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# URANIUM TALENT SEARCH EXAMINATION [ UTSE - 2018 ]



**+2, 1<sup>st</sup> year ( CHSE ) &  
Class XI ( CBSE )**



## IN CHEMISTRY

Date of Examination	:	04.02. 2018 (Sunday)
Time	:	2.00 pm - 3.00 pm
ENTRY FEE	:	Rs. 130/- (Rupees hundred thirty only)
Question Pattern	:	MCQ in Chemistry
Syllabus	:	based on CBSE/CHSE syllabus (details given in last page)
Last Date of Application	:	17.11.2017
Date of declaration of Result	:	10.03.2018

**Objectives :** To popularize chemistry in +2(XI/XII) level and give free e-guidance for the X- factor in Chemistry to top rankers for IIT(JEE)/NEET and other tests

### Special Features UTSE-2018

1. Online Application alongwith offline application
2. CHSE and CBSE students to compete on same platform to assess aptitude for IIT(JEE) and AIPMT(NEET) etc. one year advance and receive free e-guidance in Chemistry
3. Medals/Trophies to top rankers.
4. Merit certificates to candidates who qualify by securing minimum cut-off mark
6. Freely Downloadable **E-Concept in Chemisry** (Class XI) authored by Dr.SS Tripathy, *PhD, DSc*, President, *The Uranium*(formerly Senior Reader in Chemistry, Ravenshaw College)
7. Short term Contact program(Camp) on vacations for top 50-60 at Uranium centre or any host school/ junior college for ADVANCE ORGANIC REACTION MECHANISM and PHYSICAL CHEMISTRY.

### CONTACTS

Phone : 9437226340, 9853824822, 0671-2427385

E-mail : [theuraniumodisha@gmail.com](mailto:theuraniumodisha@gmail.com)

Website : [www.theuranium.org](http://www.theuranium.org)

## Guidelines

### EACH PARTICIPATING Junior College(CHSE) / Senior Secondary SCHOOL(CBSE/ICSE) CAN BE A TEST CENTRE

If the total number of candidates will be at least 50, then that school/junior college will be made a test centre for class XI. For CBSE/ICSE affiliated schools in which junior students(VII, VIII and IX) are participating in UTSE-2018, the senior(XI) participants are to appear separately under separate Centre Superintendent, invigilators and rooms. They have to meet the number requirements separately, otherwise they are to be amalgamated with junior class examinees.

#### HOW TO APPLY

#### • Online Application :

For this, the applicants have to ensure the centre of UTSE-2018 in which they will appear. They can take permission from their principal through their chemistry teacher and Chemistry HOD to make their school/junior college a UTSE-2018 test centre (by meeting the requirement of 50 minimum applicants). This should be their first choice. The second choice is to look for any nearby junior college/school and seek their permission to appear the test. The last choice is to enquire our office to suggest any nearby test centre. Application made without confirming the test centre is liable for rejection without any refund of entry fee. For online applicants, no hard copy of application is required. The permission letter of the Principal to conduct the UTSE-2018 on 4th February 2018, Sunday (2.00PM to 3.00PM) is to be sent to us by post / email [sudhansu.trips@gmail.com](mailto:sudhansu.trips@gmail.com) within 7 days of application, in case your institution is becoming a test centre.

Online application is to be done in two steps.

**Step-1: Registration:** Here the candidates have to individually or collectively register by entering the usual data (Name, School, father's name etc.). On submission, a unique Applicant's Registration Number will be given to applicant or group representative. This has to be saved by the applicant to go to step 2.

**Step-2: Payment and Validation:** In this step, a person (student or teacher or any guardian/parent) can pay individually or for a group of applicants just by entering the applicant's registration number(s).

**Entry Fee: Rs. 130/- per applicant.**

Discount of Rs. 10/- will be allowed for meeting application related expenses (ARE) by the group representative, if the payment is made for a minimum of 10 applicants at a time.

The applicant or group representative has to deposit (credit) the amount in the account of: '*The Uranium*', by any method (Bank transfer or mobile banking) given next page (procedure 1 or 2). The transaction amount, date and reference number have to be entered in this step. After submitting these data, the application will be approved by our office.

(N.B: Bank Draft is not allowed for Online application)

#### Off-line Application in Hard Copy :

Group or individual application can be made in paper and sent through courier or post as per the format given later under the guidance of the coordinating Chemistry PGT/lecturer. Separate application for each candidate is not required. In this case too, student has to ensure the test centre in which he/she will be appearing UTSE-2018 as explained for online application. **Centre confirmation is primarily the responsibility of the participating candidates.** Kindly contact our office before submitting the application if your college/school is not becoming a UTSE test centre.

**Entry Fee: Rs. 130/- per candidate**

For both online and offline application a discount deduction of Rs.10 is to be made per applicant to meet Application Related Expenses (ARE) provided the number of applicants in a group is at least 10. Below 10 applications, no deduction will be permissible. The expenses for courier charges to send the application and BD (if any) and other related expenses are to be borne by the candidates from the ARE. Extra expenditure, if required, has to be borne by the applicants.

- CENTRE CHARGES:** The centre charges will be sent to each centre by cheque or account deposit method by our office later.
  - Centre Superintendent: Rs.350/-Rs.400/-, (2) Invigilator: Rs. 200/- Rs. 250/- :one per 30 candidates (extra 2 candidates to be adjusted with one invigilator, e.g if there are 64 candidates two invigilators or 96 candidates three invigilators will be given. In such case extra 2 candidates are to be adjusted in one room)
  - One coordinating officer (Rs.300) if strength exceeds 150. He/She will assist the Suptd. in conducting the test and also during emergency relieve any invigilator)
  - Clerical Assistance: one: Rs.150/- (5) Menial Assistance (Peon): One for every 150 candidates: Rs. 100/-
  - Courier Charges: Rs. 75/- upto 150 candidates, Rs. 150/- upto 300.
  - Contingency Charges: Rs. 50/-
  - Facility Utilisation Charges: For using the facilities of the school/junior college (electricity, water etc), an amount will be paid on the basis of participation strength subject to a minimum of Rs.100.

(The 2nd figures in the Tariff will be applicable if the total number of candidates in a centre is 100 or above)

**How to send Entry Fee in Offline application:** The entry fee(after deducting the ARE) is to be paid to us by any one of the following ways.

- (1) **Bank Transfer:** (a) **Online** (i) IMPS OR (ii) NEFT  
(b) **Offline:** Cheque Deposit ;(in any nearest bank)
- (2) **Mobile Banking :** UPI (BHIM Apps) ID: **theuranium@upi**  
Name of Account Holder : **The Uranium** Name of Bank : **State Bank of India**  
Account No- **33989659769** ISF Code-**SBIN0004238**

In such case the reference number of the bank transaction, date of deposit and amount deposited are to be sent to us through the application.

- (3) **Bank Draft:** payable to - **The Uranium**, payable at : **SBI, PB Branch, Mangalabag (Code- SBIN00004238), Cuttack.** OR the draft can be payable at any nationalised bank at Cuttack. Draft is to be sent through the application proforma. BD is only permissible in case of offline application through hard copy.
- (4) The entry fee and application format can also be directly deposited in person at our office during 10.30 AM to 1.00PM and 2.00PM to 5.00PM on working days.

**What to send in case of Offline Application:**

- (1) Filled-in application proforma(for offline application)  
(2) Bank Draft of total entry Fee(after deducting the Application Related Expenses)  
(3) Forwarding letter of the Principal giving consent to make the school/junior college a test centre for UTSE -2018(in case your institution is becoming a test centre).  
(4) Bank Transfer/Mobile Transfer transaction details giving the reference number, amount deposited and date of deposit are to be given in the forwarding letter.

**How to Send:** All the above materials to be sent by registered parcel/post or courier services.

**Where to Send:** **Dr. S.S. Tripathy**, President, **UTSE BOARD, THE URANIUM**

Friends' Colony, Cuttack - 753001, ( Ph : 9437226340, 9853824822, 0671-2427385 )

**IMPORTANT INSTRUCTIONS :**

1. Our office will have the discretion to assign a few candidates from other schools/junior colleges to any centre to appear.
2. The detailed guidelines for conducting the examination, admit cards of the examinees, question papers and OMR answer sheets(confidential materials), centre charges(chèque/online transfer) and other related materials will be dispatched to Principals before 22nd January 2018.
- \* All application should be forwarded by the Principal/HOD chemistry of the junior college/school or his banafide nominee . For individual participants, this is not required.

**CONSOLIDATED APPLICATION PROFORMA (FOR OFFLINE APPLICANTS)**

Consolidated application proforma is to be prepared in a plane paper according to the given points under the guidance of the coordinating Chemistry PGT/lecturer and photocopies to be made for multiple use. Formats are to be filled up by the students or the coordinating teacher.

**Consolidated Application Proforma for Uranium Talent Search Examination (UTSE) - 2018**

(to be filled in English) **CLASS :** XI(CBSE) / 1st year +2 (Choose one from these applicable to you)

Name and Address(AT,PO,Dist,PIN)of School/junior college/studying\_\_\_\_\_

Name of Test Centre with Address(AT, PO, Dist, PIN) in which the candidate(s) want to appear:\_\_\_\_\_ (these two school/junior college may be same)

Sl. No.	NAME OF APPLICANT (Capital Letters)	Name of Father/ Mother/Guardian	Mobile/Land Phone No/email ID. of applicant/guardian	Signature of candidate
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**IMPORTANT :** The name and the mobile number of the officer-in-charge of examination as well as the coordinating Chemistry PGT/lecturer are to be given below the application proforma. For individual applicants this is not necessary.

**Admit Card:**

Admit cards will be sent from our office to the centres before 22.01.2018. The admit cards are to distributed to the examinees in advance. For individual applicants, admit cards can be sent directly to applicants in their EMAIL ID

**Results:** Results of the first level test will be declared in the 10.03.2018 in our website (www.theuranium.org)

## WHEN TO REACH THE CENTRE :

The students are to be instructed to reach the centre one hour before the test i.e at 1PM. They should bring with them the admit cards(if not collected from centre earlier, will be available at the centre 1 h before the exam), HB pencil, sharpner, eraser and ball point pen with them. **THEY MUST HAVE TO BRING THEIR SCHOOL/JUNIOR COLLEGE IDENTITY CARD CARRYING PHOTOGRAPH TO THE EXAM HALL FOR INDIDENTITY VERIFICATION. Calculators and mobiles are not allowed**

## SYLLABUS FOR UTSE-2018

1. Basic concepts: Types of Inorganic reactions, ON(OS), Redox reactions, Balancing Redox equations by ON method and ion electron method. Types of Non-redox(metathesis) reactions, simple redox reactions in the light of standard reduction potentials.

Mole Concept, Avogadro's law, Atomic mass, Molecular Mass, Equivalent concept, Simple stoichiometry(mass-mass, mole-mass, mole-mole, mass-volume, mole-volume, volume analysis for gases, eudiometry: Limiting reactant concept, Purity of sample etc. Composition stoichiometry,

Solutions : Molarity, % strength by volume and by weight, molality, Normality, Volumetric analysis by titration experiments and related stoichiometry for analysis of composition, purity etc. acid-base titrations, Redox titrations including iodometry-iodimetry, precipitation titrations etc.

2. Atomic structure:
3. Periodic classification and properties
4. Chemical Bonding
5. Gaseous State
6. Thermodynamics and Thermochemistry
7. Nomenclature of organic compounds: Aliphatic, Alicyclic, Aromatics, bicyclic, spiro compounds
8. Isomerism in organic compounds : Structural and Stereoisomerism
9. Chemistry of hydrogen family alongwith  $H_2O_2$

**Question Standard :** IITJEE(main)/NEET : 50-60 MCQ with 30% numerical and 70% thought provoking non-numerical:

**(UTSE-2017 question paper with answer keys will be available in our website by end of December 2017)**

**Reference books:** E-Concepts in Chemistry (Senior-XI) by Dr. S. S. Tripathy, *PhD, DSc*

**(President, UTSE Board & Formerly Senior Reader in Chemistry, Ravenshaw College, Cuttack)**

This will be available in our website for free downloading.:

NCERT text books volume I, II of class XI; Other Text books as recommended by their teachers

## Short Term Contact Program (Advance Workshop/ Camp) and Prize Giving Ceremony:

Top 50-60 in the test will be invited to attend advance 4-day contact program(Workshop or camp) in vacation at Uranium Centre on Advance organic reaction mechanism catering to needs of IIT(Advanced). In the Valedictory ceremony of the camp, the top 20 in UTSE-2018 will be awarded trophies and prizes. Top 20 awardees can directly receive the trophies and certificates in the prize giving ceremony without attending the 4-day camp. The candidate who will neither join the camp nor prize giving ceremony can collect the trophy from our office anytime later.

The School/Junior college giving the maximum participation or getting maximum awards in the final test, can invite the Uranium team to their school/junior college for conducting seminars/camps for their students on important topics.

UTSE is conducted by "*The Uranium*": A Public Educational Trust : "For the Advancement of Education and Research in Chemical and Allied Sciences Among Youth", Friends Colony, Cuttack-753001(Odisha)

Phone : 9437226340, 9853824822, 0671-2427385

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