Vel Tech
Rangarajan Dr. Sagunthala
R&D Institute of Science and Technology
(Deemed to be University Estd. u/s 3 of UGC Act, 1956)

VTUEEE 2022

(Vel Tech Undergraduate Engineering Entrance Examination-2022)

PAPER PEN TEST (PPT)
&
COMPUTER BASED TEST (CBT)

INFORMATION BROCHURE

Important Dates

PHASE - I
VTUEEE 2022 PPT & CBT
[2021 fee structure]

SLOT - I   -   23rd - 26th January 2022
SLOT - II   -   11th -14th February 2022

PHASE - II
VTUEEE 2022 PPT & CBT
[2022 Revised fee structure]

SLOT - I   -   14th - 17th March 2022
SLOT - II   -   21st - 24th April 2022

DECLARATION OF RESULTS

PHASE – I
SLOT - I   -   06th February 2022
SLOT - II   -   25th February 2022

PHASE – II
SLOT - I   -   25th March 2022
SLOT - II   -   05th May 2022

Option 1: Online Application Form:

- Candidate can visit www.veltech.edu.in to apply online.
  Application Fee is ₹ 950.

Option 2: Offline Application Form:

- The application form can be obtained from the Regional offices of Vel Tech on cash payment of ₹ 950/-
  The addresses of the Regional Offices are availabe in the website.

- Candidate must fill the details in Application Form & hand it over to our staff. Thereafter application number will be generated online and the same will be communicated to the candidate through SMS and E-Mail.

*For details regarding counselling dates & Programme commencement date,
please visit our website

Other Enclosures

- Application Form
- Envelope to Despatch the Application Form
- Self-addressed Acknowledgement Card
- Prospectus

1. Introduction

1.1. VTUEEE 2022 is a Vel Tech Undergraduate Engineering Entrance Examination for Scholarship which is conducted by Vel Tech Rangarajan Dr. Sagunthala R&D Institute of Science and Technology for the award of Mahatma Gandhi National Merit Scholarship for four year B.Tech. Degree Programmes of the Institution.

1.2. Special attention has been taken to provide equal opportunity to all students across the country in view of different School Boards at 10+2 (Class – XII) Level. The question paper will be based on JEE mains 2022 syllabus.

See Appendix I

1.3. Application forms for VTUEEE 2022 are available online. Refer: www.veltech.edu.in

1.4. The list of B.Tech. Degree Programmes offered by the Institution is enlisted in Appendix II.

1.5. The purpose of this Examination:

i. "VTUEEE 2022" means "Vel Tech Undergraduate Engineering Entrance Examination for Scholarship."

ii. "Qualifying Examination" means "Examination based on which the candidate becomes eligible to apply for admission to various B.Tech. Degree Programmes".

iii. "Rules" means "The rules specified by the Institution for the conduct of VTUEEE 2022".

iv. SC & ST mean "Scheduled Caste" and "Scheduled Tribe" respectively as specified and laid down by the Government of India.

v. MBC means Most Backward Classes and OBC means "Other Backward Classes as specified and laid down by the Government of India or by the respective State/UT as the case may be."

vi. PC means Physically Challenged person as specified and laid down by the Government of India or the respective State/UT as the case may be.

vii. "MPC" means "Mathematics, Physics and Chemistry."

1.6. Phase-I:
VTUEEE 2022 PPT & CBT
[2021 fee structure]

SLOT - I   -   23rd - 26th January 2022
SLOT - II   -   11th - 14th February 2022

Phase-II:
VTUEEE 2022 PPT & CBT
[2022 Revised fee structure]

SLOT - I   -   14th - 17th March 2022
SLOT - II   -   21st - 24th April 2022

Qualifying Examination Based Concession:
Based on the score obtained in the qualifying examination, candidate will get concession in the form of Mahatma Gandhi National Merit Scholarship.

VTUEEE 2022 Rank Based Concession:

Based on the rank obtained in VTUEEE 2022, the candidate will get concession in the form of Mahatma Gandhi National Merit Scholarship. Candidate can avail the Scholarship calculated based on MPC Aggregate / VTUEEE 2022 ranking whichever is higher.

2. Eligibility Criteria

(A) Admission to B.Tech. Degree Programmes
2.1. Qualifying Examination

In addition to the Government norms, candidate who seeks admission to B.Tech. degree Programmes should have either completed or appeared for, any one of the following examinations; 10+2 system of Higher Secondary Examination conducted by any State Board, Central Board of Secondary Education (CBSE, New Delhi); The Council for the Indian School Certificate Examinations (CISCE, New Delhi); National Institute of Open Schooling; Intermediate or two-year Pre-University Examination conducted by a recognized Board/University; High School Certificate Examination of the University of Cambridge or equivalent.

(B) Eligibility Criteria

2.2. Passed 10+2 examination with Physics / Mathematics / Chemistry / Computer Science / Electronics / Information Technology / Biology / Informatics Practices / Biotechonology / Technical Vocational subject / Agriculture / Engineering Graphics / Business Studies / Entrepreneurship. (Any of the three) Obtained at least 45% marks (40% marks in case of candidates belonging to reserved category) in the above subjects taken together.

2.3. Those appearing for 10+2 (Class XII) final or equivalent examination in March/April/May 2022 can appear for VTUEEE 2022.

2.4. For the purpose of consideration for the award of Mahatma Gandhi National Merit Scholarship, the State from which the candidate has studied and appeared for the qualifying examination (12th standard examination of the State or Central Board) will be taken as the state to which the candidate belongs, even though the nativity of the candidate may be another State or Union Territory.

3. Age Limit and Age Relaxation

3.1. Candidates who have not completed **25 years of age as on 1st July of the year in which admission is sought** is eligible.
However, in case of Scheduled Caste (SC), Scheduled Tribe (ST) and Physically Challenged (PC) candidates, age limit shall be relaxed by 5 years.

3.2. Date of birth as recorded in the Secondary Education Board Certificate only will be taken as authentic.

3.3. Age relaxation up to six months may be granted by the Authority of the Institution in specific cases.

4. Subject Combinations Required

Passed 10+2 examination with Physics / Mathematics / Chemistry / Computer Science / Electronics / Information Technology / Biology / Informatics Practices / Biotechonology / Technical Vocational subject / Agriculture / Engineering Graphics / Business Studies / Entrepreneurship. (Any of the three) Obtained at least 45% marks (40% marks in case of candidates belonging to reserved category) in the above subjects taken together.

5. Scheme of Examination
Paper and Pen Test (PPT) - VTUEEE 2022
Computer Based Test (CBT) - VTUEEE 2022

The question paper pattern will be similar to JEE Mains examination.

- Duration of the examination is 3 hours (180 minutes).
- The question paper consists of 90 questions.
- There are three sections in the question paper A,B,C consisting of Physics, Chemistry and Mathematics having 30 questions in each part of equal weightage .
- Each question is allotted 4 (four) marks for the correct answer.
- 1 mark (one fourth) will be deducted for every wrong answer. No deduction from the total score will be made if no response is indicated for an item in the answer sheet.
- There is only one correct answer for each question. Filling up more than one response will be treated as wrong response and mark will be deducted accordingly.

6. Schedule of Examination

6.1. VTUEEE 2022

<u>PHASE - I</u>

VTUEEE 2022 PPT & CBT
[2021 fee structure]

SLOT - I   -   23rd - 26th January 2022
SLOT - II   -   11th -14th February 2022

<u>PHASE - II</u>

VTUEEE 2022 PPT & CBT
[2022 Revised fee structure]

SLOT - I   -   14th - 17th March 2022
SLOT - II   -   21st - 24th April 2022

Time slot will be provided in the hall ticket

6.2. Exemption from VTUEEE 2022

Student who has secured the first rank in +2 examination conducted by the respective State will be admitted directly into the programme of their choice, subject to eligibility, with full scholarship to the value of 100% of the tuition fee and hostel fee for the entire duration of the programme.

6.3. Only those who have appeared for VTUEEE 2022 examination and has taken admission in to any of the B.Tech. Programmes, are eligible for Mahatma Gandhi National Merit Scholarship.

6.4. Candidate who missed the opportunity to appear for VTUEEE 2022 on the scheduled date of examination for any reason whatsoever, including loss of application form/Hall Ticket in transit, re-examination shall not be conducted. The schedule, once announced, will remain unaltered.

7. Language of the Question Paper : Question paper shall be provided in ENGLISH language only.

8. APPLICATION PROCEDURE

8.1. Application Fee: ₹ 950/-

8.2. How to Apply?

Candidate can apply Online or Offline to Vel Tech Rangarajan Dr. Sagunthala R&D Institute of Science and Technology.

Option 1: Online Application Form:

Candidate can visit www.veltech.edu.in to apply online. Application Fee is Rs 950.

Option 2: Offline Application Form:

- The application form can be obtained from the Regional offices of Vel Tech on cash payment of ₹ 950/- The addresses of the Regional Offices are availabe in the website.

- Candidate must fill the details in Application Form and hand it over to our staff. Thereafter application number will be generated online and the same will be communicated to the candidate through SMS and E-Mail.

8.3. Candidate applying online is required to retain a copy of the filled-in form, and a copy of mode of remittance of Application-cum-Examination Fee.

8.4. Request for change/correction in the application form submitted by the candidate will not be entertained under any circumstance.

8.5. Incomplete/overwritten application forms shall be rejected.

8.6. Regional Offices and Contact Numbers
Chennai Head Office:
Vel Tech Rangarajan Dr. Sagunthala R&D Institute of Science and Technology
'Santhi Sudha',
38, ABM Avenue, (Opp. Crowne Plaza Hotel),
R.A.Puram, Chennai-600 028. Tamil Nadu, India.

Regional Offices:
Chennai :
Vel Tech Rangarajan Dr. Sagunthala R&D Institute of Science and Technology
No:34, Gandhi Mandapam Road (Next to SBI),
Kotturpuram, Chennai-600 085
Tamil Nadu, India.
Phone: 044 43066864, 45030136

Delhi :
Vel Tech Rangarajan Dr. Sagunthala R&D Institute of Science and Technology
A 3/2, Vasanth Vihar,
New Delhi-110 057,
Mobile: +91 97910 68989

Hyderabad :
Vel Tech Rangarajan Dr. Sagunthala R&D Institute of Science and Technology
Door No: 8-2-161,V floor, Dynamic Chamber,
Lane Next to PVR NEXT GALLERIA MALL, Srinagar Colony Road, opp to Metro Railway Station, Panjagutta, Hyderabad - 500 082, Telangana State-India.
Mobile: 097037 60374 / 089776 38326

Kurnool :
Vel Tech Rangarajan Dr. Sagunthala R&D Institute of Science and Technology
D.No: 51-14-5A1, 1st Floor, Opp. to AP Transco, Beside Andhra Bank, New Bus stand, Kurnool, AP
Phone: 077999 04940
Landline: 08518 -257940 / 258940

Kadappa :
Phone: 082200 92468

Tirupati :
Vel Tech Rangarajan Dr. Sagunthala R&D Institute of Science and Technology
Plot No. 22, 9th ward, Opp: SEICOM Degree College , Adjacent Lane to Yamaha Showroom, New Maruthi Nagar, M.R.Palli, Tirupati - 517501
Mobile: 077999 04938/39

Vijayawada :
Vel Tech Rangarajan Dr. Sagunthala R&D Institute of Science and Technology
Door No.39-14-2, Uttam Towers, II Floor,
Opp to Gateway Hotel, M.G Road, Labbipet
Vijayawada - 520 010.
Phone: +91 866 2497 255/355/455,
Mobile: 082200 92469 / 090031 07000

Rajahmundry :
D.No: 36-16-25, Veerababu Lighting Supply Company Building, 1st Floor, Opp. Samsung Service Centre, Stadium Road, Pakkurthi vari veedhi,
Innispeta, Rajahmundry, East Godavari - 533101,
Andhra Pradesh. Phone : 08220092467,
Landline: 0883- 2482199

Nellore:
Vel Tech Rangarajan Dr. Sagunthala R&D Institute of Science and Technology
D.No: 16 -1-190 & 187 ,
II Floor, OPP. Nirmala Agencies,
A.C. Center, Trunk Road,
Nellore – 524 001, Andhra Pradesh.
Mobile : 097903 29208 / 0861 - 2309444

Visakhapatnam :
Vel Tech Rangarajan Dr. Sagunthala R&D Institute of Science and Technology
D.No: 47-10-21/18, IV Floor,
Isnar Plaza, Opp ICICI Bank,
Dwarakanagar Main Road,
Visakhapatnam – 530 016, India.
Mobile : 082200 92466

Patna :
Vel Tech Rangarajan Dr. Sagunthala R&D Institute of Science and Technology
Kulhariya Palace, No. 102, First Floor, Above Bazar India, Beside B.N. College, Ashok Rajpath,
Patna – 800 004
Phone:+91 97903 12780

8.7. For admission of Foreign students, please visit our website : www.veltech.edu.in

9. Examination Centers (PPT / CBT)

Candidate is required to select the centre (PPT/ CBT) most convenient to them, while every effort will be made to allot the centre opted by the candidate, the Institution reserves its discretion to allot a centre other than that of candidate's choice. Under any circumstance, the centre once allotted, will not be changed by the Institution. Refer page No.10 for list of cities.

10. Hall Ticket

10.1. The Hall Ticket can be downloaded by the students from his/her dashboard.

10.2. It will be the responsibility of the candidate to contact helpline (see 8.6 above)/write to the Institution in case he/she has not received the Hall Ticket at least 2 weeks prior to the date of the examination.

10.3. Such requests must be sent to The Head - Admissions (VTUEEE 2022) in order to get the duplicate Hall Ticket or contact 1800 212 7669.

11. Procedure for the Conduct of Examination and use of Answer Sheet

Procedure for conduct of examination and instructions for use of the test booklet and answer sheet are given below. Candidate is advised to go through the instructions carefully before attempting the Examination.

A. Paper and Pen Test (PPT)

11.1. The examination rooms/halls will be opened 30 minutes before the commencement of the examination. Candidates should take the seat immediately after entering the examination hall. If a candidate does not report on time, he/she is likely to miss some of the general instructions that may be announced in the examination hall.

11.2. Every candidate should produce the Hall Ticket for entry into the examination hall.

A candidate who does not possess the Hall Ticket issued by the Institution will not be permitted for the examination under any circumstance by the centre Superintendent.

11.3. Seating will be allocated to each candidate as per the roll number.

11.4. Candidate should report 30 minutes prior to the examination commencement time.

11.5. Candidate will not be permitted to leave the hall before 30 minutes of completion of examination.

11.6. Candidate is not allowed to carry any Textual material, Calculator, Dock Pen, Slide Rule, Log Table, Electronic Watch with facilities of calculator, printed or written material, bits of papers, mobile phone, or any other device, except the Hall Ticket.

11.7. Candidate should not leave the room/hall without handing over their answer sheet and test booklet to the Invigilator on duty.

11.8. Candidate is advised to bring an exam pad.

11.9. Smoking in the Examination Hall/Room is strictly prohibited.

11.10. Tea, coffee, cold drinks or snacks are not allowed inside the examination room during examination hours.

11.11. Ten minutes before the commencement of the examination, each candidate will be given a sealed booklet with an answer sheet.

11.12. On issue of the test booklet the candidate, should fill the required particulars on the cover page of the test booklet with Black Ballpoint Pen only.

11.13. The candidate will be permitted to open the test booklet before 5 minutes of the scheduled start time. Candidate should ensure the code printed on both question and answer booklets match. In case of discrepancy the candidate should report to the Invigilator for replacement.

11.14. Shade your answers using Black Ballpoint pen only.

Important: Please choose the choice of examination as A or B and shade the appropriate box. Please shade your mode of examination in the appropriate box PPT or CBT

B. Computer Based Test (CBT)

Salient Features :

- This is a real time online examination, where the computers are connected to a server and the encrypted examination is conducted via a secured and reliable connection.
- The pattern of this examination will be via multiple choice questions with four options each with only one correct option. Candidate should click on the correct option and submit to proceed to the next question. The candidate can navigate freely to the previous questions.

12. **Evaluation and Declartion of Results**

12.1. **Merit List**

A rank list will be prepared based on the total marks secured in the VTUEEE 2022.

12.2. **Announcement of Result**

The test results will be available in the website: www.veltech.edu.in

PHASE – I
SLOT - I   -   6th February 2022
SLOT - II   -   25th February 2022
PHASE – II
SLOT - I   -   25th March 2022
SLOT - II   -   5th May 2022

12.3. An email intimating the rank will be sent to the candidate and the results will not be intimated via post. There is no provision for re-grading or re-totaling. Photocopy of the answer sheet will not be provided. Any correspondence in this regard will not be entertained.

13. **Counselling, Seat Allocation, Verification of Documents and Admissions**

13.1. Counselling for branch allocation for the short-listed candidate will be based on the merit list.

13.2. Details regarding counselling will be available on the website of the Institution from the day after the declaration of results of VTUEEE 2022 and the candidate can also contact the Admission Officer for more information.

13.3. To take care of possible absentees, the number of qualified candidates is kept more than the number of seats available in the Institution. This will depend upon the candidate's rank in the examination and the availability of seats.

13.4. Details of various Branches offered under the B.Tech. Programme in the current year, the total number of seats allocated for each Branch, the number of seats already allotted and the number of seats still available will be displayed at the counselling centre for the benefit of the candidates to make their choice. Based on the availability, the candidates will be allotted the Branch.

13.5. The Institution will not be responsible for counselling information not reaching the candidate. They are advised to check our website: www.veltech.edu.in regarding information on counselling.

13.6. No change of date/time of counselling is permissible. If a candidate does not personally appear before the Admission Committee for counselling on the date specified, his/her seat shall be offered to the next candidate in order of merit.

13.7. However, due to unforeseen reasons, if a candidate is unable to attend the counselling on the specified date and time, he/she can attend on a subsequent time/date, after duly intimating the Admission Office, regarding the same. But the candidate can only opt for the branch available at that time and cannot claim for any other branch as per his/her original rank/seniority.

13.8. After the counselling for a particular day is over, the number of seats (branch wise) still available will be allotted during the consecutive days.

13.9. If the candiate is unable to submit the mark statement of the qualifying examination before the date of counselling, the candidate shall furnish an undertaking stating that if he/she fails to qualify as per the norms, the candidate has to forego his/her seat.

13.10. Candidate should decide whether he/she has to join the programme based on the Branch allotted to him/her at the time of counselling before the payment of the fee.

13.11. Once allotment of Branch is finalised, change of Branch will not be encourged under any circumstances.

13.12. The balance fee payable can be paid online using Net Banking / Debit Card/ Credit Card at www.veltech.edu.in and also in the form of a DD drawn in favour of "Vel Tech Rangarajan Dr. Sagunthala R&D Institute of Science and Technology", payable at Chennai along with a covering letter to reach the Admission Office or before the date specified in the preallotment form. The candidate should write his/her name and the branch allotted at the time of counselling on the backside of the DD.

14. **Scholarship**

Vel Tech Mahatma Gandhi Merit Scholarship Scheme is avaliable for the Meritorious students of our Institution ranging form 100% Scholarships on tuition fee to 10% concession in tuition fee. For details, refer to Appendix IV.

15. **Refund**

15.1. In the event of a candidate withdrawing before the starting of the programme, the waitlisted candidate shall be given admission against the vacant seat.The refund of fee will be processed as per UGC norms.

15.2. The programme fee should be paid in the beginning of the academic year. Those who wish to discontinue and apply for T.C. in the middle of the degree programme, shall have to remit the entire programme fee of the residual period of study and after issuingT.C. Student cannot claim any amount from the Institution as per the High Court Order.

15.3. No one in the institution is authorised to either pay or receive cash for any purpose.

16. **Rules for Reservation**

Reservation for SC/ST/OBC and Physically Challenged candidate will be applicable as per the rules of Government of India / Goverment of Tamilnadu from time to time.

17. Fee Structure for Candidates Through Counselling

Annual Fee payable for B.Tech. Programmes (in Indian Rupees)

Candidate who appears for vtueee - 2022

PHASE - I Can avail the benefit of 2021 fee structure:

PHASE - II Will adhere to 2022 fee structure:

Branch of Study	Annual Tuition Fee only	Additional Fee		Total Payable Annually
		Academic & Career Advancement Fee	Exam Fee+	
VTUEEE - 2021 PHASE - I				
All Programmes	₹2,30,000	₹15,000	₹5,000	₹2,50,000
VTUEEE - 2022 PHASE - II				
All Programmes	₹2,50,000	₹15,000	₹5,000	₹2,70,000

Applicable for both PHASE - I & PHASE - II:

Caution Deposit : ₹5,000/- is payable during admission, will be refunded at the end of the programme.

+ Applicable for all the subjects of each semester for the first attempt only. The examination fees for arrears and improvement are to be paid additionaly.

YEARLY HOSTEL FEES#

Hostel Boarding & Lodging	₹97,700
Hostel Admission Fee (One Time Payment)	₹5,000
Hostel Caution Deposit (Refundable)	₹5,000

Higher fee applicable for deluxe and super deluxe accommodation. For more details visit our website.

Outstation students must stay in the institution hostel for four years. Day boarding is not permitted.

18. Legal Jurisdiction

All disputes pertaining to the conduct of VTUEEE 2022 shall fall within the jurisdiction of Chennai only. The Registrar of the Institution shall be the legal person in whose name the Institution may sue or may be sued.

19. Instructions for Completing and Sending the Application Form

The candidate seeking admission to VTUEEE 2022 is required:-

i. To go through the Information Brochure carefully and acquaint with all the requirements.

ii. To satisfy the eligibility to appear for the examination.

iii. Toapply online visit: www.veltech.edu.in or offline application may be obatined from any Regional offices or by post from The Head - Admissions, Vel Tech Rangarajan Dr. Sagunthala R&D Institute of Science and Technology, Avadi, Chennai.

iv. Fill the Application Form in BLOCK LETTERS only by using black ballpoint pen.

19.1. **Avoid** overwriting, cutting, erasing, using correction fluid in the Application Form. Incomplete form may lead to rejection. Any error arising on this account shall be the responsibility of the candidate.

19.2. The duly filled in Application Form should be sent to **THE HEAD - ADMISSIONS,** VTUEEE 2022 in the printed envelope supplied by the Institution, so as to reach positively on or before the last date by Registered or Speed Post only. The candidate shall receive a stamped and signed acknowledgement when presenting an Application Form in person at any Vel Tech Admission Office. The candidate must retain a photocopy of his/her filled in Application Form for future correspondence.

19.3. If a candidate submits more than one Application Form, the latest will be taken into consideration and others will automatically stand rejected without refund of fee.

19.4. **Guidelines for filling in the Application Form, with the correct details.**

Please go through the explanations, illustrations and codes given below before filling in or shading circles for various items in the application form.

Important: Please choose the choice of examination as A or B and shade the appropriate box. Please shade your mode of examination in the appropriate box PPT or CBT.

(A) Point No. 1 of the Application Form:
(NAME OF THE CANDIDATE)

Candidate should write his/her name in capital letters as given in **Class X certificate.** Each letter should be filled in one box as shown below. One box should be left blank between each part of the name and shaded accordingly.

Candidate's Name: M . ASHOK KUMAR JOSH

M	.	A	S	H	O	K		K	U	M	A	R		J	O	S	H

Point No. 2 of the Application Form: (DATE OF BIRTH)

Write and shade the appropriate box for the date, month and year of birth as per English calendar and as recorded in the Secondary Education Board.
Use numerals 01 to 31 for the date, 01 to 12 for the month and 4 digits for the year of birth as shown below. e.g. for 3rd October, 1991

Shade 0 in the first column & 3 in the second column for Date ;
1 in 3rd column and 0 in 4th column for Month ;
1 in 5th column , 9 in 6th column, 9 in 7th column and 1 in 8th column for the year, as shown below:-

0	3	1	0	1	9	9	1

Point No. 3 of the Application Form:
(MOTHER TONGUE)
Enter the appropriate code in the box and shade the box in the application form as given below:

Language	Code
Assamese / Axomiya	01
Bengali	02
Bodo	03
Dogri	04
Gujarati	05
Hindi	06
Kannada	07
Kashmiri	08
Konkani	09
Maithili	10
Malayalam	11
Marathi	12
Nepali	13
Odisha	14
Punjabi	15
Sanskrit	16
Santhali	17
Sindhi	18
Tamil	19
Telugu	20
Urdu	21
Others	22

Point No. 4 of the Application Form: (State / Union Territory)

Enter the appropriate code in the box and shade the box in the application form as given below:

State / Union Territory	Code
Andhra Pradesh	01
Arunachal Pradesh	02
Assam	03
Bihar	04
Chhattisgarh	05
Goa	06
Gujarat	07
Haryana	08
Himachal Pradesh	09
Jharkhand	10
Karnataka	11
Kerala	12
Madhya Pradesh	13
Maharashtra	14
Manipur	15
Meghalaya	16
Mizoram	17
Nagaland	18
Odisha	19
Punjab	20
Rajasthan	21
Sikkim	22
Tamil Nadu	23
Telangana	24
Tripura	25
Uttar Pradesh	26
Uttarakhand	27
West Bengal	28
Andaman & Nicobar Islands	29
Chandigarh	30
Dadra & Nagar Haveli	31
Daman & Diu	32
Delhi	33
Lakshadweep	34
Puducherry	35
Jammu & Kashmir	36

Point No. 5 of the Application Form: (CENTRE SELECTION FOR VTUEEE 2022)

Enter the appropriate code in the box and shade the box in the application form as given below:

VTUEEE 2022 - PAPER & PEN TEST(PPT) COMPUTER BASED TEST (CBT) EXAM CENTRES		
STATE	**EXAM CENTRE**	**CODE**
Andaman & Nicobar	Port Blair	001
Andhra Pradesh	Anantapur	002
Andhra Pradesh	Kakinada	003
Andhra Pradesh	Nellore	004
Andhra Pradesh	Ongole	005
Andhra Pradesh	Rajahmundry	006
Andhra Pradesh	Tirupati	007
Andhra Pradesh	Vijayawada	008
Andhra Pradesh	Visakhapatnam	009
Andhra Pradesh	Guntur	010
Andhra Pradesh	Kadappa	011
Andhra Pradesh	Vizianagaram	012
Andhra Pradesh	Srikakulam	013
Andhra Pradesh	Kurnool	014
Arunachal Pradesh	Itanagar	015
Assam	Guwahati	016
Bihar	Patna	017
Bihar	Bhagalpur	018
Chandigarh	Chandigarh	019
Chattisgarh	Bhilai	020
Chattisgarh	Raipur	021
Delhi	New Delhi	022
Gujarat	Ahmedabad	023
Gujarat	Surat	024
Haryana	Hissar	025
Haryana	Gurgaon	026
Jharkhand	Bokaro	027
Jharkhand	Dhanbad	028
Jharkhand	Jamshedpur	029
Jharkhand	Ranchi	030
Karnataka	Bangalore	031
Kerala	Trivandrum	032
Madhya Pradesh	Bhopal	033
Madhya Pradesh	Gwalior	034
Madhya Pradesh	Indore	035
Madhya Pradesh	Jabalpur	036
Maharashtra	Aurangabad	037
Maharashtra	Mumbai	038
Maharashtra	Nagpur	039
Maharashtra	Pune	040

State	Exam Centre	Code
Odisha	Bhubaneswar	041
Puducherry	Puducherry	042
Punjab	Jalandhar	043
Punjab	Ludhiana	044
Rajasthan	Jaipur	045
Rajasthan	Jodhpur	046
Rajasthan	Kota	047
Rajasthan	Udaipur	048
Tamil Nadu	Chennai	049
Tamil Nadu	Coimbatore	050
Tamil Nadu	Erode	051
Tamil Nadu	Karur	052
Tamil Nadu	Madurai	053
Tamil Nadu	Namakkal	054
Tamil Nadu	Salem	055
Tamil Nadu	Tiruchirappalli	056
Tamil Nadu	Vellore	057
Tamil Nadu	Villupuram	058
Telangana	Hyderabad	059
Telangana	Warangal	060
Telangana	Karim Nagar	061
Tripura	Agartala	062
Uttar Pradesh	Agra	063
Uttar Pradesh	Allahabad	064
Uttar Pradesh	Bareilly	065
Uttar Pradesh	Gorakhpur	066
Uttar Pradesh	Kanpur	067
Uttar Pradesh	Lucknow	068
Uttar Pradesh	Noida	069
Uttar Pradesh	Rae Bareli	070
Uttar Pradesh	Varanasi	071
Uttar Pradesh	Jhansi	072
Uttar Pradesh	Faizabad	073
West Bengal	Kolkata	074
Goa	Goa	075
Himachal Pradesh	Simla	076
Jammu & Kashmir	Srinagar	077
Manipur	Imphal	078
Meghalaya	Shilong	079
Mizoram	Aizawl	080
Nagaland	Kohima	081
Sikkim	Gangtok	082
Uttarakhand	Dehradun	083
Dadra & Nagar Haveli	Silvassa	084
Daman & Diu	Daman	085
Lakshadweep	Kavaratti	086
Others	Others	087

Point No. 6 in the Application Form : (COMPLETE POSTAL ADDRESS)

Write the complete postal address to which any communication has to be sent. The address must include your name, C/o name (if required), and all other details including the correct PINCODE, for letters to reach you. Indicate your e-mail ID, Phone No. with the correct STD code and Mobile number. Please note that this OMR will be scanned by machine and therefore, it should be **written very clearly in CAPITAL LETTERS in black ballpoint pen only.** In case you make any mistake, cover the entire box with an exact-sized white paper slip and write your address on it. **Your address must not overflow this box.**

The use of address of any coaching centre / Institution is strictly prohibited.

Point No.7 in the Application Form: (PHOTOGRAPH with size 3.5 x 4.5 cm)

Affix one recent good quality colour photograph with white background taken not more than two months earlier, in the space allotted for this in the Application Form. Do not wear cap or goggles. Wear formal dress (No Sports dress/ T-Shirt/ casuals etc.,)

Spectacles if being used regularly are allowed. Polaroid photos are not acceptable. The photograph should be firmly affixed to the application form with gum or fevicol. In addition attach one more photograph with your Application No. and Name on the back side.

It is expected that the candidate will have the same appearance at the time of the examination and counselling as in the photograph affixed in the application form. In case his/her appearance changes, he/she would be required to bring two new photographs at the time of the examination/counselling.

NOTE: Photograph should not be larger than the space provided in the box for pasting it.

Point No.8 in the Application Form: (SIGNATURE)

Sign using a Black ball-point pen, within the box provided. Your signature must not overflow or touch the border of the box. Your signature establishes your identity.

Point No.9 in the Application Form: (NAME OF THE FATHER / GUARDIAN)

Candidate has to write either his/her Father's name (or) Guardian's name in capital letters as given in Class X/XII Certificate of Board.

Point No.10 in the Application Form: (NAME OF THE MOTHER)

Candidate has to write his/her Mother's name in capital letters as given in Class X/XII Certificate of Board.

Point No. 11 in the Application Form: (BRANCH OPTION)

Candidate can declare three options of their choice. Arrange them in order as I, II & III as preferred. Then start shading the branch code in column -1 for the most preferred branch, column-2 for the next and column -3 for the third most preferred.

Branch	Code
Aeronautical Engineering	01
Artificial Intelligence & Data Science	02
Artificial Intelligence & Machine Learning	03
Biomedical Engineering	04
Biotechnology	05
Civil Engineering	06
Computer Science & Design	07
Computer Science & Engineering	08
Electronics & Communication Engineering	09
Electrical and Electronics Engineering	10
Information Technology	11
Mechanical Engineering	12

Point No. 12 in the Application Form: (BOARD OF EXAMINATION)

Enter the appropriate code in the box and shade the box in the application form as given below

Board of Examination	Code
Andhra Pradesh Board of Intermediate Education	01
Assam Higher Secondary Education Council	02
Bihar Intermediate Education Council	03
Central Board of Secondary Education	04
Chhattisgarh Madhyamik Shiksha Mandal	05
Council for the Indian School Certificate Examinations	06
Goa Board of Secondary and Higher Secondary Education	07
Gujarat Secondary Education Board	08
Haryana Board of Education	09
Himachal Pradesh Board of School Education	10
J & K State Board of School Education	11
Jharkhand Academy Council	12
Karnataka Board of Pre-University Education	13
Kerala Board of Public Examinations	14
Madhya Pradesh Board of Secondary Education	15
Maharashtra State Board of Secondary and Higher Secondary Education	16
Manipur Council of Higher Secondary Education	17
Meghalaya Board of Secondary Education	18
Mizoram Board of School Education	19
Nagaland Board of School Education	20
Odisha Council of Higher Secondary Education	21
Punjab School Education Board	22
Rajasthan Board of Secondary Education	23
Tamil Nadu Board of Higher Secondary Education	24
Tripura Board of Secondary Education	25
Telangana Board of Secondary Education	26
U.P Board of High School and Intermediate Education	27
Uttaranchal Shiksha Evam Pariksha Parishad	28
West Bengal Council of Higher Secondary Education	29
Others	00

Point No.13 in the Application Form: (MEDIUM OF INSTRUCTION)
Shade the medium of instruction in 12th standard.

Point No.14 in the Application Form: (CONTACT NUMBERS)
Enter the STD code, residential phone and mobile number, and shade the appropriate box.

Point No. 15 in the Application Form: (CHECK LIST)
Shade the appropriate box in the application form.

Point No. 16 in the Application Form: (DECLARATION)
The parent/guardian and the applicant must sign and fill-in the place with date.

<div align="center">

APPENDIX I
SYLLABUS for VTUEEE 2022
MATHS SYLLABUS

</div>

UNIT 1: SETS, RELATIONS AND FUNCTIONS
Sets and their representation: Union, intersection and complement of sets and their algebraic properties: Power set: Relation: Types of relations, equivalence relations.
Functions: one-one, into and onto functions, composition of functions.

UNIT 2: COMPLEX NUMBERS AND QUADRATIC EQUATIONS
Complex numbers as ordered pairs of reals - Representation of complex numbers in the form a+ib and their representation in a plane. Argand diagram: algebra of complex numbers, modulus and argument (or amplitude) of a complex number, square root of a complex number, triangle inequality. Quadratic equations in real and complex number system and their solutions. Relation between roots and co-efficients, nature of roots, formation of quadratic equations with given roots.

UNIT 3: MATRICES AND DETERMINANTS
Matrices: algebra of matrices: types of matrices, determinants and matrices of order two and three. Properties of determinants, evaluation of determinants, area of triangles using determinants. Adjoint and evaluation of inverse of a square matrix using determinants and elementary transformations, Test of consistency and solution of simultaneous linear equations in two or three variables using determinants and matrices.

UNIT 4: PERMUTATIONS AND COMBINATIONS
Fundamental principle of counting, permutation as an arrangement and combination as selection, Meaning of nP_r and nC_r simple applications.

UNIT 5: MATHEMATICAL INDUCTION
Principle of Mathematical Induction and its simple applications.

UNIT 6: BINOMIAL THEOREM AND ITS SIMPLE APPLICATIONS
Binomial theorem for a positive integral index, general term and middle term, properties of Binomial coefficients and simple applications.

UNIT 7: SEQUENCES AND SERIES
Arithmetic and Geometric progressions, insertion of arithmetic, geometric means between two given numbers. Relation between A.M. and G.M. Sum upto n terms of special series. S_n

UNIT 8: LIMIT, CONTINUITY AND DIFFERENTIABILITY
Real - valued functions, algebra of functions, polynomials, rational, trigonometric, logarithmic and exponential functions, inverse functions. Graphs of simple functions. Limits, continuity and differentiability. Differentiation of the sum, difference, product and quotient of two functions. Differentiation of trigonometric, inverse trigonometric, logarithmic, exponential, composite and implicit functions. Derivatives of order upto two. Rolle's and Lagrange's Mean Value Theorems. Applications of derivatives: Rate of change of quantities, monotonic - increasing and decreasing functions, Maxima and minima of functions of one variable, tangents and normal.

UNIT 9: 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. Evalution of simple integral of the type

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

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

$$\int \sqrt{a^2 \pm x^2}\, dx \quad \int \sqrt{x^2-a^2}\, dx$$

integral as limit of a sum. Fundamental Theorem of Calculus. Properties of definite integrals. Evaluation of definite integrals, determining areas of the regions bounded by simple curves in standard form.

UNIT 10: DIFFERENTIAL EQUATIONS
Ordinary differential equations, order and degree. Formation of differential equations. Solution of differential equations by the method of separation of variables, solution of homogeneous and linear differential equations.

UNIT 11: CO-ORDINATE GEOMETRY
Cartesian system of rectangular co-ordinates in a plane, distance formula, section formula, locus and its equation, translation of axes, slope of a line, parallel and perpendicular lines, intercepts of a line on the coordinate axes.
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, coordinates of centroid, orthocentre and circumcentre of a triangle, equation of family of lines passing through the point of intersection of two lines.
Circles, conic sections
Standard form of equation of a circle, general form of the equation of a circle, its radius and centre, equation of a circle when the end points of a diameter are given, points of intersection of a line and a circle with the centre at the origin and condition for a line to be tangent to a circle, equation of the tangent. Sections of cones, equations of conic sections (parabola, ellipse and hyperbola) in standard forms, condition for y = mx + c to be a tangent and point (s) of tangency.

UNIT 12: THREE DIMENSIONAL GEOMETRY
Coordinates of a point in space, distance between two points, section formula, direction ratios and direction cosines, angle between two intersecting lines. Skew lines, the shortest distance between them and its equation. Equations of a line and a plane in different forms, intersection of a line and a plane, coplanar lines.

UNIT 13: VECTOR ALGEBRA
Vectors and scalars, addition of vectors, components of a vector in two dimensions and three dimensional space, scalar and vector products, scalar and vector triple product.

UNIT 14: STATISTICS AND PROBABILITY
Measures of Dispersion: Calculation of mean, median, mode of grouped and ungrouped data calculation of standard deviation, variance and mean deviation for grouped and ungrouped data.
Probability: Probability of an event, addition and multiplication theorems of probability, Baye's theorem, probability distribution of a random variate, Bernoulli trials and Binomial distribution.

UNIT 15: TRIGONOMETRY
Trigonometrical identities and equations. Trigonometrical functions. Inverse trigonometrical functions and their properties. Heights and Distances

UNIT 16: MATHEMATICAL REASONING
Statements, logical operations and, or, implies, implied by, if and only if. Understanding of tautology, contradiction, converse and contrapositive.

PHYSICS SYLLABUS - SECTION A
UNIT 1: PHYSICS AND MEASUREMENT
Physics, technology and society, SI units, Fundamental and derived Units. Least count, accuracy and precision of measuring instruments, Errors in measurement, Dimensions of Physical quantities, dimensional analysis and its applications.

UNIT 2: KINEMATICS

Frame of reference. Motion in a straight line: Position-time graph, speed and velocity. Uniform and non-uniform motion, average speed and instantaneous velocity Uniformly accelerated motion, velocity-time, position-time graphs, relations for uniformly accelerated motion. Scalars and Vectors, Vector addition and Subtraction, Zero Vector, Scalar and Vector products, Unit Vector, Resolution of a Vector. Relative Velocity, Motion in a plane. Projectile Motion, Uniform Circular Motion.

UNIT 3: LAWS OF MOTION

Force and Inertia, Newton's First Law of motion; Momentum, Newton's Second Law of motion; Impulse; Newton's Third Law of motion. Law of conservation of linear momentum and its applications, Equilibrium of concurrent forces.
Static and Kinetic friction, laws of friction, rolling friction. Dynamics of uniform circular motion: Centripetal force and its applications

UNIT 4: WORK, ENERGY AND POWER

Work done by a constant force and a variable force; kinetic and potential energies, workenergy theorem, power.
Potential energy of a spring, conservation of mechanical energy, conservative and nonconservative forces; Elastic and inelastic collisions in one and two dimensions.

UNIT 5: ROTATIONAL MOTION

Centre of mass of a two-particle system, Centre of mass of a rigid body; Basic concepts of rotational motion; moment of a force, torque, angular momentum, conservation of angular momentum and its applications; moment of inertia, radius of gyration. Values of moments of inertia for simple geometrical objects, parallel and perpendicular axes theorems and their applications. Rigid body rotation, equations of rotational motion.

UNIT 6: GRAVITATION

The universal law of gravitation. Acceleration due to gravity and its variation with altitude and depth, Kepler's laws of planetary motion. Gravitational potential energy; gravitational potential. Escape velocity. Orbital velocity of a satellite. Geo-stationary satellites.

UNIT 7: PROPERTIES OF SOLIDS AND LIQUIDS

Elastic behaviour, Stress-strain relationship, Hooke's Law, Young's modulus, bulk modulus, modulus of rigidity. Pressure due to a fluid column; Pascal's law and its applications. Viscosity, Stokes' law, terminal velocity, streamline and turbulent flow, Reynolds number. Bernoulli's principle and its applications. Surface energy and surface tension, angle of contact, application of surface tension - drops, bubbles and capillary rise. Heat, temperature, thermal expansion; specific heat capacity, calorimetry; change of state, latent heat. Heat transfer-conduction, convection and radiation, Newton's law of cooling.

UNIT 8: THERMODYNAMICS

Thermal equilibrium, zeroth law of thermodynamics, concept of temperature. Heat, work and internal energy. First law of thermodynamics. Second law of thermodynamics: reversible and irreversible processes. Carnot's engine and its efficiency.

UNIT 9: KINETIC THEORY OF GASES

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

UNIT 10: OSCILLATIONS AND WAVES

Periodic motion - period, frequency, displacement as a function of time. Periodic functions. Simple harmonic motion (S.H.M.) and its equation; phase; oscillations of a spring -restoring force and force constant; energy in S.H.M. - kinetic and potential energies; Simple pendulum - derivation of expression for its time period; Free, forced and damped oscillations, resonance.
Wave motion. Longitudinal and transverse waves, speed of a wave. Displacement relation for a progressive wave. Principle of superposition of waves, reflection of waves, Standing waves in strings and organ pipes, fundamental mode and harmonics, Beats, Doppler effect in sound.

UNIT 11: ELECTROSTATICS

Electric charges: Conservation of charge, Coulomb's law-forces between two point charges, forces between multiple charges; superposition principle and continuous charge distribution.
Electric field: Electric field due to a point charge, Electric field lines, Electric dipole, Electric field due to a dipole, Torque on a dipole in a uniform electric field.
Electric flux, Gauss's law and its applications to find field due to infinitely long uniformly charged straight wire, uniformly charged infinite plane sheet and uniformly charged thin spherical shell. Electric potential and its calculation for a point charge, electric dipole and system of charges; Equipotential surfaces, Electrical potential energy of a system of two point charges in an electrostatic field.
Conductors and insulators, Dielectrics and electric polarization, capacitor, combination of capacitors in series and in parallel, capacitance of a parallel plate capacitor with and without dielectric medium between the plates, Energy stored in a capacitor.

UNIT 12: CURRRENT ELECTRICITY

Electric current, Drift velocity, Ohm's law, Electrical resistance, Resistances of different materials, V-I characteristics of Ohmic and nonohmic conductors, Electrical energy

and power, Electrical resistivity, Colour code for resistors; Series and parallel combinations of resistors; Temperature dependence of resistance.

Electric Cell and its Internal resistance, potential difference and emf of a cell, combination of cells in series and in parallel. Kirchhoffs laws and their applications. Wheatstone bridge, Metre bridge. Potentiometer - principle and its applications.

UNIT 13: MAGNETIC EFFECTS OF CURRENT AND MAGNETISM

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

Force on a current-carrying conductor in a uniform magnetic field. Force between two parallel current-carrying conductors-definition of ampere, Torque experienced by a current loop in uniform magnetic field; Moving coil galvanometer, its current sensitivity and conversion to ammeter and voltmeter. Current loop as a magnetic dipole and its magnetic dipole moment. Bar magnet as an equivalent solenoid, magnetic field lines; Earth's magnetic field and magnetic elements. Para-, dia- and ferro- magnetic substances.

Magnetic susceptibility and permeability, Hysteresis, Electromagnets and permanent magnets.

UNIT 14: ELECTROMAGNETIC INDUCTION AND ALTERNATING CURRENTS

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

UNIT 15: ELECTROMAGNETIC WAVES

Electromagnetic waves and their characteristics. Transverse nature of electromagnetic waves.

Electromagnetic spectrum (radio waves, microwaves, infrared, visible, ultraviolet, Xrays, gamma rays). Applications of e.m. waves.

UNIT 16: OPTICS

Reflection and refraction of light at plane and spherical surfaces, mirror formula, Total internal reflection and its applications, Deviation and Dispersion of light by a prism, Lens Formula, Magnification, Power of a Lens, Combination of thin lenses in contact, Microscope and Astronomical Telescope (reflecting and refracting) and their magnifying powers.

Wave optics: wavefront and Huygens' principle, Laws of reflection and refraction using Huygen's principle. Interference, Young's double slit experiment and expression for fringe width, coherent sources and sustained interference of light. Diffraction due to a single slit, width of central maximum. Resolving power of microscopes and astronomical telescopes, Polarisation, plane polarized light; Brewster's law, uses of plane polarized light and Polaroids.

UNIT 17: DUAL NATURE OF MATTER AND RADIATION

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

UNIT 18: ATOMS AND NUCLEI

Alpha-particle scattering experiment; Rutherford's model of atom; Bohr model, energy levels, hydrogen spectrum. Composition and size of nucleus, atomic masses, isotopes, isobars; isotones. Radioactivity-alpha, beta and gamma particles/rays and their properties; radioactive decay law. Mass-energy relation, mass defect; binding energy per nucleon and its variation with mass number, nuclear fission and fusion.

UNIT 19: ELECTRONIC DEVICES

Semiconductors; semiconductor diode: I-V characteristics in forward and reverse bias; diode as a rectifier; I-V characteristics of LED, photodiode, solar cell and Zener diode; Zener diode as a voltage regulator. Junction transistor, transistor action, characteristics of a transistor; transistor as an amplifier (common emitter configuration) and oscillator. Logic gates (OR, AND, NOT, NAND and NOR). Transistor as a switch.

UNIT 20: COMMUNICATION SYSTEMS

Propagation of electromagnetic waves in the atmosphere; Sky and space wave propagation, Need for modulation, Amplitude and Frequency Modulation, Bandwidth of signals, Bandwidth of Transmission medium, Basic Elements of a Communication System (Block Diagram only).

PHYSICS SYLLABUS - SECTION B

UNIT 21: EXPERIMENTAL SKILLS

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

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

13. Potentiometer-
 a)   Comparison of emf of two primary cells.
 b)   Determination of internal resistance of a cell.
14. Resistance and figure of merit of a galvanometer by half deflection method,
15. Focal length of the following using parallax method:
 a)   Convex mirror
 b)   Concave mirror, and
 c)   Convex lens
16. Plot of angle of deviation vs angle of incidence for a triangular prism.
17. Refractive index of a glass slab using a travelling microscope.
18. Characteristic curves of a p-n junction diode in forward and reverse bias.
19. Characteristic curves of a Zener diode and finding reverse break down voltage.
20. Characteristic curves of a transistor and finding current gain and voltage gain.
21. Identification of Diode, LED, Transistor, IC, Resistor, Capacitor from mixed collection of such items.
22. Using multimeter to:
a)   Identify base of a transistor
b)   Distinguish between npn and pnp type transistor
c)   See the unidirectional flow of current in case of a diode and an LED.
d)   Check the correctness or otherwise of a given electronic component (diode, transistor or IC).

CHEMISTRY SYLLABUS
SECTION A - PHYSICAL CHEMISTRY

UNIT 1: SOME BASIC CONCEPTS IN CHEMISTRY
Atomic and molecular masses, mole concept, molar mass, percentage composition, empirical and molecular formulae; Chemical equations and stoichiometry.

UNIT 2: STATES OF MATTER
Classification of matter into solid, liquid and gaseous states.
Gaseous State:
Measurable properties of gases; Gas laws - Boyle's law, Charle's law, Graham's law of diffusion, Avogadro's law, Dalton's law of partial pressure; Concept of Absolute scale of temperature; Ideal gas equation; Kinetic theory of gases (only postulates); Real gases, deviation from Ideal behaviour, compressibility factor and van der Waals equation.

UNIT 3: ATOMIC STRUCTURE
Limitations of Bohr's model; Dual nature of matter, de-Broglie's relationship, Heisenberg uncertainty principle. Elementary ideas of quantum mechanics, quantum mechanical model of atom, its important features. Concept of atomic orbitals as one electron wave functions; Variation of   and ^{2} with r for Is and 2s orbitals; various quantum numbers (principal, angular momentum and magnetic quantum numbers) and their significance; shapes of s, p and d - orbitals, electron spin and spin quantum number; Rules for filling electrons in orbitals - aufbau principle, Pauli's exclusion principle and Hund's rule, electronic configuration of elements, extra stability of half-filled and completely filled orbitals.

UNIT 4 : CHEMICAL BONDING AND MOLECULAR STRUCTURE
Concept of ionic and covalent bonds.
Ionic Bonding: Formation of ionic bonds, factors affecting the formation of ionic bonds; calculation of lattice enthalpy.
Covalent Bonding: Concept of electronegativity, Valence Shell Electron Pair Repulsion (VSEPR) theory and shapes of simple molecules.
Valence bond theory - Its important features, concept of hybridization involving s, p and d orbitals; Resonance.
Molecular Orbital Theory - Its important features, LCAOs, types of molecular orbitals (bonding, antibonding), sigma and pi-bonds, molecular orbital electronic configurations of homonuclear diatomic molecules, concept of bond order, bond length and bond energy.
Elementary idea of metallic bonding. Hydrogen bonding and its applications.

UNIT 5: CHEMICAL THERMODYNAMICS
Fundamentals of thermodynamics: System and surroundings, extensive and intensive properties, state functions, types of processes.
First law of thermodynamics - Concept of work, heat internal energy and enthalpy, heat capacity, molar heat capacity; Hess's law of constant heat summation; Enthalpies of bond dissociation, combustion, formation, atomization, sublimation, phase transition, hydration, ionization and solution.
Second law of thermodynamics: Spontaneity of processes; ΔS of the universe and ΔG of the system as criteria for spontaneity, ΔG (Standard Gibbs energy change) and equilibrium constant.

UNIT 6: SOLUTIONS
Different methods for expressing concentration of solution - molality, molarity, mole fraction, percentage (by volume and mass both), vapour pressure of solutions and Raoult's Law - Ideal and non-ideal solutions, vapour pressure - composition, plots for ideal and non-ideal solutions; Colligative properties of dilute solutions - relative lowering of vapour pressure, depression of freezing point, elevation of boiling point and osmotic pressure; Determination of molecular mass using colligative properties; Abnormal value of molar mass, van't Hoff factor and its significance.

UNIT 7: EQUILIBRIUM

Meaning of equilibrium, concept of dynamic equilibrium.
Equilibria involving chemical processes:
Law of chemical equilibrium, equilibrium constants (Kp and Kc) and their significance, significance of G and G° in chemical equilibria, factors affecting equilibrium concentration, pressure, temperature, effect of catalyst; Le Chatelier's principle.
Ionic equilibrium:
Weak and strong electrolytes, ionization of electrolytes, various concepts of acids and bases (Arrhenius, Bronsted - Lowry and Lewis) and their ionization, acid - base equilibria (including multistage ionization) and ionization constants, ionization of water, pH scale, common ion effect, hydrolysis of salts and pH of their solutions, solubility of sparingly soluble salts and solubility products, buffer solutions.

UNIT 8: REDOX REACTIONS AND ELECTRO-CHEMISTRY

Electronic concepts of oxidation and reduction, redox reactions, oxidation number, rules for assigning oxidation number, balancing of redox reactions.
Electrolytic solutions, molar conductivities and their variation with concentration: Kohlrausch's law and its applications.
Electrochemical cells - Electrolytic and Galvanic cells, different types of electrodes, electrode potentials including standard electrode potential, half - cell and cell reactions, emf of a Galvanic cell and its measurement; Nernst equation and its applications; Relationship between cell potential and Gibbs' energy change; Dry cell and lead accumulator; Fuel cells.

UNIT 9: CHEMICAL KINETICS

Rate of a chemical reaction, factors affecting the rate of reactions: concentration, temperature, pressure and catalyst; elementary and complex reactions, order and molecularity of reactions, rate law, rate constant and its units, differential and integral forms of zero and first order reactions, their characteristics and half -lives, effect of temperature on rate of reactions -Arrhenius theory, activation energy and its calculation, collision theory of bimolecular gaseous reactions (no derivation).

UNIT 10: SURFACE CHEMISTRY

Adsorption- Physisorption and chemisorption and their characteristics, factors affecting adsorption of gases on solids - Freundlich and Langmuir adsorption isotherms, adsorption from solutions.
Catalysis - Homogeneous and heterogeneous, activity and selectivity of solid catalysts, enzyme catalysis and its mechanism.
Colloidal state- distinction among true solutions, colloids and suspensions, classification of colloids -lyophilic, lyophobic; multimolecular, macromolecular and associated colloids (micelles), preparation and properties of colloids - Tyndall effect, Brownian movement, electrophoresis, dialysis, coagulation and flocculation; Emulsions and their characteristics.

SECTION B: INORGANIC CHEMISTRY

UNIT 11: CLASSIFICATION OF ELEMENTS AND PERIODICITY IN PROPERTIES

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

UNIT 12: GENERAL PRINCIPLES AND PROCESSES OF ISOLATION OF METALS

Modes of occurrence of elements in nature, minerals, ores; Steps involved in the extraction of metals -concentration, reduction (chemical and electrolytic methods) and refining with special reference to the extraction of Al, Cu, Zn and Fe; Thermodynamic and electrochemical principles involved in the extraction of metals.

UNIT 13: HYDROGEN

Position of hydrogen in periodic table, isotopes, preparation, properties and uses of hydrogen; Physical and chemical properties of water and heavy water; Structure, preparation, reactions and uses of hydrogen peroxide; Classification of hydrides - ionic, covalent and interstitial; Hydrogen as a fuel.

UNIT 14: S - BLOCK ELEMENTS (ALKALI AND ALKALINE EARTH METALS)

Group -1 and 2 Elements
General introduction, electronic configuration and general trends in physical and chemical properties of elements, anomalous properties of the first element of each group, diagonal relationships.

UNIT 15: P- BLOCK ELEMENTS

Group -13 to Group 18 Elements
General Introduction: Electronic configuration and general trends in physical and chemical properties of elements across the periods and down the groups; unique behaviour of the first element in each group.
Groupwise study of the p - block elements.

Group -13
Preparation, properties and uses of boron and aluminium; Structure, properties and uses of borax, boric acid, diborane, boron trifluoride, aluminium chloride and alums.

Group -14
Tendency for catenation; Structure, properties and uses of Allotropes and oxides of carbon, silicon tetrachloride, silicates, zeolites and silicones.

Group -15
Properties and uses of nitrogen and phosphorus; Allotrophic forms of phosphorus; Preparation, properties, structure and uses of ammonia, nitric acid, phosphine and phosphorus halides, (PCl_3, PCl_5); Structures of oxides and oxoacids of nitrogen and phosphorus.

Group -16

Preparation, properties, structures and uses of ozone; Allotropic forms of sulphur; Preparation, properties, structures and uses of sulphuric acid (including its industrial preparation); Structures of oxoacids of sulphur.

Group -17

Preparation, properties and uses of hydrochloric acid; Trends in the acidic nature of hydrogen halides; Structures of Interhalogen compounds and oxides and oxoacids of halogens.

Group-18

Occurrence and uses of noble gases; Structures of fluorides and oxides of xenon.

UNIT 16: D - AND F - BLOCK ELEMENTS

Transition Elements

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

Inner Transition Elements

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

UNIT 17: CO-ORDINATION COMPOUNDS

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

UNIT 18: ENVIRONMENTAL CHEMISTRY

Environmental pollution - Atmospheric, water and soil.
Atmospheric pollution - Tropospheric and Stratospheric
Tropospheric pollutants - Gaseous pollutants: Oxides of carbon, nitrogen and sulphur, hydrocarbons; their sources, harmful effects and prevention; Green house effect and Global warming; Acid rain;
Particulate pollutants: Smoke, dust, smog, fumes, mist; their sources, harmful effects and prevention.
Stratospheric pollution- Formation and breakdown of ozone, depletion of ozone layer - its mechanism and effects.
Water Pollution - Major pollutants such as, pathogens, organic wastes and chemical pollutants; their harmful effects and prevention.

Soil pollution - Major pollutants such as: Pesticides (insecticides,, herbicides and fungicides), their harmful effects and prevention. Strategies to control environmental pollution.

SECTION C - ORGANIC CHEMISTRY
UNIT 19: PURIFICATION AND CHARACTERIZATION OF ORGANIC COMPOUNDS

Purification - Crystallization, sublimation, distillation, differential extraction and chromatography - principles and their applications.
Qualitative analysis - Detection of nitrogen, sulphur, phosphorus and halogens.
Quantitative analysis (basic principles only) - Estimation of carbon, hydrogen, nitrogen, halogens, sulphur, phosphorus.
Calculations of empirical formulae and molecular formulae; Numerical problems in organic quantitative analysis.

UNIT 20: SOME BASIC PRINCIPLES OF ORGANIC CHEMISTRY

Nomenclature (Trivial and IUPAC)
Covalent bond fission - Homolytic and heterolytic: free radicals, carbocations and carbanions; stability of carbocations and free radicals, electrophiles and nucleophiles.

Electronic displacement in a covalent bond - Inductive effect, electromeric effect, resonance and hyperconjugation.

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

UNIT 21: HYDROCARBONS

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

Alkanes - Conformations: Sawhorse and Newman projections (of ethane); Mechanism of halogenation of alkanes.
Alkenes - Geometrical isomerism; Mechanism of electrophilic addition: addition of hydrogen, halogens, water, hydrogen halides (Markownikoff s and peroxide effect); Ozonolysis and polymerization.
Alkynes - Acidic character; Addition of hydrogen, halogens, water and hydrogen halides; Polymerization.
Aromatic hydrocarbons - Nomenclature, benzene -structure and aromaticity; Mechanism of electrophilic substitution: halogenation, nitration, Friedel - Craft's alkylation and acylation, directive influence of functional group in mono-substituted benzene.

UNIT 22: ORGANIC COMPOUNDS CONTAINING HALOGENS

General methods of preparation, properties and reactions; Nature of C-X bond; Mechanisms of substitution reactions.
Uses; Environmental effects of chloroform, iodoform freons and DDT.

UNIT 23: ORGANIC COMPOUNDS CONTAINING OXYGEN
General methods of preparation, properties, reactions and uses.

ALCOHOLS, PHENOLS AND ETHERS

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

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

Ethers: Structure.

Aldehyde and Ketones: Nature of carbonyl group;Nucleophilic addition to >C=0 group, relative reactivities of aldehydes and ketones; Important reactions such as - Nucleophilic addition reactions (addition of HCN, NH, and its derivatives), Grignard reagent; oxidation; reduction (Wolff Kishner and Clemmensen); acidity of hydrogen, aldol condensation, Cannizzaro reaction, Haloform reaction;

Chemical tests to distinguish between aldehydes and Ketones.

Carboxylic Acids Acidic strength and factors affecting it.

UNIT 24: ORGANIC COMPOUNDS CONTAINING NITROGEN
General methods of preparation, properties, reactions and uses.

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

Diazonium Salts: Importance in synthetic organic chemistry.

UNIT 25: POLYMERS
General introduction and classification of polymers, general methods of polymerization-addition and condensation, copolymerization;

Natural and synthetic rubber and vulcanization; some important polymers with emphasis on their monomers and uses - polythene, nylon, polyester and bakelite.

UNIT 26: BIOMOLECULES
General introduction and importance of biomolecules. Carbohydrates - Classification: aldoses and ketoses; monosaccharides (glucose and fructose) and constituent monosaccharides of oligosacctiorides (sucrose, lactose and maltose). Proteins - Elementary Idea of a-amino acids, peptide bond, polypeptides; Proteins: primary, secondary, tertiary and quaternary structure (qualitative idea only), denaturation of proteins, enzymes.

Vitamins - Classification and functions.

Nucleic Acids - Chemical constitution of DNA and RNA. Biological functions of nucleic acids.

UNIT 27: CHEMISTRY IN EVERYDAY LIFE
Chemicals in medicines - Analgesics, tranquilizers, antiseptics, disinfectants, antimicrobials, antifertility drugs, antibiotics, antacids, antihistamins - their meaning and common examples.
Chemicals in food - Preservatives, artificial sweetening agents - common examples.
Cleansing agents - Soaps and detergents, cleansing action.

UNIT 28: PRINCIPLES RELATED TO PRACTICAL CHEMISTRY
Detection of extra elements (N,S, halogens) in organic compounds; Detection of the following functional groups: hydroxyl (alcoholic and phenolic), carbonyl (aldehyde and ketone), carboxyl and amino groups in organic compounds.
• Chemistry involved in the preparation of the following:
   Inorganic compounds: Mohr's salt, potash alum. Organic compounds: Acctanilide, pnitroacetanilide, aniline yellow, iodoform.
• Chemistry involved in the titrimetric excercises -Acids bases and the use of indicators, oxalic-acid vs KMnO,, Mohr's salt vs KMnO,.
• Chemical principles involved in the qualitative salt analysis:
   Cations - Pb^{2+} , Cu^{2+}, Al^{3+}, Fe^{3+}, Zn^{2+}, Ni^{2+}, Ca^{2+}, Ba^{2+}, Mg^{2+}, NH_4^+
   Anions- Co_3^{2-}, S^{2-}, So_4^{2-}, No_3^-, No_2^-, Cl^-, Br^-, I^- . (Insoluble salts excluded).
• Chemical principles involved in the following experiments:
1. Enthalpy of solution of CuS04
2. Enthalpy of neutralization of strong acid and strong base.
3. Preparation of lyophilic and lyophobic sols.
4. Kinetic study of reaction of iodide ion with hydrogen peroxide at room temperature.

APPENDIX II
DEGREE PROGRAMMES in B.Tech.

1. Aeronautical Engineering

Specialization	Minor	Honors
a) Computational Engineering	a) UAV Remote Sensing & Mapping	a) Aerial Robotics
b) Autonomous Drone Technology		

2. Artificial Intelligence & Data Science with Honors / Specializations

3. Artificial Intelligence & Machine Learning with Honors / Specializations

4. Biomedical Engineering

Specialization	Minor	Honors
a) AI in Healthcare Technology	a) Brain Computer Interface	a) Precision Healt Care Technology

5. Biotechnology

Specialization in	Minor	Honors
a) Food and Precision Agriculture	a) Bioprocess Control & Devices	a) Bioengineering
b) Regenerative Medicine / Health Diagnostics & Disease Control		

6. Civil Engineering

Specialization in	Minor	Honors
a) Computer Aided Infrastructure Engineering	a) Remote Sensing & GIS	a) Infrastructure Engineering

7. Computer Science & Design

8. Computer Science & Engineering

Specialization / Minor / Honors in

a) Artificial Intelligence
b) Data Science
c) Cyber Security
d) AI & Machine Learning
e) AI & Data Science
f) AI & Robotics
g) Financial Technology
h) Gaming and Animation

9. Electrical and Electronics Engineering

Specialization in	Minor	Honors
a) Computer Systems	a) Electric Vehicle Technology	a) Smart Grid Technologies
	b) Renewable Energy Sources	

10. Electronics & Communication Engineering

Specialization	Minor	Honors
a) Cyber Security	a) Smart Communication Technologies	a) AI for Wireless Communication
b) AI & Data Science	b) Smart Automation	b) VLSI System Design
c) AI & Machine Learning		

11. Information Technology

Specialization	Minor	Honors
a) Cloud Computing	a) Human Computer Interaction	a) Artificial Intelligence

12. Mechanical Engineering

Specialization	Minor	Honors
a) AI & Robotics	a) Smart Manufacturing	a) Digital Manufacturing
b) Mechatronics	b) Energy Engineering	b) Computational Thermo-Fluids

APPENDIX III
INSTRUCTIONS FOR USE OF TEST BOOKLET AND ANSWER SHEET

1. The candidate will find the Answer Sheet placed inside the sealed Test Booklet. The seal should be broken/ opened by the candidate on the announcement by the invigilator.

2. Each answer sheet will have a pre-printed code A,B,C,D or P,Q,R,S the candidates are required to check if the code printed on the answer sheet is the same as the code printed on the test booklet. the candidate must enter the booklet code in the box and shade the appropriate box in the Question Paper Code Box. All four Codes on the Test booklet, Answer sheet, QP code box must be the same.

3. The Answer Sheet used will be of special type which will be scanned on Optical Scanner. There will be two parts in the Answer Sheet.

Part 1 This part of the Answer Sheet contains the following columns which are to be filled in neatly and accurately by the candidate with Black ballpoint pen only.

i. Answer Sheet No. – Write down the S.No. Printed in the front page of the test booklet in box no.
ii. Registration No.
iii. Question Paper Code
iv. Centre No.
v. City
vi. Name of the candidate
vii. Signature of the candidate

Part 2 IMPORTANT INSTRUCTIONS FOR SHADING

Out of four alternatives for each question, only one circle for the correct answer is to be darkened completely using Black ballpoint pen.

For example:

Taj Mahal is situated in

Ⓐ Delhi   Ⓑ Mumbai   Ⓒ Agra   Ⓓ Bangalore

Answer   Ⓐ Ⓑ ⬤ Ⓓ

i. The question paper will be similar to JEE mains exam.
ii. Use Black ballpoint pen to completely shade the appropriate circle, i.e. one circle for each entry. The answer once marked is not liable to be changed.
iii. A light or faintly darkened circle is a wrong method of marking and liable to be rejected by the Optical Scanner.
iv. If the candidate does not want to attempt any question he/she should not darken the circle given against that question.
v. Please do not fold the answer sheet and do not make any stray marks on it.
vi. ROUGH WORK
The candidate will not do any rough work on the Answer Sheet. All rough work is to be done in the test booklet itself.
vii. CHANGING AN ANSWER IS NOT ALLOWED
The candidate must ensure about the accuracy of the answer before darkening the appropriate circle as no change in a answer is allowed once marked. Use of eraser or white/correction fluid on the answer sheet is not permissible as the 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 or as shown in 'incorrect Method' as indicated in the answer sheet shall be treated as wrong.

viii Prior to handing over the answer sheet soon after the examination is over, the candidate must sign the attendance sheet as a proof thereof.

ix The candidate shall submit, both the test booklet and answer sheet at the end of the examination.

Warning
Persons removing pages from the test booklet during examination, impersonating or trying to appear in the counselling through forged means will be dealt with as per law.

Canvassing directly or indirectly for the allotment of seat or influencing staff by unfair means would lead to serious consequence including disqualification of the candidate.

APPENDIX-IV

Vel Tech Mahatma Gandhi National Merit scholarship in tuition fee for B.Tech. Programmes
100% Scholarship will be awarded to MPC topper from each State/ Union Territory among admitted Candidates

Scholarship based on MPC aggregate	
MPC aggregate	Percentage of Scholarship in tuition fee
Above 95%	75%
90 - 94.9%	50%
80 - 89.9%	25%
70 - 79.9%	10%

SCHOLARSHIP FOR VTUEEE 2022 RANK HOLDERS:	
Rank Holders in VTUEEE 2022	Percentage of Scholarship In Tuition Fee
Top 20 Ranks	75%
Rank 21-500	50%

Minimum Eligibility is 60% in MPC for availing scholarship.

CANDIDATE CAN AVAIL SCHOLARSHIP CALCULATED BASED ON MPC AGGREGATE / VTUEEE 2022 RANKING WHICHEVER IS HIGHER.

Appendix V: OMR Model

Appendix V: OMR Model

12. FATHER'S NAME ⬭ **OR GUARDIAN'S NAME** ⬭ (Shade any one and write the Name below)

MOBILE NUMBER

13. MOTHER'S NAME

MOBILE NUMBER

(Point No. 15 Page 11 refer to information brochure)

14. NAME OF JUNIOR COLLEGE / SCHOOL IN WHICH CURRENTLY STUDYING 12th STD	15. BRANCH OPTION * (*MANDATORY FIELD)

REG. NO / ROLL NUMBER

NAME OF THE SCHOOL / JUNIOR COLLEGE STUDYING :

ADDRESS :

CITY :

DIST. :

PIN CODE :

STATE :

(Sl. No. 16 refer to information brochure)

16. BOARD OF EXAMINATION	17. MEDIUM OF INSTRUCTION	18. CONTACT NUMBERS		
		STD CODE	RESIDENTIAL NUMBER	MOBILE NUMBER

ENGLISH ⬭

OTHERS ⬭

◄ - - - - - - - - - - - - - - - CAUTION: DO NOT CRUSH / BEND / FOLD - - - - - - - - - - - - ►

19. CHECK LIST

Please check

1. Date of Birth (Sl. No. 2) Ⓨ Ⓝ

2. Recent photo with white background (Sl. No. 10) Ⓨ Ⓝ

3. Signature in Sl. No. 11 and 20 Ⓨ Ⓝ

4. Branch Option (Sl. No. 15 & Page No. 12) Ⓨ Ⓝ

5. Note down your application number for future communication Ⓨ Ⓝ

20. DECLARATION

    I solemnly and sincerely affirmthat I am an Indian National and that all particulars furnished in this application form are true and correct to the best of my knowledge and that I have not concealed any information. However, in the event this being found to be incorrect, fraudulent or untrue, either before or after the examination or after my admission to the programme, I understand that I am liable to face criminal prosecution and the authorities can claim all powers to cancel my candidature/selection or admission as the case may be and I have to forego my seat and the fee.

    I agree to abide by the rules and regulations governing the examination as well as the rules pertaining to the refund of tuition and hostel fee mentioned in the brochure.

DATE:

PLACE:

Signature of the Parent / Guardian   Signature of the Candidate

Incomplete Application form shall not be considered

CHECKLIST FOR DO'S & DON'TS
Before filling up and/or before posting the application please

- Read and understand the instructions before filling in the Application Form. ☐
- Use black ballpoint pen to write and to shade the appropriate boxes. ☐

  Use CAPITAL LETTERS only.
- Affix a recent high resolution colour photograph in the space provided. ☐
- Do not get the photograph attested.
- Write your complete postal address clearly and legibly to which communication has to be sent. ☐
- Enter your correct Mobile Number / Landline Number with your STD code. ☐
- Mention your correct e-mail address. ☐
- Sign in the space provided below the photograph and in the declaration form. ☐
- Parent / Guardian should sign in the declaration form. ☐
- Do not use stapler pins on your application. ☐
- Enter the mode of examination opted for. ☐
- Enter the Exam City Code on the envelope provided. ☐
- Retain a copy of your application. ☐
- Note down your application number for all the future reference. ☐