\_\_\_ years \_\_\_\_\_ months, and therefore this certificate shall be valid till (DD/MM/YY) \_\_\_\_\_
- 4. The applicant has submitted the following document as proof of residence:

Nature of Document	Date of Issue	Details of authority issuing certificate

(Authorised Signatory of notified Medical Authority) (Name and Seal)

#### Countersigned

{Countersignature and seal of the CMO/Medical Superintendent/Head of Government Hospital, in case the certificate is issued by a medical authority who is not a government servant (with seal)}

Signature/Thumb impression of the person in whose favour disability certificate is issued.

Note: In case this certificate is issued by a medical authority who is not a government servant, it shall be valid only if countersigned by the Chief Medical Officer of the District. Note: The principal rules were published in the Gazette of India vide notification number S.O. 908(E), dated the 31st December, 1996.

#### **FORM-DYSLEXIC-1**

Date:

#### FORMAT OF MEDICAL CERTIFICATE / REPORT TOBE PRODUCED BY DYSLEXIC CANDIDATE {To be obtained from any Dyslexia Association\*}

	PSYCHO-EI	DUCATION EVAL	<u>UATION REPORT</u>	
Name of the ca	indidate:			Photograph
Date of Birth:				of the Candidate
Registration in	the Dyslexia Assn. (dat	e / number):		
Name of the Fa	ther/Mother/Guardian	:		
Name/address of the Dyslexia	_			
Physical & Neu	rologic Assessment:	[	1	
Psychological A WISC	Assessment: Verbal IQ: PerformanceIQ: Full Scale IQ:	]	]	
Interpretations		[	1	
Educational As	sessment:	[	]	

#### Certified that:

- The condition of handicap is: MILD / MODERATE / SEVERE (tick whichever is applicable)\*\*
- 2. The disability is **PERMANENT** in nature and **DETAILED REPORTS OF DYSLEXIA ASSESSMENT ARE ATTACHED WITH THIS FORM (IN ORIGINAL).**

- 1. Dyslexia Trust of Kolkata, Divya Jalan, Aruna Bhaskar 3, Dover Park, Kolkata 700019
- 2. Dyslexia Association Of Andhra Pradesh (DAAP), 3-4-494/1,1st Floor, Macherla Gastrology Hospital, Reddy College Road, Barkatpura, Hyderabad, Telangana, 500027
- 3. Madras Dyslexia Association, 94 Park View, 1st Floor, G.N. Chetty Road, T. Nagar, Chennai 600017
- 4. Maharashtra Dyslexia Association, 003, Amit Park Bldg, L J Road, Deonar, Mumbai 400088
- 5. The Dyslexia Association of India, MZ-47, The Centre Stage Mall, Plot No 01, Block L, Sector 18, NOIDA 201303

## Signature and Name (in CAPITAL LETTERS) of the certifying official: Seal:

<sup>\*</sup>Some Dyslexia Associations:

<sup>\*\*</sup>Learning Disability is a permanent developmental disorder. Currently there are no standard approved methods to quantify the disorder. However the method of diagnosis is based on significant impairment in academic achievement. To avail the benefit of relaxed norm under PwD category, the candidate must come under SEVERE category.

#### **FORM-DYSLEXIC-2**

# \*CERTIFICATE TO BE PRODUCED BY DYSLEXIC CANDIDATE FROM THE PRINCIPAL OF THE SCHOOL/COLLEGE LAST ATTENDED

#### **Testimonial**

Date:	
Name of the candidate:  Date of Birth:	Photograph
Name and Address of the School/College:	
Certified that Shri/Shrimati/Kumari	
son/daughter of	of
village/town passed his/her	Class XII from this
school and as per records, availed concession under dysle	exic category.
Signature with seal:	

<sup>\*</sup>A candidate passing Class XII or equivalent through open school system or in private mode may submit the certificate to this effect from the competent authority in the board certifying the concessions availed under dyslexia.

**FORM-DS** 

#### **PROFORMA**

#### EDUCATION SCHOLARSHIP-ENTITLEMENT CARD

(To children of Armed Forces personnel killed/disabled/missing in wars/CI Operations)

The holder of this card Sh	ri/Kum	
born on	is the son/daughter of Shri/Smt	
	, Rank	
of U	nit Se	ervice
	Service No.	
killed in action/permanently	y disabled/missing on	
during	(Name of war/operation).	
Name of the Guardian:		
Address:		
The holder is eligible for	all educational concessions sanctioned by C of Armed Forces personnel killed, missings/CI Operations.	
Signature of the authorized (	Officer	
Office Address:		
	Card for Education Scholarship should be obtained from hi-11. and for Personnel Below Officer Rank (PBOR) the s	same

be obtained from the respective Record Offices.)

#### **FORM-SCRIBE (AMANUENSIS)**

#### FORMAT OF REQUEST LETTER FOR SCRIBE (AMANUENSIS) FOR PwD CANDIDATES

From			Date:
Name of the candidate:			<u> </u>
Address:			
Application / Roll Number	er of JEE (Main	n) 2020:	
Mobile No:		Email:	
The Chairman, JEE (Advai Indian Institute of Techno Madras/ Roorkee (Tick A	ology, Bombay,		ati/ Kanpur/ Kharagpur/
Dear Sir, Subject: R	Requirement of	SCRIBE (AMA	ANUENSIS)
	I would like t	to use the servi	severe)/ disability in the upper ce of a scribe (AMANUENSIS) l.
services of a scribe, but d	o not possess t	the extent of dis	any stage that I have used the ability that warrants the use of an and admission. In case will be cancelled.
Thanking you,			
Signature of the o	candidate	Signature o	of the Parent/Guardian
		(Name o	of the Parent/Guardian)

## **Declaration by the Candidate in Lieu of OBC-NCL Certificate**

Name of the candidate:		_	
Address:		-	Passport size photo
Application /Roll Number of	JEE (Main) 2020:	-	
Mobile No:	Email:		
Pensions, GoI, I am required to Since I have not been able to (Advanced) 2020 provisional candidate and that I will uplo or before September 26, 2020 I understand that inability to up	new guideline from the Ministry to submit OBC-NCL certificate is collect the said certificate on time ally. I hereby declare that I was ad a fresh certificate (issued on/at, 05:00 PM. apload the same by the given date erstand that, if qualified, my cates	sued on or after Aprile, I may kindly be all rote JEE (Main) 20 fter April 1, 2020) a and time will lead to	il 1, 2020. lowed to write JEE 020 as OBC-NCL it the web portal on the withdrawal of
Signature of Father/Mother		Signature of App	olicant
Name:		Date:	
Date:			

## **Declaration by the Candidate in Lieu of GEN-EWS Certificate**

Name of the candidate:		_	
Address:		_	Passport size photo
Application /Roll Number of	JEE (Main) 2020:		
Mobile No:	Email:		
Pensions, GoI, I am required to Since I have not been able to (Advanced) 2020 provisional candidate and that I will uplo or before September 26, 2020 I understand that inability to up	new guideline from the Ministrato submit GEN-EWS certificate is collect the said certificate on timely. I hereby declare that I was an a fresh certificate (issued on/a), 05:00 PM.  Inpload the same by the given date derstand that, if qualified, my cate	ssued on or after Aprale, I may kindly be alwrote JEE (Main) 20 after April 1, 2020) at and time will lead to	il 1, 2020. lowed to write JEE 020 as GEN-EWS at the web portal on the withdrawal of
Signature of Father/Mother		Signature of App	plicant
Name:		Date:	
Date:			

## **Annexure-III** Courses Offered in the Academic Year 2019-20

2. Agri Food 3. Artif Inte 4. Bio 5. Bio 6. Biole and Bioe 7. Biot Engi	ospace gineering icultural and ad Engineering ificial elligence Engineering Technology logical Sciences	X	BBS	BHU	D	G	GN	Н	В. Т	_ ↓ Γech	к . (4	Years		Mandi	PKD	Р	R	RPR	TP	ISM	GOA	BH	JM	DWD
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	l Technology																							
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	Engineering																							
25.	Instrumentation																							
	Engineering											Х												
26.	Manufacturing																							
	Science and											х												
	Engineering																							i
27.	Materials Science																							
	and Engineering						Х				Х												Х	
28.	Materials Science																							
	and Metallurgical							х																
	Engineering																							
29.	Mathematics and																							
	Computing				Х	Х		х										Х			Х			
30.	Mechanical																							
	Engineering	Х	Х	Х	Х	Х	Х	х	Х	Х	Х	Х	Х	Х	х	Х	Х	Х	Х	Х	Х	Х	Х	Х
31.	Metallurgical and																							
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	Engineering																							
32.	Metallurgical																							
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34.	Mineral																							
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36.	Mining Machinery																			Λ.D.				
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37.	Naval Architecture																							
	and Ocean												х											
	Engineering																							
38.	Ocean Engineering																							
	and Naval											х												
	Architecture																							
39.	Petroleum																			AR				
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40.	Pharmaceutical																							
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41.	Polymer Science																							
	and Engineering			L		L		L	L	L	L	L	L		L	L	Х		L	L		L		
42.	Production and																							
	Industrial				х												х							
	Engineering			L		L		L	L	L	L	L	L		L	L	L		L	L		L		
43.	Textile Technology				Х																			
	<u> </u>								В	3.S. (	4 Ye	ars)												
44.	BS in Mathematics	Х																						
45.	Chemistry	х									х													
46.	Earth Sciences										х													
47.	Economics	Х									х													
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	Computing																							. 1
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Code	Branch Name	В	BBS	BHU	D	G	GN	Н		J	K	KGP	М	Mandi	PKD	Р	R	RPR	TP	ISM	GOA	BH	JM	DWD
49.	Physics										Х													
									В. /	Arch	. (5	Years	)											
50.	Architecture			Х								Х					Х							
				1	I	В	. Tec	hN	1.Te	ch. [	Dual	Degre	ee (5	Years	)					1		1		
	Aerospace														ĺ									
51.	Engineering											Х	Х											
52.	Agricultural and																							
52.	Food Engineering																							
	with M.Tech. in											х												
	any of the listed											_ ^												
	specializations																							
53.	Bio Engineering													Х										
54.	Biochemical													^										
54.																								
	Engineering with																							
	M.Tech. in Biochemical			х																				
	Engineering and Biotechnology																							
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55.	Bioengineering with M.Tech in																							
	Biomedical			х																				
	Technology																							
56.	Biological												х											
	Engineering																							
57.	Biotechnology and																							
	Biochemical											Х												
	Engineering																							
58.	Ceramic			х																				
	Engineering																							
59.	Chemical				х							х												
	Engineering																							
60.	Civil Engineering			Х																				
61.	Civil Engineering																							
	and M. Tech. in		х																					
	Structural																							
	Engineering																							
62.	Civil Engineering																							
	and M.Tech in		х																					
	Transportation																							
	Engineering																							
63.	Civil Engineering																							
	and M.Tech. in		х																					
	Environmental																							
	Engineering				<del>                                     </del>	-	-								-	-			-	-		-		
64.	Civil Engineering																							
	with any of the											х												
	listed																							
	specialization	-			<u> </u>	ļ	-									-			ļ			-		
65.	Computer Science		х	х	х							х												
	and Engineering	<b>.</b>			ļ	<u> </u>	-									-			ļ			-		
66.	Electrical	х																						
	Engineering				<u> </u>	<u> </u>	<b></b>								ļ	<u> </u>			<u> </u>			<b></b>		
67.	Electrical																							
	Engineering and																							
	M.Tech Power		Х																					
	Electronics and																							
	Drives				<u> </u>																			

1			IITs																					
Code	Branch Name	В	BBS	BHU	D	G	GN	Н	1	J	K	KGP	М	Mandi	PKD	Р	R	RPR	TP	ISM	GOA	BH	JM	DWD
68.	Electrical																							
	Engineering with																							
	M.Tech. in any of											х												
	the listed											^												
	specializations																							
69.	Electrical																							
	Engineering with			х																				
	M.Tech. in Power																							
	Electronics																							
70.	Electronics and																							
	Electrical																							
	Communication																							
	Engineering with											х												
	M.Tech. in any of																							
	the listed																							
	specializations																							
71.	Energy				<u> </u>										-				<b> </b>					
/1.																								
	Engineering with																							
	M.Tech. in Energy	Х																						
	Systems																							
	Engineering																							
72.	Engineering												х											
	Design																							
73.	Engineering			х																				
	Physics			^																				
	Environmental																							
74.	Science and	х																						
	Engineering																							
75.	Industrial and																							
	Systems																							
	Engineering with																							
	M.Tech. in																							
	Industrial and											Х												
	Systems																							
	Engineering and																							
	Management																							
76.	Industrial			х																				
	Chemistry																							
77.	Manufacturing																							
	Science and																							
	Engineering with																							
	M.Tech. in																							
	Industrial and											Х												
	Systems																							
	Engineering and																							
	Management																							
78.	Materials Science																							
	and Technology			Х																				
79.	Mathematics and				1										1						1			
13.	Computing			х	х																			
00					<u> </u>		-								-				-		-			
80.	Mechanical			х														х						
L	Engineering				<u> </u>	<u> </u>									1						<b></b>			
81.	Mechanical																							
	Engineering and																							
	M. Tech. in		х																					
	Mechanical																							
	System Design				L	L			L	L			L		L				L_					

			IITs																					
Code	Branch Name	В	BBS	BHU	D	G	GN	Н	ı	J	K	KGP	М	Mandi	PKD	Р	R	RPR	TP	ISM	GOA	ВН	JM	DWD
82.	Mechanical Engineering and M. Tech. in Thermal Science & Engineering		x																					
83.	Mechanical Engineering and M.Tech. in Computer Integrated Manufacturing	x																						
84.	Mechanical Engineering with M.Tech. in any of the listed specializations											х												
85.	Mechanical Engineering with M.Tech. in Manufacturing Engineering		х																					
86.	Metallurgical and Materials Engineering		х									х												
87.	Metallurgical Engineering			х																				
88.	Metallurgical Engineering & Materials Science	х																						
89.	Mining Engineering			AR								AR												
90.	Mining Safety Engineering											AR												
91.	Ocean Engineering and Naval Architecture											x	x											
92.	Pharmaceutical Engineering & Technology			х																				
93.	Quality Engineering Design and Manufacturing									-1.04		X												
94.	Applied Geology				1	1	11	iceg	rate	u IVI	. те	ch. (5	теа	15)			l			AR				
95.	Applied Geophysics																			AR				
96.	Geological Technology																х							
97. 98.	Geophysical Technology Mathematics and																х							
30.	Computing							Inte	graf	ted I	M S	. (5 Y	pare	.)						х				
99.	Applied Geology								-51 a	.cu	71.3	AR	- ai 3											
100.												7313					х							

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			IITs																					
Code	Branch Name	В	BBS	BHU	D	G	GN	Н		J	K	KGP	М	Mandi	PKD	Р	R	RPR	TP	ISM	GOA	BH	JM	DWD
101.	Chemistry											Х					Х							
102.	Economics											Х												
103.	Exploration Geophysics											AR												
104.	Mathematics and Computing											х												
105.	Physics											Х					Х							
							В.	SM	I.S. I	Dual	Deg	gree (!	5 Ye	ars)										
106.	Biological Sciences												Х					,						
107.	Physics												х	·										

NB. 1) AR: These courses have additional requirements.

<sup>2)</sup> At IIT Kharagpur, B.Tech. degrees are B.Tech.(Hons).

## **Annexure-IV IMPORTANT DATES**

No.	Activity	Day, Date and Time (IST)
1.	JEE (Main) 2020 [Computer Based Test by NTA]	JAN 06 to 11, 2020
2.	JEE (Main) 2020 [Computer Based Test by NTA]	SEP 01 to 06, 2020
3.	Results of JEE (Main) 2020 by NTA	By 31-01-2020 & By 11-09-2020
4.	Registration for JEE (Advanced) 2020	SAT, 12-09-2020 to THU, 17-09-2020
5.	Last date for fee payment of registered candidates	FRI, 18-09-2020
6.	Admit Card available for downloading	MON, 21-09-2020 to SUN, 27-09-2020
7.	JEE (Advanced) 2020	SUN, 27-09-2020
8.	Copy of candidate responses to be available on the JEE (Advanced) 2020 website	TUE, 29-09-2020, 10 AM to WED, 30-09-2020, 05 PM
9.	Online display of provisional answer keys	TUE, 29-09-2020, 10 AM
10.	Feedback and comments on provisional answer keys from the candidates	TUE, 29-09-2020, 10 AM to WED, 30-09-2020, 05 PM
11.	Online declaration of final answer keys and results of JEE (Advanced) 2020	MON, 05-10-2020, 10 AM
12.	Online registration for Architecture Aptitude Test	MON, 05-10-2020, 10 AM to TUE, 06-10-2020, 05 PM
13.	Architecture Aptitude Test	THU, 08-10-2020
14.	Declaration of results of AAT	SUN, 11-10-2020, 05 PM
15.	Tentative Start of Seat Allocation Process	TUE, 06-10-2020

## **Annexure-V Contact Details of Zone-wise IITs**

Zone Wise	Address for	Phone Number and Email						
Institutes	Correspondence	Thore Number and Eman						
South IIT Madras* IIT Hyderabad IIT Palakkad IIT Tirupati	Chairman JEE (Advanced) 2020 IIT Madras Chennai - 600036	Phone: +91 44 22578220 E-mail: jeeadv@iitm.ac.in						
West IIT Bombay* IIT Gandhinagar IIT Goa IIT Dharwad	Chairman JEE (Advanced) 2020 IIT Bombay, Powai Mumbai - 400076	Phone: +91 22 25769093 E-mail: jeeadv@iitb.ac.in						
North-Central IIT Delhi* IIT Jodhpur IIT Jammu	Organizing Chairman, JEE (Advanced) 2020 IIT Delhi, Hauz Khas New Delhi - 110016	Phone: +91 11 26591785 +91 11 26591798 +91 11 26597099 E-mail: jeeadv@admin.iitd.ac.in						
North-East IIT Guwahati* IIT Patna	Chairman JEE (Advanced) 2020 IIT Guwahati Guwahati - 781039	Phone: +91 361 2692795 E-mail: jee@iitg.ac.in						
Central IIT Kanpur* IIT Indore IIT (BHU)	Chairman JEE (Advanced) 2020 IIT Kanpur Kanpur - 208 016	Phone: +91 512 2597325 E-mail: jeeadv@iitk.ac.in						
East IIT Kharagpur* IIT Bhubaneswar IIT (ISM) IIT Bhilai	Chairman JEE (Advanced) 2020 IIT Kharagpur Kharagpur - 721302	Phone: +91 3222 282102 E-mail: jeeadv@iitkgp.ac.in						
North IIT Roorkee* IIT Mandi IIT Ropar	Chairman JEE (Advanced) 2020 IIT Roorkee Roorkee - 247667	Phone: +91 1332 284272 E-mail: jeeoffice@iitr.ac.in						

<sup>\*</sup> Zonal IIT