

**PROSPECTUS CUM INFORMATION
BULLETIN**

**DIPLOMA ENGINEERING
ENTRANCE EXAMINATION
OF TRIPURA-2021
(DEEET-2021)**

**Central Selection Committee-2021
Education (Higher) Department
Govt. of Tripura**

**Online Applications for
Diploma Engineering Entrance Examination of
Tripura-2021 (DEEET-2021)
Opening Date: 27.04.2021
Closing Date: 16.05.2021**

The Central Selection Committee (CSC) will conduct **Diploma Engineering Entrance Examination of Tripura (DEEET)-2021 on the basis of its syllabi**, to prepare merit list for admission to Diploma Engineering in against available seats in the State of Tripura. **Application must be done through online mode only. There is no printed application form available.**

The programme of Diploma Engineering Entrance Examination of Tripura (DEEET)-2021 is as follows:

| Date & Day of DEEET | Time |
|--------------------------------|---|
| Will be informed later | 11 A.M to 1.0 P.M (“Compensatory time” of 20 min per hour will be allowed to PwD candidates) |

Candidates seeking admission to **Diploma Engineering** will have to appear in **Physical Science/ Science, Mathematics/ Standard Mathematics and English**. Candidates are directed to go through the Prospectus for filling-up of application form, in the website www.highereducation.tripura.gov.in and deet.tripura.gov.in .

It is also to be noted that admission of candidate in an institute will be subjected to merit position in the DEEET 2021, seat allotment through Online Counselling along with fulfillment of all eligibility criteria and other norms as specified by the Dept. of Higher Education and Central Selection Committee.

Examination Centre

The examination will be conducted at **Agartala, Udaipur, Belonia, Ambassa and Dharmanagar**. Applicants have to choose any two of the examination location as first and second choice.

Guidelines for admission in Diploma Engineering through DEEET 2021

- (a) Candidate must be a permanent resident of Tripura.
- (b) Candidate must have passed / appeared in the Madhyamik or equivalent examination from Tripura Board of Secondary Education / Central Board of Secondary Education or other equivalent boards.
- (c) A candidate must obtain minimum 35% marks (no rounding up) in aggregate in the Madhyamik or equivalent examination (as per AICTE, New Delhi).
- (d) There will be no maximum age limit for candidate (as per AICTE, New Delhi).
- (e) Candidate has to produce character certificate issued by Headmaster/ Principal of the school last attended. Such character certificate must be issued within six month of date of document verification and admission.
- (f) Physical presence of candidate at the time of document verification and admission is mandatory otherwise his/ her candidature will stand cancelled without further notification.

(g) If a candidate is allotted a seat in the past through CSC in any of the polytechnic under DHE, Govt. of Tripura, he/she shall not be eligible to avail seat in this Academic Year 2021-2022 unless he/she has surrendered the allotted seat in writing within specific date & time to the appropriate authority.

(h) During Online Application, candidate has to upload correct Photograph, front page BPL ration card and Signature, otherwise candidate will lose his / her candidature / claim for the year.

(i) Candidate has to pay requisite fees during Online Application failing which candidate will lose his / her candidature / claim for the year.

(j) BPL candidates seeking relaxation of fees have to provide their unique Ration Card Number during online application process and have to upload front page of BPL Ration card where card number, name of members and other details are available. After verification, if it is found that the Ration Card is not for BPL in that case candidates have to pay the extra amount to CSC failing which, candidate will lose his / her candidature / claim for the year.

(k) Candidates have to produce hard copy of their online application confirmation page and photo copy of all relevant documents along with original documents during document verification and admission. Without verification of original documents, no candidate will be allowed for admission.

(l) PwD candidate seeking “Compensatory time” has to produce original PwD certificate in the examination center.

(m) Candidates appeared Madhyamik examination in the year 2021 may also appear for the DEET 2021 under the condition that at the time and date of document verification and admission, candidates must fulfill all the eligibility criteria as specified above and must produce relevant original certificates; failing which, candidate will lose his/ her candidature / claim for the year. However, if any amendment / change is / are made after issue of this Notification, the same shall be notified in the website www.highereducation.tripura.gov.in .

Reservation

Reservation of seats for SC / ST / Person with disability (PwD)/ Wards of Ex-serviceman (ESM) candidates will be made as per Reservation Policy of the Government of Tripura as notified from time to time. In case of PwD, percentage and type of PwD will be as per Govt. norms. Certificate(s) issued by the appropriate authority (Dept. of Sainik Welfare for ESM and Dept. of Social Welfare for PwD candidate) shall have to be produced in original at the time of document verification.

In case of Wards of Ex-Serviceman (ESM), a candidate should get endorsed the online submitted form from Dept. of Sainik Welfare and the candidate must have satisfied all other condition set by CSC 2021. Candidate must produce the duly endorsed form at the time of document verification.

However, if any amendment / change is / are made after issue of this Notification, the same shall be notified as per procedure in local newspaper and also in official website.

Submission of Online Application

Online Application can be done through the link provided in the website www.highereducation.tripura.gov.in and deet.tripura.gov.in. Candidates are not required to submit the hard copy of their online application confirmation page or any other document to Central Selection Committee (CSC) if not otherwise asked by the Central Selection Committee (CSC). Acknowledgement Page and Admit Card will not be generated if payment is not deposited within the stipulated last date of submission of online application form his/ her candidature will stand cancelled without further notification.

Examination Fees

Application fee plus Bank's Services, as applicable, are payable by NET banking/Debit Card/Credit Card.

| Category wise Application Fee | |
|--|-----------------|
| General, SC and ST | Rs 350/- |
| BPL (male & female) candidates | Rs 200/- |
| Processing charges & Goods & Service Tax (GST) are to be paid by the candidate, as applicable. | |

Important Dates

| Sl. No. | Activity | Date |
|----------------|---|-------------------------|
| 1. | Online Registration | 27.04.2021 – 16.05.2021 |
| 2. | Admit card generation | Will be informed later |
| 3. | Date of DEEET-2021 | Will be informed later |
| 4. | Upload of answer key | After DEEET 2021 |
| 5. | Receiving feedback on answer key | Will be informed later |
| 6. | Publication of merit list | Will be informed later |
| 7. | Choice feeding, online counselling etc. | Will be informed later |

Instruction for Online Application

Candidates are required to go through the instructions carefully before attempting for online application.

Once an application is received, it will be considered that the candidate agrees to all terms & conditions, rules & regulations stipulated in the Information Bulletin and notices published by Central Selection Committee (CSC).

Any application not in compliance with the conditions specified by the CSC 2021 is liable to be rejected.

1. Candidates have to apply “**Online**” ONLY. The Application Form other than online mode will not be accepted.
2. Submission of Online Application Form should be done by accessing Diploma Engineering Entrance Examination of Tripura website <https://deet.tripura.gov.in/>. Only one application is to be submitted by a candidate. Duplicate application may cause the rejection of the candidature.
3. Please ensure your eligibility as per the criteria laid down for DEEET-2021.
4. **It is essential to have a mobile number and a unique email ID for online application.**

All future communications will be sent through the registered mobile number and email ID. Central Selection Committee (CSC) **will not be responsible for non-receipt of any communication by the candidates if the mobile number and/or the email ID are wrong/non-existing/ changed.**

5. The candidates should select only two (02) from five centers of examination as per their choice.

6. Instructions for Filling Online Application Form (Detailed guidelines for complete online application for DEET 2021 are given in Appendix-1)

a) Registration:

Once the registration details i.e. name, gender, date of birth and E-mail ID are entered and submitted, they cannot be changed/modified/edited under normal circumstances. Also the information must match exactly with the school admit cards, mark sheets, certificates, photo identity cards, caste/category certificates etc. which a candidate has to produce at the time of reporting during admission.

b) Create Profile details and edit:

- Candidate has to fill up his/her profile details in this section i.e. Father's name, mother name's, caste etc.
- Upload scanned images of Candidate's Photograph (Not more than 250Kb), Candidate's Signature (Not more than 100Kb).

c) Fill online application

Fill up the application form in online and note down the system generated Application Number.

d) Preview Application: Before final submission of application form check the details and edit if necessary.

e) Submit Application: You cannot edit the application form after the final submission.

f) Make Payment:

Make payment of fee using online payment gate and keep proof of payment. **The fee may be paid either by credit/debit card/ Net Banking** during the online filling of the application. No other mode like money order, DD, IPO etc. will be accepted. No request for refund of fee once remitted by the candidate will be entertained.

g) Print Acknowledgement

Print out of acknowledgement after successful completion of the application. Acknowledgement should be submitted at the time of reporting.

7. Candidates are not required to send/ submit any documents including acknowledgement of Diploma Engineering Entrance Examination of Tripura. However, they have to submit these in original during counseling and verification along with two (02) self attested copies of all necessary documents failing which no seat will be allotted to them.

8. The use of Calculator/ mobile phone or any other electronics gadget such as ear phone, microphone, camera, tape recorder, any metallic item etc. inside the examination hall is strictly prohibited. Candidates are also not allowed to carry Instrument/ Geometry/ Pencil box, Handbag, Purse, Any kind of Paper/ Stationery/ Textual material (printed or written material), Eatables and Water (loose or packed), in the examination Room / Hall.

9. Candidate must bring the **Admit Card** of Diploma Engineering Entrance Examination of Tripura - **2021** examination. It must be shown to the Officer-In-Charge / Invigilator in examination hall on demand.

10. Candidates are advised to keep visiting the Diploma Engineering Entrance Examination of Tripura website regularly for latest updates.

Instructions Regarding Examination

1. The CSC is conducting the examination through Optical Marks Recognition (OMR) system. The pattern of questions is Multiple Choice Question (MCQ) type.
2. Regarding the entrance examination following guidelines are proposed-
 - Subject: **Mathematics, Physical Science/Science and English**
 - Total marks: **400 containing 4 mark for each MCQ.**
 - Section in question paper: **Section-I** (Mathematics), **Section-II** (Physical Science/Science) and **Section-III** (English).
 - Marks for individual section: **160 marks** for **Section-I**, **160 marks** for **Section-II (80 marks for Physics and 80 marks for Chemistry)** and **80 marks** for **Section-III.**
 - Time/duration: **2 hours** (“Compensatory time” of 20 min per hour will be allowed to PwD candidates)
 - Medium of question paper: **English** and **Bengali** both.
 - Question set: **03 (three)** set of questions namely **A, B** and **C**
 - Negative marking: **1 mark for each wrong answer**
3. The questions of the examination will be framed on the basis of the Syllabus available in the website.
4. Each question booklet will have four options (i.e. A, B, C, D) out of which the correct option is only to be selected.
5. After selecting the correct answer the candidate will have to dark the corresponding letter in appropriate space provided in OMR Answer Sheet with black ball point pen. Candidates are requested to go through all relevant instruction provided in the front page of Question Booklet and back page of OMR sheet.

Instruction Regarding Marking of OMR Sheet

Strict compliance of instruction is essential. Answer sheet will be processed by Electronic means in computer. Invalidation of Answer Sheet due to incomplete/ incorrect filling of the OMR sheet will be the sole responsibility of the candidate. Accordingly candidates are advised to adhere to the following instructions.

1. Write and mark your Roll Number, Test (Question) Booklet Series and in appropriate places on the OMR Sheet.
2. Mark the correct answer by darkening the circle.
3. Use of white fluid/eraser/blade etc. for correction in OMR sheet is not permitted.
4. Once marked, no change in the response shall be permitted.
5. More than one response is also not allowed. Multiple answers given against one question will not be considered for evaluation, *i.e.* marking more than one answer or marking alterations after marking an answer will result in zero mark.
6. Do not make any stray mark or any other mark on the OMR sheet.
7. Do not cut or mutilate the OMR sheet.
8. Do not fold or damage the OMR sheet.

9. Candidates should write the OMR Sheet Number (as provided in OMR sheet) in the Attendance Sheet before putting his/ her signature.
10. Candidate shall have to ascertain that the information furnished by them in the OMR Sheet are duly checked by the invigilator before putting his/ her signature.
11. Candidates are to sign in 3 **(three) places**, one signature in the **OMR Sheet, in the Attendance Sheet and in the Question Booklet** on the space specified for these.
12. Do not do any rough work on the OMR Sheet. It may be done in the space provided in the Test Booklet/Question paper.
13. There will be no re-checking/ re-evaluation of the OMR sheet.
14. Please ensure that you have returned the OMR sheet to the Invigilator before leaving the Examination Hall.
15. Adoption of any unfair means in the Examination Hall causing disturbance to others or indiscipline of any sort will lead to cancellation of your candidature followed by legal action (if necessary).
16. The signature should be identical with the signature which was uploaded by the candidate in **Online Application Form** submitted to the Board.

Publication of Result

The Central Selection Committee (CSC) shall publish Merit list on the basis of the merit. This list includes the candidates who will appear in the examination qualifying the criteria fixed by the Central Selection Committee (CSC) on consideration of all the aspects. Result will be published in the www.highereducation.tripura.gov.in and deet.tripura.gov.in. The DEET does not keep any provision for post publication review at any stage and so will not entertain any such application in this regard.

Counseling

Seats of different courses in different polytechnic institute in state of Tripura will be distributed amongst the eligible candidates through online counseling. For that purpose, before online counselling choice feeding has to be done in the online portal. Based on choice feeding eligible candidates will be nominated for admission in different polytechnic institute through online counseling.

Following documents in original along with two photo copies are required at the time of document verification and admission

1. Two recent passport size **photograph**.
 2. **Marksheet** of Madhyamik or equivalent examination.
 3. **Admit card** of Madhyamik Examination or equivalent / **Birth certificate** as proof of age.
 4. **PRTC (not Citizenship certificate)** as proof of residency of the **applicant**.
 5. **Caste (SC/ ST) Certificate** of the candidate from the appropriate authority.
 6. **Persons with Disabilities (PwD) Certificate** issued by Dept. of Social Welfare / District Disabilities Rehabilitation Centres (DDRC) or competent authority approved by the State Government, if any.
 7. **Ward of Ex-Serviceman (ESM) Certificate** (from Rajya Sainik Board/ Directorate of Sainik Welfare).
 8. **BPL ration card** from the appropriate authority approved by the State Government, if any.
 9. Seat allotment letter issued by CSC-2021.
 10. Admit card of DEET-2021.
- Seat surrendered certificate** from concerned department, if applicable.

Guidelines for filling up the online application form

Step 1: Registration in decet.tripura.gov.in/

For new registration, fill up the registration form with correct information of the candidate. N.B: It is essential to have a mobile number and a unique email ID for online application.

1. Enter the Mobile Number and Click on **Generate OTP**
2. Enter the OTP received at the given mobile number in OTP field and click on **Submit OTP**.

1. Click on Register button to register.

1. After successful registration of the candidate, message will appear with DEEET 2021 Registration Number.
2. Enter the Registration Number or Email Address, enter password, enter verification code and click on log in to fill up Candidate Profile

Step 2: Candidate Profile Fill up

1. Fill up the Candidate Profile details with correct information.
2. Fill **Guardian's name and relation with guardian if parents are not alive.**
3. If candidate belongs to BPL category then enter correct ration card number.
4. If candidate is not having PRTC and applied/applying for PRTC then click on "No" button and then click on Applied/ Applying option.

1. Fill up the Candidate's Permanent Address and Address for communication
2. If Permanent Address and Address for communication are same click on **same as permanent address** option

1. Upload Candidate's photograph and signature in correct format and size.
Photograph : Maximum allowed Size and format : 250Kb , JPEG/JPG
Signature : Maximum allowed Size and format : 100Kb , JPEG/JPG
2. Click on **Submit** button
3. Profile Updated successfully will appear.
4. Click on **edit profile** if corrections are required.
5. Click on **Apply online** button for applying in DEEET 2021 session

Step 3: Filling Up Application form

Diploma Engineering Entrance Examination of Tripura
(Department of Higher Education)

Application for DEEET Session 2020

Academic Qualification of Madhyamik or Equivalent Examination Passed/Appeared

Examination Status
 Passed Appeared

Year of Passing / Appearing: 2020
 Name of The Board: TSEB
 Roll Number: ASURAM/BSB/NA/18308

Main Subjects

| Subject | Full Marks/Total Grade | Marks Obtained/Grade |
|-----------------|------------------------|----------------------|
| English | Full Marks | Obtained Marks |
| Mathematics | Full Marks | Obtained Marks |
| Physics/Science | Full Marks | Obtained Marks |

Overall Total/Grade: Overall Total/Grade
 Total Number of Subjects: Total number of Subject
 Overall Percentage/CGPA: Percentage/CGPA

[Next](#)

1. Fill Academic Qualification of Madhyamik or Equivalent Passed/Appeared
2. In case appeared, no need to fill marks and Percentage/Grade
3. Click on next and fill up required information
4. If already admitted in previous years, candidate will not be allowed to apply.
5. If CBSE School Conducted, candidate will not be allowed to apply.
6. Choose Examination Centre 1, Examination Centre 2. Both choices should not be same.
7. Tick the Check boxes.
8. Click on Submit.

Diploma Engineering Entrance Examination of Tripura
(Department of Higher Education)

Application for DEEET Session 2020

Previous Application Details

If admitted in any Polytechnic of Tripura last year or previous year
 Yes No

If CBSE candidate, mention whether school conducted or Board conducted examination
 School Conducted Board Conducted Not Applicable

Examination Center Choice 1: Agartala

Examination Center Choice 2: Udaipur

I do hereby declare that I shall abide by all the rules and regulations of the Tripura State Government and also the instructions laid down by the Central Selection Committee 2020.

The information furnished in this application are true to the best of my knowledge and belief.

[Previous](#) [Submit](#)

Diploma Engineering Entrance Examination of Tripura
(Department of Higher Education)

Application Saved Successfully. [Click here for Final Submission](#)

| User Account Information: | User Profile Information: | DEEET Session 2020 |
|---|--|---|
| User Reference ID: U2020031902020 Name: Mr. Rohan Sarkar Date of Birth: 02/03/1990 Email: cscpolytechnic2020G@gmail.com Mobile: 8837077415 Change Password |  Father's Name: Mr. Suman Sarkar Mother's Name: Mrs. Rama Sarkar Gender: Male Category: SC View More Edit Profile | Last Online Application Date: 27/03/2020 Last Payment Date: 30/03/2020 Application Fee (In Rupees): For General, SC, ST: 5 For OBC: 3 Edit Application Application Preview |

1. "Application saved successfully and Click here for final submission" will appear.
2. Click "here" or click on Application Preview button to go to application Preview page.

Diploma Engineering Entrance Examination of Tripura
(Department of Higher Education)

Application Preview for DEET Session 2020

Examination Status: Appeared
Year of Passing / Appearing: 2020
Roll Number: AGAR/M/REG/M/N/48508

Name of The Board: TBSE

| Main Subjects | | |
|---------------------|------------|----------------|
| Subject Name | Full Marks | Obtained Marks |
| English | 0 | 0 |
| Mathematics | 0 | 0 |
| Phy Science/Science | 0 | 0 |

Total Marks: 0
Percentage/CGPA: 0.0

Total number of Subjects: 0

Previously Admitted: No
Venue Preference: Agartala

School/Board Conducted: Not Applicable
Venue Preference: Udaipur

I do hereby declare that I shall abide by all the rules and regulations of the Tripura State Government and also the instructions laid down by the Central Selection Committee 2020.
The information furnished in this application are true to the best of my knowledge and belief.

[Edit Application](#) [Submit Application](#)

1. Application Preview will appear.
2. If correctors are required then click on **Edit application** button to go to application Preview page.
3. Click on **Submit Application** Button
4. No Changes will be allowed after submission of application.
5. Click on **Ok**.

Diploma Engi
(Department

deet.tripura.gov.in says

Check your application thoroughly. No correction in application or profile will be allowed after submission of application

[OK](#) [Cancel](#)

[Logout](#) [How to Apply](#)

Examination Status: Appeared
Year of Passing / Appearing: 2020
Roll Number: AGAR/M/REG/M/N/48508

Name of The Board: TBSE

| Main Subjects | | |
|---------------------|------------|----------------|
| Subject Name | Full Marks | Obtained Marks |
| English | 0 | 0 |
| Mathematics | 0 | 0 |
| Phy Science/Science | 0 | 0 |

Total Marks: 0
Percentage/CGPA: 0.0

Total number of Subjects: 0

Previously Admitted: No
Venue Preference: Agartala

School/Board Conducted: Not Applicable
Venue Preference: Udaipur

I do hereby declare that I shall abide by all the rules and regulations of the Tripura State Government and also the instructions laid down by the Central Selection Committee 2020.
The information furnished in this application are true to the best of my knowledge and belief.

[Edit Application](#) [Submit Application](#)

Diploma Engineering Entrance Examination of Tripura
(Department of Higher Education)


Application Submitted Successfully. [Click here to Make Payment.](#)

User Account Information:

User Reference ID: U2020031900020
Name: Mr. Rohan Sarkar
Date of Birth: 02/03/1990
Email: cospolytechnic2020@gmail.com
Mobile: 8837077415

[Change Password](#)

User Profile Information:



Father's Name: Mr. Suman Sarkar
Mother's Name: Mrs. Rama Sarkar
Gender: Male
Category: SC

[View More](#) [Edit Profile](#)

DEET Session 2020

Last Online Application Date: 27/03/2020
Last Payment Date: 30/03/2020

Application Fee (In Rupees):
For General/SC/ST: 5
For BPL: 3

[Make Payment](#)

1. Application Submitted successfully. Click here to make payment” message will appear.
2. Click [Here](#) or **Make payment** button to make payment

Diploma Engineering Entrance Examination of Tripura
(Department of Higher Education)

Home | About Us | Contact Us | Profile | Change Password | Logout | How to Apply

Payment Information:

| | |
|----------------------------|---|
| Candidates Name : | Mr. Rohan Sarkar |
| Applying For : | DEEET Session 2020 |
| Mobile No. : | 8837077415 |
| Email ID : | cspolytechnic2020@gmail.com |
| Online Payment Last Date : | 27/03/2020 |
| Category (Amount): | 50% <input type="checkbox"/> 10% <input type="checkbox"/> |

[Make Payment \(₹\)](#)

1. Click on **Make payment** button to make payment
2. Payment Gateway page will appear.
3. Complete the Payment process.

Credit Card >

Debit Card

Debit Card + ATM PIN

Internet Banking

Wallet/ Cash Cards

Pay by Credit Card

VISA | MasterCard | RuPay

Card Number
Enter card number

Expiration Date **CVV/CVC**
Month Year

Card Holder Name
Enter card holder name

[Make Payment](#) [Cancel](#)

Diploma Engineering Entrance Examination of Tripura
(Department of Higher Education)

Home | About Us | Contact Us | Profile | Change Password | Logout | How to Apply

Payment Response

Dear Mr. Rohan Sarkar, Your payment of Rs. 3 received successfully.

| | |
|----------------------------|-------------------------|
| Registration No.: | U2020031900020 |
| Order Id: | OR20031912453320180 |
| Transaction Reference No.: | SSB18634924794 |
| Status: | Completed successfully. |

Please note Order Id and Transaction Reference No. for future reference.

[Print Payment Receipt](#) [Print Acknowledgment](#)

1. Application Submission for DEEET 2021 is completed.
2. Print Payment receipt and Acknowledgement for future reference.
3. Sample Acknowledgement

Registration Acknowledgment for DEEET Session 2020

Dear Candidate,

Registration No. U2020031900020

Order Id: OR20031912453320180

Transaction Reference No. SSB18634924794

Status: Completed successfully.

Please note Order Id and Transaction Reference No. for future reference.

[Print Payment Receipt](#) [Print Acknowledgment](#)

Central Selection Committee- 2021
Education (Higher) Department
Govt. of Tripura

Syllabus of the Diploma Engineering Entrance Examination – Tripura 2021
(DEEET 2021)

SECTION-I: MATHEMATICS

Unit-I: Arithmetic

Real Numbers

Euclid's division lemma, the fundamental theorem of arithmetic – statement after illustrating and motivating through examples, proofs of irrationality of $\sqrt{2}$, $\sqrt{3}$, $\sqrt{5}$. decimal representation of rational numbers in terms of terminating, non-terminating, recurring decimals.

Unit-II: Algebra

Polynomials

zeros of a polynomial. relationship between zeros and co-efficients of quadratic polynomials. statement and simple problems on division algorithm for polynomials with real coefficients.

Pair of linear equations in two variables

Pair of linear equations in two variables and graphical method of their solution; consistency/ inconsistency. algebraic conditions for number of solutions. solution of a pair of linear equations in two variables algebraically – by substitution, by elimination and by cross multiplication method. simple situational problems. Simple problems on equations reducible to linear equations.

Quadratic equations

Standard form of a quadratic equation $ax^2 + bx + c = 0$ ($a \neq 0$), solutions of quadratic equations (only real roots) by factorization, by completing the square and by using quadratic formula, relationships between discriminant and nature of roots, situational problems based on quadratic equations related to day to day activities to be incorporates.

Arithmetic progressions

Motivation for studying arithmetic progression, derivation of the n th term and sum of the first n terms of a.p. and their application in solving daily life problems.

Logarithm

logarithm of a real positive number with respect to a base ($\neq 0,1$) laws of logarithm, simple problems involving logarithm.

Unit-III: Geometry

Triangles, Circles

definitions, examples, counter examples of similar triangles.

Unit IV: Trigonometry

4.1 Introduction to trigonometry

Trigonometric ratios of an acute angle of a right angled triangle, proof of their existence (well defined), motivate the ratio whichever are defined at 0° and 90° values (with proofs) of the trigonometric ratios of 30° , 45° , and 60° , relationships among the ratios.

4.2 Trigonometric identities

Proofs and applications of the identities $\sin^2 a + \cos^2 a = 1$; $\sec^2 a = 1 + \tan^2 a$; $\operatorname{cosec}^2 a =$

$1 + \cot^2 a$ only simple identities to be given, trigonometric ratios of complementary angles.

4.3 Heights and distances

Introduction, line of sight, angles of elevation, angles of depression, simple problems on heights and distances, problems should not involve more than two right triangles, angles of elevation / depression should be only 30° , 45° , 60° .

Unit-V: Mensuration

5.1 Areas related to circles

Motivate the area of a circle, area of sector and segment of a circle, problems based on areas and perimeter / circumference of the above said plane figures (in calculating area of segment of a circle, problems should be restricted to central angle of 60° , 90° , and 120° only. plane figures involving triangles, simple quadrilaterals and circle should be taken.)

5.2 Surface areas and volumes

5.2.1 Surface areas and volumes of combinations of any two of the following: cubes, cuboids, spheres, hemispheres, and right circular cylinders, cones, frustum of a cone.

5.2.2 problems from real life situation such as converting one type of metallic solid into another, combination of solids(not more than two types), immersing a solid into a liquid contained in another solid, flow of water through a pipe, embankment.

Unit-VI: Co-ordinate geometry

6.1 Introduction, concept of co-ordinate geometry, distance between two points, section formula, area of a triangle.

Unit-VII: Statistics and probability

7.1 Statistics

Mean, median and mode of grouped data (bimodal situation is to be avoided) cumulative frequency graph.

SECTION-II: SCIENCE/PHYSICAL SCIENCE

Section-IIA: Physics

Unit I: Force and Newton's laws

Force and Motion, Newton's Laws of Motion, Action and Reaction forces, Inertia of a body, Inertia and mass, Momentum, Force and Acceleration, Elementary idea of conservation of Momentum, Work done by a Force, Energy, power; Kinetic and Potential energy; Law of conservation of energy.

Unit II: Electricity

Electric current, potential difference and electric current, Ohm's law; Resistance, Resistivity, Factors on which the resistance of a conductor depends, Series combination of resistors, parallel combination of resistors and its applications in daily life, Heating effect of electric current and its applications in daily life, Electric power, Interrelation between P, V, I and R.

Unit III: Magnetic effects of Current

Magnetic field, field lines, field due to a current carrying conductor, field due to current carrying coil or solenoid; Force on current carrying conductor, Fleming's Left Hand Rule. Electromagnetic induction, Induced potential difference, Induced current. Fleming's Right Hand Rule, Direct current. Alternating current: frequency of AC. Advantage of AC over DC, Domestic electric circuits.

Unit IV: Light - Reflection and Refraction

Reflection of light by curved surfaces; Images formed by spherical mirrors, centre of curvature, principal axis, principal focus, focal length, mirror formula (Derivation not required), magnification, Refraction; Laws of refraction, refractive index. Refraction of light by spherical lens; Image formed by spherical lenses; Lens formula (Derivation not required); Magnification, Power of a lens; applications of spherical mirrors and lenses.

Unit V: Sound

Nature of sound and its propagation in various media, speed of sound, range of hearing in humans; ultrasound; reflection of sound; echo and SONAR. Structure of the Human Ear (Auditory aspect only)

Unit VI: Sources of Energy

Different forms of energy, conventional and non-conventional sources of energy: Fossil fuels, solar energy; biogas; wind, water and tidal energy; Nuclear energy, Renewable versus non-renewable sources of Energy.

Section-IIB: Chemistry

Unit VII: Matter - Nature and Behaviour

Definition of matter; solid, liquid and gas; characteristics - shape, volume, density; change of state-melting (absorption of heat), freezing, evaporation (cooling by evaporation),

condensation, sublimation, Elements, compounds and mixtures, Heterogeneous and homogenous mixtures, colloids and suspensions. Atoms and molecules, Law of constant proportions, Atomic and molecular masses, Mole concept : Relationship of mole to mass of the particles and numbers, Electrons, protons and neutrons, valency, chemical formula of common compounds, Isotopes and Isobars.

Unit VIII: Chemical reactions

Chemical Equation, Balanced chemical equation, implications of a balanced chemical equation, types of chemical reactions: combination, decomposition, displacement, double displacement, precipitation, neutralization, oxidation and reduction.

Unit IX: Acids, Bases and Salts

Their definitions in terms of furnishing of H^+ and OH^- ions, General properties, examples and uses, concept of pH scale (Definition relating to logarithm not required), importance of pH in everyday life; preparation and uses of sodium hydroxide, Bleaching powder, Baking soda, washing soda and Plaster of Paris.

Unit X: Metals and Non-metals

Properties of metals and non-metals, reactivity series, formation and properties of ionic compounds, basic metallurgical processes, corrosion and its prevention.

Unit XI: Carbon compounds

Covalent bonding in carbon compounds. Versatile nature of carbon. Homologous series. Nomenclature of carbon compounds containing functional groups (halogens, alcohol, ketones, aldehydes, alkanes and alkynes), difference between saturated hydrocarbons and unsaturated hydrocarbons. Chemical properties of carbon compounds (combustion, oxidation, addition and substitution reaction). Ethanol and Ethanoic acid (only properties and uses), soaps and detergents.

Unit XII: Periodic classification of elements

Need for classification, Modern Periodic table, Gradation in Properties, Valency, Atomic number, metallic and non-metallic properties.

SECTION-III: ENGLISH

English Grammar -

Unit I: Tenses

Unit II: Modals

Unit III: Voice

Active voice, passive voice

Unit IV: Subject – verb concord

Unit V: Reporting/ Narration

Commands and requests, Statements, Questions etc.

Unit VI: Clauses:

Noun clauses, Adverb clauses, Relative clauses etc.

Unit VII: Parts of speech, Determiners

Unit VIII: Prepositions

N.B.: For Diploma Engineering Entrance Examination-Tripura (DEEET) the learning stage/difficulty level of questions from the syllabus may be considered as per existing Class IX and Class X syllabus of TBSE and CBSE.

.....End of Syllabus.....