1. TABLE OF CONTENTS

2. ADMISSION PROCEDURE

Admission to B.Tech Programmes offered at Amrita Schools of Engineering – Amaravati*, Amritapuri, Bengaluru, Chennai, Coimbatore campuses for the academic year 2020 is through:

Subject to approval of concerned bodies

Amrita Entrance Examination – Engineering 2020 (AEEE 2020) / Joint Entrance Examination Mains 2020 (JEE Mains 2020) and is based on the rank secured in AEEE 2020/JEE Mains 2020.

70% of the seat allotment will be through AEEE 2020 and 30% through JEE Mains 2020 (one of the sessions)

A candidate can choose to apply either through AEEE 2020 / JEE Mains 2020 or both.

i)   Amrita Entrance Examination – Engineering 2020 (AEEE 2020)

Amrita Entrance Examination – Engineering 2020 is conducted by Amrita Vishwa Vidyapeetham in two modes: Computer Based Test (CBT) and Pen & Paper Test (PPT).

*   Computer Based Test (CBT), on 5 days with 3 slots on each day.
*   Pen & Paper Test (PPT), conducted **only** in Tamil Nadu, one slot on one day.

While CBT is conducted in 100+ centres across the country, PPT is conducted only in selected centres in the state of Tamil Nadu.

Candidates can opt only one mode of examination - either CBT or PPT mode. Candidates opting for PPT mode can appear for the examination only in selected centres in the state of Tamil Nadu.

(ii) Joint Entrance Examination Mains 2020 (JEE Mains 2020)

Note : Refer **'Important Dates'** section to see the schedule of admission activities.

3. ADMISSION PROCESS

• Apply online and Register for Amrita Entrance Examination – Engineering 2020 / Choose the JEE
  Mains option.
• Submit your academic preference (campus + branch) prior to the registration for Seat Allotment.
• Register online for Seat Allotment after the publication of results.
• Accept the seat offer if satisfied with the allotment.
• Pay the tuition fees online.
• Satisfy the eligibility criteria by producing the original marks statement at the time of document
   verification.
(ii) • Classes to commence in the mid of July.

4. ELIGIBILITY & CRITERIA FOR ADMISSION TO B.TECH PROGRAMME:

Age: Candidates whose date of birth falls **on or after 1st July, 1999**.

Educational Qualification: A pass in 10 + 2 (Class XII) or its equivalent examination with minimum 60% aggregate of marks in Mathematics, Physics and Chemistry and with not less than 55% in each of these three subjects.

Note: Those who appear for the above examination in March/April 2020 and expect to secure minimum marks as above, may also apply.

Amrita Vishwa Vidyapeetham neither verifies the data submitted by the candidates online nor verifies any certificate of category/educational qualification for deciding the eligibility of candidates prior to the examination. The certificates of educational qualification and category (if applied under reserved category) will be verified at the time of document verification process conducted as part of Seat Allotment. The candidates are, therefore, advised to ensure the validity of their eligibility and the category (if applying under reserved category) as entered in the application portal. The University will, in no way, be responsible for any wrong/incorrect information furnished by the candidate(s) in their online application form. Any letter/e-mails in this regard will not be entertained. Application may be rejected in case any false information is submitted. Amrita Vishwa Vidyapeetham reserves the right to cancel the admission in case of any discrepancy found in the data submitted at any point of admission process.

5.   APPLICATION SUBMISSION – ONLINE

Application submission is online and shall be submitted via the website amrita.edu/btech.

One candidate shall submit only one application form. Multiple applications, i.e. more than one application from a candidate may get rejected.

The candidates are advised to have their own personal and valid email id and mobile No. The candidates are advised to retain the registered mobile number and email-id they have submitted in the application form till the admission procedures are completed as all important updates will be informed to the candidates through SMS / e-mail or both.

You need to complete following sections in order to submit the application. Refer next section for more details on application form data. You can fill all the details initially and complete the payment at a later stage. However, the application is deemed to be completed only after the payment. Details to be filled:

a) Personal Profile (Name, Address & Contact details)
b) Academic Profile (Marks of the qualifying examination & year, Last attended school)
c) Family Profile (Income details)
d) Mode of admission – AEEE / JEE
    i.   AEEE 2020: Choose Examination Centre, Date
    ii.   JEE (Mains) 2020: Enter the details as in JEE score card.

Note : Only selection of mode of admission is enough at the application submission stage. Details as in JEE score card may be entered soon after the publication of results of JEE Mains, 2020.

e) Choice of city to attend AEEE 2020

6.   COST OF APPLICATION FOR AEEE 2020:

INR 1000 for candidates seeking admission through Amrita Entrance Examination – Engineering 2020 and INR 300 for candidates seeking admission based on the rank / score secured in JEE Mains 2020. Candidates need to pay only INR 1000 if they wish to secure admission through both AEEE 2020 rank and JEE Mains 2020 rank.

The application fee may be paid either by credit/debit card or net banking. Please note that fee submitted through any other mode like money order, demand draft, IPO etc. is not accepted for online applications. Application fee once paid will not be refunded (full or partial) under any circumstances. **In case the examination fee is paid through credit/debit card, the candidates may have to pay an additional processing charge as per government rules.**

Post your payment queries in Query Management System to get a faster response.

Note: The test will be conducted in both the modes in Tamil Nadu only.

7.   APPLICATION FORM DATA

The name of the candidate and his/her parents' name in the application form **must be exactly the same** as registered in Class 10th. Prefix/title such as Mr/Shri/Fr/Dr/Mrs/Smt/Col etc shall not be used.

Candidates shall correct/modify some of the particular(s) of the application data, prior to the commencement of Seat Allotment. The candidates are advised to visit the website regularly to know the exact dates of each process in the admissions.

Request for change will not be accepted through fax, e-mail etc.

The candidates are advised not to send hardcopy of the online application to the University. However, the candidates are advised to retain the hard copy of the application, i.e., acknowledgement page for future reference or correspondence, if any.

Candidate(s) may check the status of their application online in amrita.edu/btech website.

The jurisdiction to settle and decide all matters and disputes related to admission process is within Coimbatore.

All correspondence related to B.Tech Admissions should be addressed only to:
Chairman (B.Tech Admissions),
E-105, Admissions Office, Academic Block 1,Amrita Vishwa Vidyapeetham,
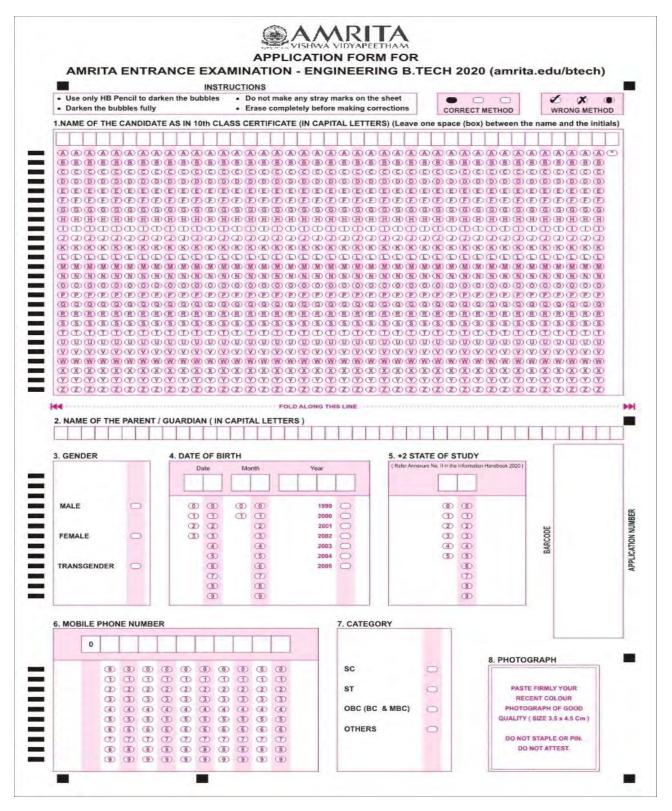**Amritanagar P.O., Ettimadai, Coimbatore – 641112.**
Phone: 1800 425 90009 [Toll Free]
Email: btech@amrita.edu. For latest information related to B.Tech admissions, visit amrita.edu/btech.

Personal Information	
Fields	**Remarks**
Candidate's Name	Your name shall be entered as per the records of Class 10[th.]
Gender	Male / Female / Transgender
Date of Birth	Yyyy/mm/Dd
Social Status	OBC / MBC / SC / ST
Email Address	Most of the communication will be through E-Mail. Enter a valid E-Mail ID
Alternate Email	
Aadhar Number	
Nationality	
Father's/Mother's Name	Shall be entered as per the records of Class 10th.
Father's/Mother's Mobile No.	Most of the communication will be through Mobile. Enter a valid Mobile No.
Photograph	File size as mentioned in the online form.
How did you come to know about Amrita?	Newspaper / Facebook / Teachers / Alumni / Social Media / Other
Address for Correspondence	
Address Line 1	
Address Line 2	
Pincode	
State	
District	
City	
Academic Qualifications	
School Last Attended	
Plus Two Board	CBSE/STATE/OTHER/AICSE
Plus Two State	State where you studied +2
AEEE Details	
Mode of Exam	
Exam City Choice 1	
Exam City Choice 2	
Exam City Choice 3	
JEE Details	
JEE Application No.	
Session 1 JEE Score	
Session 2 JEE Score	
JEE Rank (Common Rank List (CRL))	
Other Details	
Preferred Campus	
Do you wish to stay in Hostel ?	
Do you need Bus Facility ?	
DECLARATION	
Declaration	
Place	
Date	
Signature of the Candidate	According to the file size mentioned in the online form.

NOTE : Academic Profile and JEE marks needs to be entered only after the publication of the results. It is not mandatory to fill the same at the time of filling the application.

8. APPLICATION SUBMISSION – OFFLINE

Offline, OMR application forms can be procured from the University counter of Amrita Schools of Engineering at Amritapuri, Bengaluru, Coimbatore & Chennai on producing a demand draft for Rs. 1000/- in favour of Amrita School of Engineering, Payable at Coimbatore. It is important that those candidates who are purchasing offline application are required to send the application at the earliest.

9. Mode of Examination : Mark ONLY ONE option. University deserves the right to allot the mode of examination if both the options are marked or none is marked.

COMPUTER BASED TEST		PEN & PAPER TEST
CBT ▢	(OR)	PPT ▢
CHOICE OF CITY FOR CBT APPLICANTS: CHOOSE ANY THREE CITIES FROM ANNEXURE - I OF THE INFORMATION HANDBOOK 2020 AND ENTER THE CORRESPONDING CITY CODE BELOW.		CHOICE OF CITY FOR PPT CANDIDATES (CONDUCTED ONLY IN TAMILNADU) CHOOSE ANY TWO CITIES FROM ANNEXURE - I OF THE INFORMATION HANDBOOK 2020 AND ENTER THE CORRESPONDING CITY CODE BELOW.

CHOICE 1   CHOICE 2   CHOICE 3

FOLD ALONG THIS LINE

10. DECLARATION BY CANDIDATES AND PARENT / GUARDIAN

I hereby declare that all particulars stated by me in this application are true and correct. If any information furnished by me is found to be false or distorted, or if any information is found to be suppressed to secure admission, I understand that, I will be denied admission, and if already admitted, my admission / degree acquired is liable to be cancelled without any claim or consideration. I have read the Information Handbook before filling the application form. I promise to abide by the rules and norms of discipline of the University, if I am admitted. I agree to submit the rest of details online failing by which my application may be rejected.

11. SIGNATURE OF THE CANDIDATE
(within the box using black ball point pen only)

12. FULL SIGNATURE OF THE PARENT / GUARDIAN
(within the box using black ball point pen only)

Name:

Date:

Name:

Date:

9. EXAMINATION CITIES - CITIES/TOWNS OF AEEE 2020 EXAMINATION CENTRES

The names of those cities in which CBT and PPT Examinations will be conducted are listed in **Appendix – I**. Choose the city listed in the online application to write the examination. Candidates shall fill three choices of cities to attend AEEE - 2020.

Requests for Change of Examination City/Town

Normally, the requests for change of cities will not be entertained after the application submission. The decision of the Admission Committee will be final in case of any such requests raised in this regard.

10. ABOUT AEEE 2020 – SYLLABUS, PATTERN AND EVALUATION

Mode of Examination:

Amrita Entrance Examination – Engineering 2020 is conducted in two modes:
- Computer Based Test (CBT), on 5 days with 3 slots on each day.
- Pen & Paper Test (PPT), conducted **only** in Tamil Nadu, one slot on one day.

Note : **In case a candidate, by furnishing false information, appears in more than one slots/dates of the computer based examination or appears in both the modes of examination i.e. pen & paper based and computer based examination, his candidature will be cancelled and his result will not be declared.**

Both CBT and PPT are of 2 and half hours duration.

Syllabus :

The syllabus consists of three sections: Physics, Chemistry and Mathematics. The questions are based on the syllabus in Class 11th & Class 12th. The pattern of examination paper for AEEE – 2020 is given in **Appendix – III.**

All the questions are of Multiple Choice type and will have four answers of equal weightage. 3 (three) marks are awarded for each correct answer and -1 (negative one) for each wrong answer.

Candidates can choose the most appropriate answer for each question in the Computer Based Test mode. Answers marked can be changed later, before the final submission of all the answers. Candidates can practice the test online through the link published in amrita.edu/btech.

Number of questions and mark distribution: Total number of questions is 100, 30 each from Physics & Chemistry, 40 from Mathematics.

Subject	No. of Questions	Marks
Mathematics	40	120
Physics	30	90
Chemistry	30	90
Total	100	300

Use of Calculator and Communication Aids

Use of electronic devices like mobile phones, calculators etc. are **NOT PERMITTED** for AEEE 2020. Materials like log table, book, notebook, etc. should **NOT** be brought into the examination hall.

11. ALLOTMENT OF EXAMINATION CITY FOR CBT CANDIDATES

A candidate appearing for CBT should submit three preferences from the list of cities in Appendix – I. Examination will be conducted in a centre in these cities, provided there are sufficient number of candidates. The preferences submitted by the candidate are only indicative and a guide to the University for deciding the number of cities & centres. A candidate will be allotted one out of the three preferred cities, preferably the first preferred city. If exam cannot be conducted at the first preference of a candidate, he / she will be allotted to second / third preference as applicable. University will put all efforts to conduct examination at all the cities listed in the appendix. If any city in the list is cancelled due to very less registrations, the candidates who have opted for that city will be allotted another nearest city and the same will be informed to the candidates by email.

12.   SLOT BOOKING FOR CBT CANDIDATES

Candidates registered for Computer Based Test shall select **"DATE AND TIME SLOT"** of their choice, SUBJECT TO AVAILABILITY, by visiting the University website prior to the last date. This process is called **"SLOT BOOKING."** Test Centre, Number of days and Number of operating slots in a day will be finalized based on the number of candidates for a particular city. The allotment of date/ slot will be on first come first serve basis. If a candidate does not exercise his/her option, he/she shall be assigned a date/ slot as per the availability of the same. To Book Exam Date and Slot, registered candidates need to click the slot booking link provided in the University web page www.amrita.edu/btech and follow the instructions given below:

a) Candidates can login using their Application Number and Date-of-Birth. In case of any difficulty logging in, open a ticket in the online query management system.

b) After logging in, the candidates can select the test date and test slots based on the availability. To choose the date, click on the available date and click continue button. In the next screen, candidates will be prompted to select test slot based on its availability status.

c) Since other candidates are also simultaneously using the same slot booking portal, sometimes the status presented may change by the time the candidate finishes his/her selection and the particular slot chosen by the candidate may not be available. In such case the candidate will be prompted to choose another date and slot. To change the test date, click on Change Test Date button. Candidates are advised to check selection of Test Centre, Date and Time before confirmation. Click "Confirm Slot" button to confirm booking.

d) A slot once booked cannot be changed under any circumstances. Requests for change of test centers also will not be entertained. The address of the examination centre for a candidate will be mentioned in the Admit Card, which can be downloaded.

13.   CENTRE ALLOTMENT FOR CANDIDATES ATTENDING PPT

Pen and Paper Test is conducted in one slot only on **May 2 (Saturday) from 10:00 AM to 12:30 PM.** PPT applicants shall choose their two preferred city choices for exam centre. Every attempt will be made to allot the centre of first choice. In extreme cases, candidate may be allotted the city of second choice. If examination cannot be conducted in these two cities, candidate will be allotted to another city at the discretion of the University.

14.   ADMIT CARD DOWNLOAD

Admit Card is issued provisionally to the candidate to attend the examination. Admit Card to write the examination is generated only to those eligible candidates who have submitted their application form complete in all respects, on or before the last date specified. Photograph and signature image shall be uploaded on or before the last date.

Admit cards to attend AEEE 2020 shall be downloaded from the website as per schedule [refer Important dates section] by logging into their registered account using their registered Email ID / Application Number and Date of Birth.   Intimation in this regard is sent by SMS and email.

1. Admit Card **will not be sent by post. Visit "**https://www.amrita.edu/btech**" to** see the link to download the Admit Card. The Admit Card will contain details like the Name and Registration Number of the candidate, Date of Exam, Address of the Exam Centre allotted etc.

2. After downloading the admit card, ensure that the data is printed as per the application form submitted by you. In case of any discrepancy, open a ticket in the online query management system (amrita.edu/btech) for a faster resolution.

Note : Request from a candidate for change of city allotted to him/her will NOT be entertained under any circumstances.

3. Candidate will not be permitted to appear for the entrance examination without a valid Admit Card. In the examination hall, candidate should produce his/her Admit Card when demanded by the invigilator.

4. Admit Card is an important document and must be kept safe till the admission process is over.

15. GUIDELINES TO CANDIDATES FOR EXAMINATION

i. COMPUTER BASED TEST

A sample/mock test is available on website for practice purpose and to give the candidate an awareness of the Computer Based Test (CBT).

The examination rooms/hall will be opened one hour before the commencement of the test. The candidates should take their seats in the examination hall 30 minutes prior to the commencement of the examination. If the candidates do not report in time, they are likely to miss some of the general instructions to be announced in the examination hall.

A seat indicating the roll number is allocated to each candidate. Candidate should find out and occupy only their allotted seat. Any candidate found to have changed room or the seat on his/her own other than allotted, his/her candidature shall be cancelled and no plea would be accepted for it.

The candidate must show, on demand, the Admit Card for admission in the examination room/hall. The test will start exactly at the time mentioned in the Admit Card. During the examination time, the invigilator will check Admit Card of the candidate to satisfy himself/herself about the identity of each candidate.

All calculations/writing works are to be done only in the rough sheet provided at the centre and on completion of the test, **candidates must hand over the rough sheets to the invigilator on duty in the Room/Hall.** Candidates attending PPT shall use the 'Rough Work Space' in the question paper booklet for any rough work.

The candidates are governed by rules and regulations set by Amrita Vishwa Vidyapeetham, with regard to their conduct in the Examination Hall. All cases of unfair means will be dealt with as per rules.

The candidates must sign on the Attendance Sheet at the appropriate place.

No candidate is allowed to carry any baggage inside the examination hall. University Representative will not be responsible for any belongings stolen or lost at the premises.

No candidate, under any circumstances, is allowed to attend examination 30 minutes after the commencement.

Candidates are not allowed to carry any textual material, Calculators, Docu Pen, Slide Rules, Log Tables, Electronic Watches with facilities of calculator, printed or written material, bits of papers, mobile phone, pager or any other device, except the Admit Card, identity proof, inside the Examination Room/Hall. If any candidate is in possession of any of the above items, his/her candidature will be treated as unfair means and his/her current examination will be cancelled & he/she will also be debarred for future examination(s) & the equipment will be seized.

Smoking and eating is strictly prohibited in the examination room.

Candidates are not allowed to take Tea, coffee, cold drinks or snacks into the examination rooms during examination hours.

Approach the hall invigilator in the room for any technical assistance, first aid emergency or any other information during the course of examination.

No candidate, without the special permission of the Centre Superintendent or the Invigilator concerned, will leave his/her seat or Examination Room until the full duration of the examination. Candidates must follow the instructions strictly as given by the Centre Superintendent/Invigilators.

ii. PEN & PAPER TEST [PPT]

Ten minutes before the commencement of the examination, each candidate will be given sealed Question Paper Booklet with an answer sheet inside it. Immediately on the receipt of the Question Paper Booklet, the candidate will fill in the required particulars on the cover page of the Question Paper Booklet with **Ball Point Pen** only. He / She will not open the Question Paper Booklet until asked to do so by the invigilator. Do not open/break the seal before the announcement.

In case of toned / mutilated Question Paper Booklet and OMR sheet return it immediately to the invigilator for replacement with another set of same series available in the examination hall/centre.

Five minutes before the commencement of the paper the candidate will be asked to break/open the seal of the Question Paper Booklet. In case of any discrepancy, the candidate should immediately report the matter to the Invigilator for replacement of both the Question Paper Booklet and the OMR answer sheet.

Candidates are required to fill the examination details on the OMR Sheet with **<u>Ball Point Pen.</u>** After completing this step, the candidates will wait for the instruction by the invigilator.

After opening the Question Paper Booklet by breaking the seal, the candidate will check that the question paper booklet contains as many numbers of pages as printed on the top of the first page.

No candidate, under any circumstances, will be allowed to enter the examination hall 30 minutes after the commencement of the examination.

Candidates must follow the instructions strictly as instructed by the Centre Superintendent / Invigilators.

Candidates should not leave the room/hall without handing over their Answer Sheets to the invigilators on duty.

A signal will be given at the beginning of the examination and at half-time. A signal will also be given before the closing time when the candidate must stop marking the responses.

The candidates must sign on the Attendance Sheet, OMR Answer Sheet & Question Paper Booklet at the appropriate place.

The candidate shall not remove any page(s) from the Question Paper Booklet and if he/she is found to have removed any page(s) from his/her Question Paper Booklet, he/she will be presumed to have used unfair means and shall be liable for legal action.

Out of four answers given for each question, only one circle for the correct answer is to be darkened on the OMR Answer Sheet. Use Blue or Black Ball Point Pen to completely darken the appropriate circle, i.e. one circle for each entry. If two circles are darkened, evaluation may go wrong.

The answer once marked is not liable to be changed. <u>So mark cautiously.</u>

Changing an answer to be made cautiously: The candidates must fully satisfy themselves about the accuracy of the answer before darkening the appropriate circle as no change in answer once marked is allowed. Use of eraser or white/correction fluid on the OMR answer sheet is not permissible as the OMR answer sheets are machine gradable and it may lead to wrong evaluation.

If more than one circle is darkened or if the response is marked in any other manner except the 'Correct Method' shown above, it shall be treated as a wrong way of marking and ¼ (one fourth) marks i.e. **one mark** will be deducted for each question.

A light or faintly darkened circle is a wrong method of marking and liable to be rejected by the Optical Scanner. So, the circle should be properly darkened.

Rough work shall be done only in the rough space allotted in the Question Paper Booklet.

If the candidate does not want to attempt any question he/she should not darken the circle given against that question. Do not fold the Answer Sheet and do not make any stray marks on it.

Prior to handing over the OMR Answer Sheet soon after the examination is over, the candidate must sign the attendance sheet as a proof.

16.　CODE OF CONDUCT

The candidates are governed by all Rules and Regulations of the Board with regard to their conduct in the Examination Hall. All cases of unfair means will be dealt with as per rules. Candidates shall maintain perfect silence and attend to their question paper only. Any conversation or gesture or disturbance in the Examination Room/Hall shall be deemed as misbehaviour.

If a candidate is found using unfair means or impersonating, his/her candidature shall be cancelled and he/she will be liable to be debarred for taking examination either permanently or for a specified period according to the nature of offence.

17. SAMPLE OMR SHEET

AMRITA ENTRANCE EXAMINATION - ENGINEERING 2019

Answer Sheet No .

A) INSTRUCTIONS

USE HB PENCIL OR BLACK INK BALL PEN FOR ANSWERS

1. Use Black Ink Ball Pen for Writing in the boxes at 1, 2 and 3 below
2. Use HB Pencil or Black Ink Ball Pen for darkening the bubbles.

Examples

3. If your question booklet version code is C, write C in the box in item 2 using Ball Point Pen and darken the bubble 'C' with HB Pencil / Ball Point Pen.

Ⓐ Ⓑ ● Ⓓ

4. If the answer to Question No .7 is B, darken the bubble 'B' as below using HB Pencil / Ball Point Pen.

7. Ⓐ ● Ⓒ Ⓓ

3. Question Booklet No .

B) DATA PART

1. Registration No .

2. Question Booklet Version Code

Ⓐ Ⓑ Ⓒ Ⓓ

C) ANSWER PART

Q.No	Answers
1	Ⓐ Ⓑ Ⓒ Ⓓ
2	Ⓐ Ⓑ Ⓒ Ⓓ
3	Ⓐ Ⓑ Ⓒ Ⓓ
4	Ⓐ Ⓑ Ⓒ Ⓓ
5	Ⓐ Ⓑ Ⓒ Ⓓ
6	Ⓐ Ⓑ Ⓒ Ⓓ
7	Ⓐ Ⓑ Ⓒ Ⓓ
8	Ⓐ Ⓑ Ⓒ Ⓓ
9	Ⓐ Ⓑ Ⓒ Ⓓ
10	Ⓐ Ⓑ Ⓒ Ⓓ
11	Ⓐ Ⓑ Ⓒ Ⓓ
12	Ⓐ Ⓑ Ⓒ Ⓓ
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14	Ⓐ Ⓑ Ⓒ Ⓓ
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92	Ⓐ Ⓑ Ⓒ Ⓓ
93	Ⓐ Ⓑ Ⓒ Ⓓ
94	Ⓐ Ⓑ Ⓒ Ⓓ
95	Ⓐ Ⓑ Ⓒ Ⓓ
96	Ⓐ Ⓑ Ⓒ Ⓓ
97	Ⓐ Ⓑ Ⓒ Ⓓ
98	Ⓐ Ⓑ Ⓒ Ⓓ
99	Ⓐ Ⓑ Ⓒ Ⓓ
100	Ⓐ Ⓑ Ⓒ Ⓓ

(Use Ball Point Pen for Writing Signature and Name)

4. Signature of the Candidate

Name :

Entries of Registration No ., Question Booklet No ., Question Booklet Version Code, Signature of the Candidate and Name are verified by me and found correct.

5. Signature of the Invigilator :

Name :

18. FEE STRUCTURE **

Aerospace Engineering (AE)
Chemical Engineering (ChE)
Civil Engineering (CE)
Computer & Communication Engineering (CCE)
Computer Science & Engineering (CSE)
Computer Science & Engineering (Artificial Intelligence) (CAI)
Electrical & Computer Engineering (ELC)
Electrical & Electronics Engineering (EEE)
Electronics & Communication Engineering (ECE)
Electronics & Computer Engineering (EOC)
Mechanical Engineering (ME)

B.Tech. Fee Structure 2020

	Amritapuri		Bengaluru		Coimbatore		Chennai		Amaravati * (proposed campus)	
Slab	**Category 1 : CSE, CAI**		**Category 1: CSE , CAI**		**Category 1: CSE , ECE , CAI**		**Category 1:- CSE**		**Category 1: CAI, CSE**	
	Seat %	Fees	Seat %	Fees	Seat %	Fees	Seat %	Fees	Seat %	Fees
1	10	100,000	10	100,000	10	125,000	10	100,000	10	100,000
2	20	175,000	20	190,000	20	225,000	20	175,000	20	200,000
3	20	210,000	20	250,000	20	290,000	20	250,000	20	250,000
4	50	250,000	50	280,000	50	325,000	50	300,000	50	300,000
	Category 2 : ELC, EOC, ECE		**Category 2: EOC, ECE**		**Category 2: ME , ELC, CCE , AE**		**Category 2:- ECE , ME**		**Category 2: ECE**	
1	10	100,000	10	100,000	10	125,000	10	100,000	25	100,000
2	20	150,000	20	175,000	20	210,000	20	150,000	25	200,000
3	20	175,000	20	225,000	20	260,000	20	200,000	50	250,000
4	50	225,000	50	260,000	50	300,000	50	250,000		
	Category 3 : EEE, ME		**Category 3: ME , EEE**		**Category 3: EEE , CE, ChE**		**Category 3:- EEE , CE**		**Category 3: ME , EE**	
1	25	100,000	10	100,000	25	125,000	25	100,000	25	100,000
2	25	150,000	20	150,000	25	175,000	25	150,000	25	150,000
3	25	175,000	20	210,000	25	250,000	25	200,000	50	200,000
4	25	200,000	50	250,000	25	300,000	25	225,000		

** subject to changes

19. WITHDRAWAL RULES

Procedures and rules on the withdrawal from B.Tech admission is published prior to the counselling process. Candidates are requested to visit website amrita.edu/btech for all the updates.

20. IMPORTANT DATES

September 19th 2020 : Commencement of Online Application.

March 31st, 2020 : Closing date for Online Application

April 6th 2020 : Commencement of slot booking for CBT

April 10th 2020 : Slot booking closes for CBT

April 25th 2020 : Application submission closes for PPT

April 23rd to 27th, 2020 : CBT – 3 slots each of 2.5 hrs. duration

May 2nd 2020 : Pen & Paper Test – one slot of 2.5 hrs. duration (10:00 to 12:30 hrs)

May 5th, 2020 : Commencement of Online Registration for Seat Allotment.
Option open to submit / change the academic preference & profile data. No more change in data is allowed after the last date of registration. Candidates are required to enter the JEE Score on or before the last date of registration.

May 7th 2020 : Publication of AEEE Results

The following dates are only tentative. The dates may vary based on the dates of publication of CBSE, State Board and JEE Mains 2020 final rank list.

Seat Allotment and Admission process will begin in the last week of May and will continue till the third week of June.

Seat Allotment procedure and other details will be uploaded in the website prior to the Seat Allotment and Admission process.

Last week of June: Verification of documents & filling the vacant seats. Candidates who have paid the fees shall produce the qualifying examination documents in original in order to complete the admission requirements. Candidates are required to appear in person in the campus as per the allotment.

APPENDIX1 : EXAMINATION CITIES :

I. COMPUTER BASED TEST (CBT)

State	City	City Code
ANDAMAN & NICOBAR ISLANDS	Port Blair	101
ANDHRA PRADESH	Anantapur	102
	Guntur	103
	Kakinada	104
	Kurnool	105
	Nellore	106
	Tadepalligudem	107
	Tirupati	108
	Vijayawada	109
	Visakhapatnam	110
ASSAM	Guwahati	112
BIHAR	Patna	113
	Muzaffarpur	114
CHANDIGARH	Chandigarh	115
CHHATTISGARH	Bhilai	116
	Raipur	117
DELHI	Delhi	118
GOA	Goa (Panaji)	119
GUJARAT	Ahmedabad	120
	Rajkot	121
	Surat	122
	Vadodara	123
HARYANA	Gurgaon	124
	Hisar	125
HIMACHAL PRADESH	Shimla	126
JHARKHAND	Dhanbad	127
	Jamshedpur	128
	Ranchi	129
KARNATAKA	Bengaluru	130
	Davangere	131
	Hubli	132
	Mangalore	133
	Mysore	134
	Raichur	135
	Shimoga	136
	Udupi	137
KERALA	Alappuzha	138
	Amritapuri	139
	Kalpetta	140
	Kannur	141
	Kasaragod	142
	Kochi	143
	Kollam	144
	Kottayam	145
	Kozhikode	146
	Malappuram	147
	Palakkad	148
	Pathanamthitta	149
	Thiruvananthapuram	150
	Thodupuzha	151
	Thrissur	152

State	City	Code
MADHYA PRADESH	Bhopal	153
	Gwalior	154
	Indore	155
	Jabalpur	156
MAHARASHTRA	Aurangabad	157
	Mumbai	158
	Nagpur	159
	Nasik	160
	Pune	161
	Thane	162
ODISHA	Bhubaneswar	163
PUNJAB	Amritsar	164
RAJASTHAN	Jaipur	165
	Jodhpur	166
	Kota	167
	Udaipur	168
TAMIL NADU	Chennai	169
	Coimbatore	170
	Cuddalore	171
	Dindigul	172
	Erode	173
	Hosur	174
	Karur	175
	Kancheepuram	176
	Madurai	177
	Nagercoil	178
	Namakkal	179
	Ooty	180
	Pollachi	181
	Puducherry	182
	Pudukkottai	183
	Salem	184
	Thanjavur	185
	Thiruvannamalai	186
	Tirunelveli	187
	Tiruppur	188
	Trichy	189
	Tuticorin	190
	Vellore	191
TELANGANA	Hyderabad	192
	Khammam	193
	Warangal	194
UTTAR PRADESH	Agra	195
	Allahabad	196
	Kanpur	197
	Lucknow	198
	Noida	199
	Varanasi	200
UTTARAKHAND	Dehradun	201
WEST BENGAL	Durgapur	202
	Kolkata	203

II.   PEN & PAPER TEST (PPT)

State	City	City Code
TAMIL NADU	Chennai	169
	Coimbatore	170
	Erode	173
	Hosur	174
	Madurai	177
	Namakkal	179
	Salem	184
	Thanjavur	185
	Vellore	191

APPENDIX 2 : LIST OF STATES / UNION TERRITORIES

State	Code
Andhra Pradesh	10
Arunachal Pradesh	11
Assam	12
Bihar	13
Chhattisgarh	14
Goa	15
Gujarat	16
Haryana	17
Himachal Pradesh	18
Jammu and Kashmir	19
Jharkhand	20
Karnataka	21
Kerala & Mahe	22
Madhya Pradesh	23
Maharashtra	24
Manipur	25
Meghalaya	26
Mizoram	27
Nagaland	28
Odisha	29
Punjab	30
Rajasthan	31
Sikkim	32
Tamil Nadu & Puducherry (UT)	33
Telangana	34
Tripura	35
Uttar Pradesh	36
Uttarakhand	37
West Bengal	38
UNION TERRITORIES	
Andaman and Nicobar Islands	39
Chandigarh	40
Dadra and Nagar Haveli	41
Daman and Diu	42
Delhi	43
Lakshadweep	44
Countries other than India	50

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MATHEMATICS

Unit 1: COMPLEX NUMBERS: Complex numbers in the form a+ib and their representation on a plane. Argand diagram. Algebra of complex numbers, Modulus and argument (or amplitude) of a complex number, square root of a complex number. Cube roots of unity, triangle inequality.

Unit 2: PERMUTATIONS AND COMBINATIONS: Fundamental principle of counting; Permutation as an arrangement and combination as selection, simple applications.

Unit 3: BINOMIAL THEOREM: Binomial theorem for positive integral indices. General and middle terms in binomial expansions, simple applications.

SEQUENCES AND SERIES

Arithmetic, Geometric and Harmonic progressions. Insertion of Arithmetic, Geometric and Harmonic means between two given numbers. Relation between A.M., G.M. and H.M. Special series $\sum n$, $\sum n2$, $\sum n3$.Arithmetico-Geometric Series, Exponential and Logarithmic Series.

Unit 4: MATRICES AND DETERMINANTS: Determinants and matrices of order two and three, Properties of determinants. Evaluation of determinants. Addition and multiplication of matrices, adjoint and inverse of matrix. Solution of simultaneous linear equations using determinants.

Unit 5: QUADRATIC EQUATIONS: Quadratic equations in real and complex number system and their solutions. Relation between roots and coefficients, Nature of roots, Formation of quadratic equations with given roots;

Unit 6: TRIGONOMETRY: Trigonometrical identities and equations. Inverse trigonometric functions and their properties. Properties of triangles including centroid, incentre, circumcentre and orthocentre, Solution of triangles. Heights and distances.

Unit 7: MEASURES OF CENTRAL TENDENCY AND DISPERSION: Calculation of Mean, Median and Mode of grouped and ungrouped data, Calculation of standard deviation, variance and mean deviation for grouped and ungrouped data.

Unit 8: PROBABILITY: Probability of an event, addition and multiplication theorems of probability and their applications; Conditional probability; Bayes' theorem, Probability distribution of a random variate; Binomial and Poisson distributions and their properties.

Unit 9: DIFFERENTIAL CALCULUS: Polynomials, rational, trigonometric, logarithmic and exponential functions; Graphs of simple functions, Limits, Continuity; Differentiation of the sum, difference, product and quotient of two functions; Differentiation of trigonometric, inverse trigonometric, logarithmic, exponential, composite and implicit functions; Derivatives of order upto two, Applications of derivatives; Maxima and Minima of functions one variable, tangents and normals, Rolle's and Langrage's Mean Value Theorems.

Unit 10: INTEGRAL CALCULUS: Integral as an anti-derivative. Fundamental integrals involving algebraic, trigonometric, exponential and logarithmic functions; Integration by substitution, by parts and by partial fractions; Integration using trigonometric identities; Integral as a limit of sum; Properties of definite integrals. Evaluation of definite integral;

Determining areas of the regions bounded by simple curves.

Unit 11: DIFFERENTIAL EQUATIONS: Ordinary differential equations, their order and degree; Formation of differential equation; Solutions of differential equations by the method of separation of variables; Solution of Homogeneous and linear differential equations of first order

Unit 12: TWO-DIMENSIONAL GEOMETRY: Review of Cartesian system of rectangular co-ordinates in a plane, distance formula, area of triangle, condition for the collinearity of three points, slope of a line, parallel and perpendicular lines, intercepts of a line on the coordinate axes.

Unit 13: THE STRAIGHT LINE AND PAIR OF STRAIGHT LINES: Various forms of equations of a line, intersection of lines, angles between two lines, conditions for concurrence of three lines, distance of a point from a line. Equations of internal and external bisectors of angles between two lines, equation of family lines passing through the point of intersection of two lines, homogeneous equation of second degree in x and y, angle between pair of lines through the origin, combined equation of the bisectors of the angles between a pair of lines, condition for the general second degree equation to represent a pair of lines, point of intersections and angles between two lines.

Unit 14: CIRCLES AND FAMILY OF CIRCLES: Standard form of equation of a circle, general form of the equation of a circle, its radius and centre, equation of a circle in the parametric form, equation of a circle when the end points of a diameter are given, points of intersection of a line and circle with the centre at the origin and condition for a line to be tangent, equation of a family of circles through the intersection of two circles, condition for two intersecting circles to be orthogonal.

Unit 15: CONIC SECTIONS: Sections of cones, equations of conic sections (parabola, ellipse and hyperbola) in standard forms, conditions for $y = mx+c$ to be a tangent and point(s) of tangency.

Unit 16: VECTOR ALGEBRA: Vector and scalars, addition of two vectors, components of a vector in two dimensions and three-dimensional space, scalar and vector products, scalar and vector triple product. Application of vectors to plane geometry.

Unit 17: THREE-DIMENSIONAL GEOMETRY: Distance between two points. Direction cosines of a line joining two points. Cartesian and vector equation of a line. Coplanar and skew lines. Shortest distance between two lines. Cartesian and vector equation of a plane. Angle between (i) two lines (ii) two planes (iii) a line and a plane. Distance of a point from a plane.

PHYSICS

Unit 1: Units and dimensions
Units for measurement, system of units, SI, fundamental and derived units, dimensional analysis.

Unit 2: Mechanics
Motion in one-dimension, uniform and non-uniform motion, uniformly accelerated motion; Scalars and Vectors, resolution of Vectors, vector properties. Motion in a plane, Projectile motion, Uniform circular motion.

Newton's laws of motion, conservation of linear momentum, Friction; Work-Energy theorem, kinetic energy, potential energy, conservation of energy; elastic collision in one and two dimensions.

Center of mass of a system of particles, centre of mass of a rigid body, rotational motion and torque, angular momentum and its conservation, moments of inertia for various geometries , parallel and perpendicular axes theorem.

Universal law of gravitation, acceleration due to gravity, planetary motion, Kepler's laws, Satellites, gravitational potential and potential energy and escape velocity.

Unit 3: Solids and Fluids

Solids: Elastic properties, Hooke's law, Young's modulus, bulk modulus, rigidity modulus.

Liquids: Cohesion and adhesion; surface energy and surface tension; flow of fluids;Bernouli's theorem and applications; viscosity, Stoke's law, terminal velocity

Unit 4: Oscillations and Waves

Oscillations: Oscillatory motion - periodic and non-periodic motion; simple harmonic motion (SHM), angular SHM, linear harmonic oscillator – both horizontal and vertical; combination of springs – series and parallel, simple pendulum; Expression of energy – potential energy, kinetic energy and total energy; Graphical representation of SHM; Types of oscillations – free, damped, maintained and forced oscillations and resonance.

Wave Motion: Properties of waves; Transverse and Longitudinal waves; Superposition of waves, Progressive and Standing waves; Vibration of strings and air columns, beats, Doppler Effect.

Unit 5: Heat and Thermodynamics

Heat, work and temperature; Ideal gas laws; Specific heat capacity, Thermal expansion of solids, liquids and gases, Relationship between C_p and C_v for gases; Newton's law of cooling, black body, Kirchoff's law, Stafan's law and Wein's law, thermodynamic equilibrium, internal energy; Zeroth, first and second law of thermodynamics, thermodynamic processes, Carnot cycle, efficiency of heat engines, refrigerator

Unit 6: Electrostatics, Current Electricity and Magnetostatics

Electric charges and Fields: Electric Charge; Conductors and Insulators, Charging by Induction, Basic Properties of Electric Charge, Coulomb's Law, Forces between Multiple Charges, Electric Field, Electric Field Lines, Electric Flux, Electric Dipole, Dipole in a Uniform External Field, Continuous Charge Distribution, Gauss's Law, Applications of Gauss's Law.

Electrostatic potential and Capacitance: Electrostatic potential, Potential due to a point charge, electric dipole, system of charges. Equipotential surfaces; Potential energy of a system of charges, potential energy in an external field, Electrostatics of conductors, Dielectric and Polarization, Capacitors and Capacitance, parallel plate capacitor, effect of dielectric on capacitance combination of capacitors, energy stored in a capacitor, Van de Graaff Generator.

Current Electricity: Electric current, electric currents in conductors, Ohm's law, drift of electrons and the origin of Resistivity, temperature dependence of resistivity, electrical energy, power, combination of resistors, series and parallel, cells, emf, internal resistance, cells in series and in parallel, Kirchhoff's Rules, Wheatstone bridge, Meter bridge, potentiometer.

Heating effects of current: Electric power; concept of thermoelectricity – Seebeck effect and thermocouple, chemical effect of current – Faraday's laws of electrolysis.

Magnetic effects: Oersted's experiment, BiotSavart's law, magnetic field due to a straight wire, circular loop and solenoid, force on a moving charge in a uniform magnetic field (Lorentz force), forces and torques on a current carrying conductor in a magnetic field, force between current carrying wires, moving coil galvanometer and conversion to ammeter and voltmeter.

Magnetostatistics: Bar magnet, magnetic field, lines of force, torque on a bar magnet in a magnetic field, earth's magnetic field; para, dia, and ferro magnetism, magnetic induction and magnetic susceptibility.

Unit 7: Electromagnetic Induction and Electromagnetic Waves

Electromagnetic Induction: Induced e. m. f: Magnetic flux, Faraday's law, Lenz's Law and Conservation of Energy, self and mutual inductance.

Alternating Current: Impedance and reactance; power in AC circuits; AC voltage applied to resistor, inductor, capacitor, LCR circuits and resonance, transformer and AC generator.

Electromagnetic Waves: Electromagnetic waves characteristics, electromagnetic spectrum from gamma to radio waves.

Unit 8: Ray and Wave Optics

Ray Optics and optical instruments: Reflection and refraction of light by plain spherical mirrors - Total Internal Reflection; optical fiber; deviation and dispersion of light by a prism; lens formula; magnification and resolving power; microscope and telescope.

Wave Optics: Huygens principle: Wave nature of light, **interference of light waves and Young's experiment**, thin films, **Newton's rings**, Diffraction **–** single slit, grating, Polarization and applications.

Unit 9: Modern Physics

Dual nature of radiation and matter: De Broglie relation, Electron emission, photoelectric effect, experimental study, Einstein's photoelectric equation: Energy quantum of radiation; particle nature of light, the photon, wave nature of matter.

Atoms: Alpha-particle scattering and Rutherford's nuclear model of atom, atomic spectra, Bohr model of the hydrogen atom; the line spectra of the hydrogen atom.

Nuclei: Atomic masses and composition of nucleus; size of the nucleus; mass-energy and nuclear binding energy; nuclear force; radioactivity; nuclear energy

Semiconductor materials, devices and simple circuits: Energy bands in solids; classification of metals, conductors and semiconductors; intrinsic semiconductor, extrinsic semiconductor, p-n junction, semiconductor diode, junction diode as a rectifier, junction transistor, transistor as an amplifier.

CHEMISTRY

UNIT 1 – Basic Chemical calculations: Density - mole concept - empirical and molecular formula – stoichiometry - volumetry, equivalent and molecular masses, percentage composition

UNIT 2 - Atomic structure & periodicity: Atomic models, sub-**atomic particles, orbital shapes, Pauli's exclusion, Hund's rule, Aufbau principle, de**-Broglie relation, Heisenberg's uncertainty, electronic config**uration and periodic properties.

UNIT 3 - Chemical bonding: Ionic bonding, lattice energy **–** Born-haber cycle, covalent bond - **Fajan's Rule –**VSEPR theory - - hybridization, valence bond and molecular orbital theory, coordinate, metallic and hydrogen bonding

UNIT 4 - S-block and hydrogen: Hydrogen, isotopes, liquid hydrogen as fuel, alkali metals, oxides and hydroxides, extraction and properties of lithium, sodium and potassium. Group 2 elements and their properties.

UNIT 5 - P-block elements: Boron - borax, boranes, diboranes, Carbon - allotropes, oxides, carbides, halides and sulphides of carbon group- silicon and silicates **–** silicones, Nitrogen **–** Fixation **–** compounds of nitrogen- Phosphorous **–** allotropes and compounds. Oxygen - oxides and peroxide. Sulphur **–** its compounds - inter-halogen compounds.

UNIT 6 - d and f block elements: d-block elements configuration and properties - transition elements, chromium, copper, zinc, silver, interstitial compounds and alloys, f - block elements and extraction, lanthanides and actinides

UNIT 7 - Solid state: Solids - amorphous and crystalline, classification of crystalline - unit cell, Miller indices - packing efficiency, unit cell dimensions, crystal structure, ionic crystals, imperfections in solids, electric and magnetic properties.

UNIT 8 - Coordination compounds: Terminology in coordination- isomerism, Werner, VBT, CFT theories - Bio-coordination compounds.

UNIT 9 - Gaseous State & Surface chemistry: Gaseous state and gas laws, deviation- **van der Waal's constan**ts - Joule-Thomson effect - liquefaction of gases, theory of catalysis, colloids and emulsions.

UNIT 10 - Colligative properties: Lowering of vapour pressure, Depression of freezing point, Elevation in boiling point, Osmotic pressure, abnormality - dissociation and association

UNIT 11 – Electrochemistry: Faraday's laws - specific, equivalent and molar conductances, Kohlraush's law and applications- electrode potentials - EMF, electrochemical and, galvanic cells, Nernst equation, batteries, fuel cells, corrosion and its prevention.

UNIT 12 -Thermodynamics: First and second law- internal energy, enthalpy, entropy, free energy changes– specific heats at constant pressure and constant volume – enthalpy of combustion, formation and neutralization, Kirchoff law – Hess's law - bond energy

UNIT 13 - Chemical and Ionic Equilibria: Law of chemical equilibrium, homogenous and heterogeneous equilibrium, Le Chatlier's principle, equilibrium constants, factors affecting- Ionic equilibrium, ionization of acids and bases, buffer solutions, pH -solubility of sparingly soluble salts

UNIT 14 - Chemical kinetics: Order, molecularity, rate and rate constant – first and second order reactions - temperature dependence, factors influencing rate of reaction, integrated rate equation, collision theory of chemical reaction

UNIT 15 - Basic Organic chemistry: Classification, functional groups, nomenclature and isomerism, types of organic reactions, mechanism, purification, qualitative and quantitative analysis carbocation, carbanion and free radical, electron displacement in covalent bond.

UNIT 16 - Hydrocarbons & Polymers: IUPAC nomenclature, alkanes –alkynes – aromatic hydrocarbons- nomenclature, preparation, physical and chemical properties uses. Polymerization – types, molecular mass, biodegradable and commercial polymers.

UNIT 17 - Organic halogen compounds: Nature of C-X bond- preparation - properties and reactions of alkyl and aryl halides- polyhalogen compounds - substitution and elimination – mechanism- Grignard reagents.

UNIT 18 - Stereochemistry and Organic nitrogen compounds: Preparation - properties and uses of Aliphatic and aromatic nitro compounds --aliphatic and aromatic amines, nitriles, Diazonium salts. – 1°, 2°, and 3° amines – distinction - Optical activity.

UNIT 19 - Organic functional groups – hydroxyl, carbonyl compounds and ethers: Nomenclature, preparation, properties and uses of alcohols, ethers, aldehydes, ketones, aliphatic carboxylic acids, benzoic acid - salicylic acid

UNIT 20 - Biomolecules and Environmental chemistry: Carbohydrates, proteins, amino acids - enzymes, vitamins and nucleic acids - lipids. Pollution.- air, water and soil - industrial waste, acid rain, greenhouse effect, global warming, Strategies to control pollution.