

UTTARAKHAND TECHNICAL UNIVERSITY

ENTRANCE EXAMINATION : 2010

(UKSEE : 2010)

INFORMATION BROCHURE

For Admission to

B.Tech. Lateral Entry /B.Pharm. Lateral Entry,
2nd year 2010

B.Pharm, Bachelor of Hotel Management (BHMCT)

MCA Courses

1st year 2010

Last Date for

Submission of Forms

10- May, 2010

Date of Examination

Sunday, 23 May 2010



UTTARAKHAND TECHNICAL UNIVERSITY

Dehradun, Uttarakhand

email : exam.utu@gmail.com

website : www.uktech.in

UKSEE-2010

Uttarakhand State Entrance Examination
Organised by : Uttarakhand Technical Univeristy, Dehradun, UK

**UKSEE-2010 FOR ADMISSION TO THE B.PHARM. 2nd Year LATERAL ENTRY,
B.TECH. 2nd Year LATERAL ENTRY, B. PHARM.,
BACHELOR OF HOTEL MANAGEMENT (BHMCT),
MCA 1st Year IN VARIOUS GOVERNMENT COLLEGES/UNIVERSITIES/SELF
FINANCED INSTITUTIONS OF UTTARAKHAND**

Eligibility : As per latest AICTE norms.

Reservation : As per Notification (applicable at the time of Counselling) of Govt. of Uttarakhand/University rules.

Application Forms :

1. The cost of Brochure/Application form Inclusive of Examination Fee is Rs. 1000/- for General/OBC Candidates and Rs. 500.00 for SC/ST candidates with Rs. 30/- additional as post office handling charges.
2. The Information Brochure containing Application form are available for Sale from April 15, 2010 to May 10, 2010 by paying Rs. 1000/- for General/OBC candidates and Rs. 500/- for SC/ST candidates with Rs. 30/- additional as post office handling charges in cash from Post Offices of Dehradun GPO, Roorkee HO, Kotdwar HO, Haldwani HO, Tallital, Pantnagar, Rudrapur, Kichha, Ramnagar, Kashipur, Mussoorie, Hardwar, Rishikesh MDG, Rudraprayag, Pauri, Srinagar, Tehri, Almora, Ranikhet, Bageshwar, Pithoragarh, Doiwala, Vikasnagar, Chakrata, Bajpur, Lansdowne, Gopeshwar, Khatima and outside of Uttarakhand from Post Office of New Delhi GPO.

Examination Centres : At Ten places. In Uttarakhand - Dwarahat, Dehradun, Haldwani, Srinagar, Kotdwar, Pithoragarh, Roorkee, Rudrapur, Uttarkashi and New Delhi (NCR).

Important Dates

Application forms available from	:	15 th April, 2010
Last date for sale and receipt of forms	:	10 th May, 2010, 5.00 p.m. closing time
Delivery of Admit Cards	:	upto 20 th May, 2010
Date of Examination	:	23 rd May, 2010

For More Information Please Contact :

Uttarakhand Technical University

Govt. Polytechnic Suddhowala,
Dehradun, 248 007, Uttarakhand.

email : exam.utu@gmail.com

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1. GENERAL INFORMATION

The University has been assigned the task of conducting UKSEE-2010 for admission to first year of MCA, BHMCT, B.Pharmacy and second Year of Four Year B.Tech. & B. Pharmacy programme offered at University Departments and Government/Private Institutes of Uttarakhand (hereafter referred to as institute) for the academic year 2010-11 this year.

2. IMPORTANT INSTRUCTIONS

- i. Admission to an institute implies acceptance by the candidate and his/her parents or guardians of all the provisions given in the brochure/prospectus of the University. Any change in the rules, regulations, fees, special conditions, etc. of the institute will apply to him/her.
- ii. The information indicated in the brochure/prospectus of an institute is only for general guidance of the candidates.
- iii. Application forms found incomplete or received after the due date will be rejected.
- iv. The candidates are advised to read each and every instruction given in this information brochure very carefully before filling up the Application form.
- v. **Paste (do not staple or pin)** your color photograph in the specified box only, on the Application form. Photograph must not be attested/signed.
- vi. Write your mailing address, pin code and put your signature using blue/black ball point pen only within the specified blocks provided in the Application form.
- vii. Do not staple, pin or fold the Application form. While sending the application form, please ensure that staples or pin are not fixed on envelope.
- viii. A candidate should submit one application only. However, if multiple applications are made for any reason the candidate must write duplicate and the form number of the original Application form in Red Ink on all the envelopes used for additional forms.
- ix. The candidate as well as his/her parent/guardian must sign the certificate in the Application form under Point No. 13. In case, either of the signatures is missing, the application form will be rejected.
- x. The candidate must note down his/her Application form number and keep a photocopy of the same for future reference.
- xi. The application form will not be scrutinized and hence the onus of probing the category of the candidate and eligibility criteria for admission to offered programmes lies solely with the candidate at the time of admission.
- xii. Request for change of test centre and category shall not be entertained.
- xiii. If the admit card is not received seven days prior to the test date, please contact Coordinator, UKSEE-2010, Uttarakhand Technical University, Govt. Polytechnic, Suddhowala, Dehradun.
- xiv. Candidate must preserve the admit card till the admission process is over.

- xv. Notwithstanding any provisions in this brochure, with respect to reservation of seats and any particular matter related to admission, the latest Government Order issued by Government of Uttarakhand as valid on the date of admission, shall be applicable. No claim in this regard by the candidate shall be entertained.
- xvi. The application form completed in all respect should reach Coordinator UKSEE-2010, Post Box No. 202, GPO, Dehradun by 10th May, 2010. Candidates are advised to go through all the points in the checklist before finally mailing/submitting the application.
- xvii. Candidates seeking advantage of reserved categories should not enclose relevant supporting certificates, given at the end of this brochure, with the application form. **The certificates in original will have to be produced at the time of admission along with one set of attested copies.**
- xviii. The result of UKSEE-2010 declared by the Co-ordination Committee shall be final. There is no provision of scrutiny of Answer Books.
- xix. If any document/declaration submitted by the candidate is found to be false at any stage including his/her stay in the institute, his/her admission shall be cancelled and he/she will be liable for prosecution under the law.
- xx. The Co-ordination Committee is competent to take all decisions on matters relating to admission and allotment of the institutes mentioned in this Brochure and may frame rules in this regard. The decision of the Co-ordination Committee shall be final.
- xxi. If a candidate, who is not eligible to appear in the Test, does so, he/she will not have any claim whatsoever for admission.
- xxii. Use of calculator and mobile phones during the examination is strictly prohibited.
- xxiii. Candidates are required to write their Roll Numbers only at the space provided on the question booklet (front page) and the OMR answer sheet. A candidate will be disqualified if he/she writes his/her Roll No. or any other identification mark elsewhere in the OMR answer sheet.
- xxiv. In case of any legal dispute, the jurisdiction will be limited to Lower District Court, Dehradun and High Court, Nainital and will not be subjected to the jurisdiction of any other courts except Supreme Court.
- xxv. The application form, complete in all respects, should reach **The Coordinator, UKSEE-2010, POST BOX No. 202, GPO, DEHRADUN** by speed post on or before the last date i.e. 10th May, 2010. Candidates are advised to go through all the points in checklist before finally submitting the application form. The Co-ordination Committee, **UKSEE-2010**, Uttarakhand Technical University will not be responsible for any delay either on the part of the post office or for any reason whatsoever.
- xxvi. The Cost of Brochure/Application form inclusive of Examination Fee is Rs. 1000/- for General/OBC candidates and Rs. 500.00 for SC/ST candidates with Rs. 30/- additional as post office handling charges.
- xxvii. The information Brochure containing Application form are available for Sale from 15th April,

2010 by paying Rs. 1000.00 for General/OBC candidates and Rs. 500.00 for SC/ST candidates with Rs. 30/- additional as post office handling charges in cash from Post Offices of Dehradun GPO, Roorkee HO, Kotdwar HO, Haldwani HO, Tallital, Pantnagar, Rudrapur, Kichha, Ramnagar, Kashipur, Mussoorie, Hardwar, Rishikesh MDG, Rudraprayag, Doiwala, Vikasnagar, Chakrata, Bajpur, Lansdowne, Gopeshwar, Khatima and outside of Uttarakhand from Post Offices of New Delhi GPO.

3. QUALIFICATIONS AND ELIGIBILITY REQUIREMENTS

- i.* **MCA** : Bachelors Degree in any discipline. In addition the candidate must have mathematics as compulsory subject at 10+2 level.
- ii.* **B.Pharm.** : 10+2 (Intermediate) examination from Uttarakhand Board, Ramnagar, Nainital or equivalent with Physics & Chemistry as compulsory subject & Biology/Mathematics/Biotechnology/Computer Science and English as subjects of study in Intermediate. The candidate will have to appear in the following papers of entrance examination consisting of :
- Compulsory Subjects - Physics & Chemistry
Anyone of optional subject - Biology / Mathematics
- iii.* **BHMCT** : 10+2 (Intermediate) in any discipline from a recognized board with English as one of the subject.
- iv.* **B.Tech. (Lateral Entry)** : 3 years Diploma (Polytechnic) of Uttarakhand Technical Board in any specialization with atleast 60% marks.

or

B.Sc. with Mathematics as one of the subject with atleast 60% marks.

- v.* **B Pharm. (Lateral Entry)** : 3 Years Diploma in Pharmacy from Uttarakhand Technical Board with atleast 60% of marks.

Note : Those appearing in 10+2 or equivalent examination may also appear in entrance examination for consideration of Provisional Admission.

4. DOMICILE REQUIREMENTS

Those candidates who have passed/are appearing in the qualifying examination from/in other states, but have domicile of Uttarakhand are eligible to apply for admission under Uttarakhand quota.

Candidates belonging to UAGE, UASC/UAST/UABC, UAGD, GDSC/GDST/GDBC, OSGE, OSSC/OSST categories as defined at Point No. 6 will be eligible for admission as candidates belonging to Uttarakhand.

5. RESERVATIONS

In Government Funded Institutes, the reservations for Uttarakhand candidates will apply as per Uttarakhand Government rules and for all India seats, the reservations will be applicable as per the Central Government rules.

For courses conducted by University Departments/Government Engineering Colleges/Institutes, the intake will be through UKSEE-2010 only and the seats will be reserved as per norms of Uttarakhand Government. For self-financing institutes the reservation will be as per norms applicable at the time of counselling.

6. CATEGORY

Candidate in General Category and those claiming reservation of any type must indicate their category by writing the code in the box provided in the application form. Subsequent request for change of category shall not be entertained. **Categories must be supported by the relevant certificates to be produced at the time of Admission**, failing which the candidate shall be treated in general category. (No certificates should be enclosed with the application form). **Candidate should note that the OBC certificate should be issued after March 31, 2010.**

The following categories are defined for the purpose of admission :

Category	Category Abbreviation	Category Code	Required Certificate No.
♦ Candidates (i) who have passed qualifying examination from any institute located in Uttarakhand, and (ii) who are not eligible to any reserved category.	UKGE	01	Proof of Qualifying Exam within UK
♦ Candidates (i) who have passed qualifying examination from any institute located in Uttarakhand, and (ii) who are domicile of Uttarakhand, and (iii) who belong to : ♦ Scheduled Caste of Uttarakhand ♦ Scheduled Tribe of Uttarakhand ♦ Other Backward Classes of Uttarakhand	UKSC UKST UKBC	02 03 04	1 1 2
♦ Candidates (i) who are domicile of Uttarakhand, but who have passed qualifying examination from any institute located outside Uttarakhand, and (ii) who are not eligible for any reserved category.	UKGD	11	3
♦ Candidates (i) who are domicile of Uttarakhand, but who have passed qualifying examination from any institute located outside Uttarakhand, and (ii) who belong to : ♦ Scheduled Caste of Uttarakhand ♦ Scheduled Tribe of Uttarakhand ♦ Other Backward Classes of Uttarakhand	GDSC GDST GDBC	12 13 14	1 1 2
♦ Candidates (i) who have passed qualifying examination from any institute located outside Uttarakhand, and who are not domicile of	OSGE	21	None

Category	Category Abbreviation	Category Code	Required Certificate No.
Uttarakhand, and (ii) who are not eligible for any reserved category.			
♦ Candidates (i) who have passed qualifying examination from any institute located outside Uttarakhand, and who are not domicile of Uttarakhand, and (ii) who belong to : ♦ Scheduled Caste ♦ Scheduled Tribe	OSSC OSST	22 23	1 1
♦ Candidates who are not domicile of Uttarkahand and are seeking admission on All India basis.	AIB	24	None

Note :

- ❖ Candidates in their own interest should carefully note the category code.
- ❖ No request for change of category shall be entertained afterwards.

7. SUB CATEGORY (HORIZONTAL RESERVATION)

Candidate who belong to main categories, namely UKGE, UKSC/UKST/UKBC/UKGD, or GDSC/GDST/GDBC, and, if they are one amongst the following sub categories can claim for reservation under that sub category. Candidates claiming reservation in UKFF, UKPH and UKAF sub category should submit the certificate no. 4, 5 & 6 respectively at the time of Admission.

Sub Category	Sub Category Code	Required Certificate No.
♦ Girls Candidates (UKGL)	01	-
♦ Children of Ex-Armed Force (UKAF)	02	4
♦ Dependent wards of Freedom Fighter (UKFF)	03	5
♦ Handicapped as defined in eligibility for handicapped in certificate no. 6 (UKPH)	04	6
♦ NCC	11	Proof of NCC Certificate
♦ J&K Migrants	22	

Note : There are supernumerary seats for J&K migrants as per Central/State Govt. notification.

8. CENTRES FOR ADMISSION TEST

The admission test will be held at various centres listed below, subject to minimum of 100 students opting for the centre. The candidates are advised to give three preference for the test centres. However, Co-ordination Committee reserves the right to allot or cancel any centre. Coordination Committee will make every possible effort to allocate centres to candidates as

per their preference. However guarantee cannot be given in this connection and the decision of the Co-ordination Committee, UKSEE-2010 shall be final.

Centres for Written Test

Sl. No.	Place	Code
1.	Dwarahat	01
2.	Dehradun	02
3.	Haldwani	03
4.	Srinagar	04
5.	Kotdwar	05
6.	Pithoragarh	06
7.	Roorkee	07
8.	Rudrapur	08
9.	Uttarkashi	09
10.	Delhi	10

9. ADMIT CARD

The Admit Card bearing information like Roll number and Address of Examination Centre for the UKSEE-2010 will be sent to the candidates by Registered/Speed Post at the address given by him/her on the application form. All candidates should normally receive the Admit Card by May 20, 2010. If any candidate fails to receive the Admit Card by May 20, 2010, he/she should inform either through e-mail (exams.utu@gmail.com) giving his/her details as filled in the form (candidates are advised to keep a photocopy of the main application form for ready reference) or contact on given mobile phone.

Candidate can receive the admit card from the examination centre on producing the xerox copy of application form alongwith passport size photo and proof of date of birth/high school certificate. The fee of duplicate admit card will be Rs. 50/- in cash. It will be also possible that admit card can be downloaded from website www.uktech.in by filling date of birth and name.

A plea that the candidate failed to receive the information for appearing at the Written Test will not be accepted as a ground for the refund of fee or any other redressal. The “**Coordinator, UKSEE-2010**”, may withdraw the permission granted by mistake to a candidate who is not eligible to appear in the Written Test even though an Admit Card has been issued and produced by the candidate before the Centre Superintendent.

A candidate will not be allowed to change the centre of his/her test under any circumstances.

10. MERIT LIST PROCEDURE

Separate Merit List will be prepared for eligible candidates belonging to various categories on the basis of the marks obtained in the written test. In case of candidates securing the equal marks the relative merit shall be decided on the basis of date of birth, with person born earlier getting higher merit.

Eligibility for Direct Admission (Lateral Entry) to Second Year in Private Institutions under Vacant Seats after Counselling of UKSEE-2010

The vacant seats in B.Tech./B.Pharm. course after UKSEE-2010 counselling for lateral entry (second year) shall be filled at institute level, strictly on the basis of merit of the eligible candidates who have minimum qualification required to appear in UKSEE-2010 for direct admission in second year. Institute shall ensure the filling of these seats by inviting the applications through advertisement in atleast two leading newspapers of state and institute website, and give atleast one week time to submit the applications. Counselling for these seats shall be done at Institute level in presence of University and Government nominees.

11. SCHEME OF WRITTEN TEST

11.1 UKSEE- 2010 will be conducted for eight papers with objective type questions. The candidates are required to opt papers and subjects for appearing in the entrance examination as mentioned in clause 11.4

11.2 Scoring and Negative Marking

- (i) All objective type questions (four options with single correct answer) would carry one mark for each correct answer.
- (ii) More than one answer indicated against a question will be deemed as incorrect response.
- (iii) There will be **no negative marking** in objective type question papers. However, a record of incorrect answers given by a candidate will be kept separately. In case two or more candidates secure same total marks, inter-se-merit of such candidates shall be first determined by the number of incorrect answers given by the candidate.
- (iv) All objective type questions are required to be answered on specially designed OMR answer sheets.
- (v) Answers are to be marked using ball point pen (Black/Blue) only. For the purpose of evaluation, Test Booklet Code written by the candidate in the OMR answer sheet will be accepted as final.

11.3 Papers and Subjects in the Entrance Examination

Paper	Subjects	Number of Questions	Marks
Paper 1	Physics and Chemistry	150 objective type questions with equal weightage to Physics and Chemistry	150
Paper 2	Mathematics	75 objective type questions	75
Paper 3	Biology	75 objective type questions with equal weightage to Botany & Zoology	75
Paper 4	Aptitude Test for General Awareness (BHMCT)	75 objective type questions	75

Paper	Subjects	Number of Questions	Marks
Paper 5	Aptitude Test for MCA	100 objective questions	100
Paper 6	Aptitude Test for Engg. Diploma Holders (Lateral Entry)	75 objective type questions	75
Paper 7	Aptitude Test for Pharmacy Diploma Holders (Lateral Entry)	75 objective type questions	75
Paper 8	Aptitude test for B.Sc. Graduates (Lateral Entry)	75 objective type questions	75

11.4 Papers to be Opted For Different Courses

Courses	Papers
B.Pharm.	Paper 1; and Paper 2 or Paper 3
BHMCT	Paper 4
MCA	Paper 5
Lateral Entry : B.Tech. 2 nd year (for Engg. Diploma Holders) B. Pharm 2 nd year (for Pharmacy Diploma Holders) B. Tech. 2 nd year (for B.Sc. Graduates)	Paper 6 Paper 7 Paper 8

12. SCHEDULE OF EXAMINATION

Date of Examination	Paper Code	Subjects	Timing	Total Period
First Shift 23 rd May, 2010 (Morning) Sunday	Paper 5	Aptitude test for MCA	8.00 AM to 10.30 PM	2 Hours 30 Minutes
	Paper 1	Physics & Chemistry		
Second Shift 23 rd May, 2010 (Evening) Sunday	Paper 2	Mathematics	2.30 PM to 4.00 PM	1 Hour 30 Minutes
	Paper 3	Biology (Botany & Zoology)		
	Paper 4	Aptitude Test for General Awareness (BHMCT)		
	Paper 6	Aptitude Test for Diploma Holder in		
	Paper 7	Engg/Diploma Holders in Pharmacy/		
	Paper 8	Pharmacy/B.Sc. Graduates.		

13. SYLLABUS

The Syllabus for each question papers for the UKSEE-2010 is given at Appendix-A.

14. EVALUATION AND DECLARATION OF RESULT

- 14.1 The results of UKSEE-2010 alongwith answer keys will be declared on or before 2nd week of June 2010.
- 14.2 Based on performance of candidates in UKSEE-2010, separate merit list will be prepared for each course. Merit position, score-card with total marks, marks obtained in each subject and answer keys shall be available on website **www.uktech.in** after the declaration of result.
- 14.3 In case two or more candidates secure equal marks, inter-se-merit of such candidates shall be determined as follows :
- (a) Firstly, by the number of incorrect answer given. A candidate giving lesser number of incorrect answers will be placed at higher merit.
 - (b) Secondly
 - B. Pharm. : By marks obtained in Paper 1 and then by age.
 - BHMCT/MCA/Lateral entry : By age only
 - Candidate with higher age will be placed at higher merit.
- 14.4 The cut-off percentage of marks (if any) in UKSEE-2010 shall be deided by the admission board.
- 14.5 Candidates are requested to be attentive on website schedule since newspapers advertisement matter will be to see website only. Post office service is not guarnteed since delay is not in any body's hand. Counselling will be made on available seats on the day of counselling. Candidate will be responsible for collecting information from website. University will not own responsibility of information through other then website.

15. SYLLABI FOR UKSEE-2010 PAPER-1 (PHYSICS & CHEMISTRY)

PHYSICS

Measurement : Dimensional analysis and error estimation, dimension compatibility and significant figures.

Motion in one dimension : Average velocity, instantaneous velocity, one dimensional motion with constant accelerations, freely falling bodies.

Laws of Motion : Force and inertia, Newton's laws of motion and their significance.

Motion in two dimensions : Projectile motion, uniform circular motion, tangential and radial acceleration in curve-linear motion, relative motion and relative acceleration.

Work, Power and Energy : Work done by a constant and variable forces, kinetic and potential energy, power, conservative and non conservative forces, conservation of energy, gravitational energy, work energy theorem, potential energy stored in a spring.

Linear Momentum & Collisions : Linear momentum and impulse, conservation of linear momentum for two particle system, collisions, collision in one dimension, collision in two dimension, rocket propulsion.

Rotation of a rigid body about a fixed axis : Angular velocity and angular acceleration, rotational kinematics, rotational motion with constant angular acceleration relationship between angular and linear quantities, rotational energy, moment of inertia for a ring, rod, spherical shell, sphere and plane lamina, torque and angular acceleration, work and energy in rotational motion, rolling motion of a solid sphere and cylinder.

Gravitation : Gravitational field, Kepler's laws and motion of planets, planetary and satellite motion, geostationary satellite.

Oscillatory motion : Harmonic motion, oscillatory motion of mass attached to a spring, kinetic and potential energy, Time Period of a simple pendulum, comparing simple and harmonic motion with uniform circular motion, forced oscillations, damped oscillation and resonance.

Mechanics of solids and fluids : States of matter young's modulus, bulk modulus, shear modulus of rigidity, variations of pressure with depth, Buoyant forces and Archimedes Principle, Pascal's law, Bernoulli's theorem and its application, surface energy, surface tension, angle of contact, capillary rise, coefficient of viscosity, viscous force, terminal velocity, Stoke's law, stream line motion, Reynold's numbers.

Heat and thermodynamics : First law of thermodynamics, specify heat of an ideal gas at constant volume and constant pressure, relation between them, thermodynamics process (reversible, irreversible, isothermal, adiabatic), second law of thermodynamics, concept of entropy and concept of absolute scale, efficiency of a Carnot engine, thermal conductivity, Newton's law of cooling, black body radiation, Wien's displacement law, Stefan's law.

Wave : Wave motion, phase, amplitude and velocity of wave, newton's formula for longitudinal waves, propagation of sound waves in air, effect of temperature and pressure on velocity of sound, Laplace's correction, Principle of superposition, formation of standing waves, standing waves in strings and pipes, beats, Doppler's effect.

Electrostatics : Coulomb's law, electric field and potential due to point charge, dipole and its field along the axis and perpendicular to axis, electric flux, Gauss's theorem and its applications to find the field due to infinite sheet of charge, and inside the hollow conducting sphere, capacitance, parallel plate capacitor with air and dielectric medium between the Plates, series and parallel combination of capacitors, energy of a capacitor, displacement currents.

Current Electricity : Concept of free and bound electrons, drift velocity and mobility, electric current, Ohm's law, resistivity, conductivity, temperature dependency of resistance, resistance in series and parallel combination, Kirchoff's law and their application to network of resistances, principle of potentiometer, effect of temperature on resistance and its application.

Magnetic Effect of Current : Magnetic field due to current, Bio-Savart's law, magnetic field due to solenoid, motion of charge in a magnetic field, force on a current carrying conductors and torque on current loop in a magnetic field, magnetic flux, forces between two parallel current carrying conductors, moving coil galvanometer and its conversion into ammeter and voltmeter.

Magnetism in Matter : The magnetization of substance due to orbital and spin motions of electrons, magnetic moment of atoms, diamagnetism, paramagnetism, ferromagnetism, earth's magnetic field and its components and their measurement.

Electromagnetic Induction : Induced e.m.f., Faraday's laws, Lenz's law, electromagnetic induction, self and mutual induction, B-H curve, hysteresis loss and its importance, eddy currents.

Ray Optics and optical instruments : Sources of light, luminous intensity, luminous flux, illuminance, photometry, wave nature of light, Huygen's theory for propagation of light and rectilinear propagation of light, reflection of light, total internal reflection, reflection and refraction at spherical surfaces, focal length of a combination of lenses, spherical and chromatic aberration and their removal, reflection and dispersion of light due to a prism, simple and compound microscope, reflecting and refracting telescope, magnifying power and resolving power.

Wave Optics : Coherent and incoherent sources of light, interference, young's double slit experiment diffraction due to a single slit, linearly polarized light, Polaroid.

Modern Physics : Photo-electric equation, matter waves, quantization, Planck's hypothesis, Bohr's model of hydrogen atom and its spectra, ionisation potential, Rydberg constant, solar spectrum and Fraunhofer lines, fluorescence and phosphorescence, X-Rays and their productions, characteristics and continuous spectra.

Nuclear Instability, radioactive decay laws, Emission of α , β , γ rays, Mass - defect, Mass Energy equivalence, Nuclear Fission Nuclear Reactors, Nuclear Fusion.

Classification of conductors, Insulators and semiconductors on the basis of energy bands in solids, PN junction, PN Diode, junction Transistors, Transistors as an amplifier and Oscillators.

Principles of Logic Gates (AND, OR and NOT) Analog Vs Digital communication, Difference between Radio and television, Signal propagation, Principle of LASER and MASER, Population Inversion, Spontaneous and stimulated Emission.

CHEMISTRY

Atomic Structure : Bohr's concept. Quantum numbers, Electronic configuration, molecular orbital theory for homonuclear molecules, Pauli's exclusion principle.

Chemical Bonding : Electrovalency, co-valency, hybridization involving s,p and d orbitals hydrogen bonding.

Redox Reactions : Oxidation number, oxidising and reducing agents, balancing of equations.

Chemical Equilibrium and Kinetics : Equilibrium constant (for gaseous system only) Le Chatelier's principle, ionic equilibrium, Ostwald's dilution law, hydrolysis, pH and buffer solution, solubility product, common-ion effect, rate constant and first order reaction.

Acid-Base Concepts : Bronsted Lowry & Lewis.

Electrochemistry : Electrode potential and electro-chemical series.

Catalysis : Types and applications.

Colloids : Types and preparation, Brownian movement, Tyndall effect, coagulation and peptization.

Colligative Properties of Solution : Lowering of vapour pressure, Osmotic pressure, depression of freezing point elevation of boiling point, determination of molecular weight.

Periodic Table : Classification of elements on the basis of electronic configuration, properties of sp and d block elements, ionization potential, electronegativity & electron affinity.

Preparation and Properties of the following : Hydrogen peroxide, copper sulphate, silver nitrate, plaster of paris, borax, Mohr's salt, alums, white and red lead, microcosmic salt and bleaching powder, sodium thiosulphate.

Thermochemistry : Exothermic & endothermic reactions Heat of reaction, Heat of combustion & formation, neutralisation, Hess's law.

General Organic Chemistry : Shape of organic compounds, Inductive effect, mesomeric effect, electrophiles & nucleophiles, Reaction intermediates : carboniumion, carbanions & free radical, Types of organic reaction, Cannizzaro Friedel Craft, Perkin, Aldol condensation.

Isomerism : Structural, Geometrical & Optical

IUPAC : Nomenclature of simple organic compounds.

Polymers : Addition & condensation polymers

Carbohydrates : Monosaccharides

Preparation and Properties of the Followings : Hydrocarbons, monohydric alcohols, aldehydes, ketones, monocarboxylic acids, primary amines, benzene, nitrobenzene, aniline, phenol, benzaldehyde, benzoic acid, Grignard Reagent.

Solid State : Structure of simple ionic compounds, Crystal imperfections (point defects only), Born-Haber cycle.

Petroleum : Important industrial fractions, cracking, octane number, anti knocking compounds.

PAPER - 2 (MATHEMATICS)

Algebra : Sets relations & functions, De-Morgan's Law, Mapping Inverse relations, Equivalence relations, Peano's axioms, Definition of rationals and integrals through equivalence relation, Indices and surds, solutions of simultaneous and quadratic equations, A.P., G.P. and H.P., Special sums i.e. Σn^2 and Σn^3 ($n \Sigma n$), Partial fraction, Binomial theorem for any index, exponential series, Logarithm and Logarithmic series. Determinants and their use in solving simultaneous linear equations, Matrices, Algebra of Matrices, Inverse of a Matrix, Use of Matrix for solving equations.

Probability : Definition, Dependent and independent events, Numerical problem on addition and multiplication, theorem of probability.

Trigonometry : Identities, Trigonometric equations, properties of triangles, solution of triangles, heights and distances, Inverse function, Complex numbers and their properties, Cube roots of unity, De-Moivre's theorem.

Co-ordinate Geometry : Pair of straight lines, Circles, General equation of second degree, parabola, ellipse and hyperbola, tracing of conics.

Calculus : Limits & continuity of functions, Differentiation of function of function, tangents & normal, Simple examples of Maxima, Indeterminate forms, Integration of function by parts, by substitution and by partial fraction, definite integral, application to volumes and surfaces of frustums of sphere, cone and cylinder. Differential equations of first order and of first degree.

Vectors : Algebra of vectors, scalar and vector products of two and three vectors and their applications.

Dynamics: Velocity, composition of velocity, relative velocity, acceleration, composition of accelerations, Motion under gravity, Projectiles, Laws of motion, Principles of conservation of momentum and energy, direct impact of smooth bodies.

Statics : Composition of coplanar, concurrent and parallel forces moments and couples resultant of set of coplanar forces and condition of equilibrium, determination of centroid in simple cases, Problems involving friction.

PAPER - 3 (BIOLOGY)

ZOOLOGY

Origin of Life: Oparin's theory, Miller's Experiment, Viruses - structure, properties, distribution, classification and pathogenesis (Eg. AIDS, CANCER), Viroids & Prions, Biotic balance.

Organic Evolution : Relationship among organisms and Evidences of organic Evolution - Principles of Evolution - Lamarkism, Darwinism and Speciation.

Mechanism of Organic Evolution : Variations - Definition, causes and types, Mutations (Principles of Hugo de'veries), Role of mutations in speciation. Evolution through ages and human evolution.

Human Genetics and Eugenics : Human hereditary traits, study of Twins, A.B.O. blood groups and their inheritance, Rh-factor, Sex determination. Chromosomal aberrations, Important human syndromes, Sex linked characters and their inheritance, Applied Genetics - eugenics, eugenics, euphenics & I.Q. Test.

Applied Biology : Wild life of India - Endangered species : Biosphere Reserves, National Parks

and sanctuaries, Project Tiger, Conservation of wild life, Bio-energy, Poultry, Fisheries (edible fishes), Human Population, Population explosion, problems & control. Test-Tube babies, & Amniocentesis, Application of Biotechnology in human welfare. Human Aging.

Mammalian Anatomy (Eg. Rabbit) : Reproductive system (excluding embryonic development) Osteology, structure and organization of different systems.

Animal Physiology :

- (A) *Animal Nutrition* : Food, Balanced diet, Nutritional imbalances and deficiency diseases, Digestion, Absorption, Assimilation of food, (comparison between human and Rabbit).
- (B) *Animal Excretion and Osmoregulation* : Chemical nature of excretory products in various animals, Physiology of excretion, Function of liver and Kidney (Homeostatic regulatory functions of kidneys), Formation of urine, Osmoregulation by kidneys.
- (C) *Respiratory System* : Exchange and transport of gases (O_2 and CO_2) factors affecting O_2 and CO_2 transport, Cellular respiration, different lung volumes, breathing and sound production.
- (D) *Nervous System* : Central, autonomic and peripheral nervous system, Receptors, Effectors, Reflex-action. Nature and conduction of Nerve-impulses, Synapse, Sense organs - Structure & working of Eye & Ear, Biochemistry of vision and taste buds
- (E) *Endocrine System* : Different endocrine glands and Hormones - definition, types, characteristics and their functions, (in relation to human beings), Hormonal disorders and pheromones.
- (F) *Circulatory System* : Circulation of body fluids - Blood and lymph, Open and closed vascular systems, Structure and working physiology of Heart, Comparison between arteries and veins, Lymphatic system.
- (G) *Animal Diversity* : Classification of Animal kingdom (Based on Storer & Eusinger), Characteristic feature of different phyla and classes with examples.

Detailed studies of followings :

- (a) Protozoa
 - (i) Amoeba- Habit & Habitat, structure, locomotion, reproduction, Osmoregulation, Parasitic amoebae-Entamoeba histolytica and Entamoeba gengivalis, structure, diseases caused by them and their control measures.
 - (ii) Plasmodium vivax-life-cycle, malaria therapy and control.
 - (iii) Protozoan and diseases
- (b) Porifera: A simple sponge (Leucosolenia) : Detailed study of structure & physiology, Sponge industry.
- (c) Coelenterata : Hydra - Habit and Habitat, morphology, tissue differentiation in relation to physiological division of labour and regeneration.
- (d) Aschelminthes : Ascaris - morphology, life-cycle, therapy and control.
- (e) Annelida : Pheretima posthuma - Bionomics and economic importance.

(f) Arthropoda : (Periplanata) : Structure - external and internal.

Comparison between Periplanata and Blatta.

(i) Housefly & Mosquito : structure and life - cycle.

(ii) Economic importance of insets & their control.

BOTANY

Plant Cell : Structure & functions electron microscopic structure mitochondria, Plastids centrosomes. Lysosomes, microsomes, endoplasmic reticulum, Nuclear, Golgibodes, D.N.A. & R.N.A. cytoplasm, membranes and cell wall.

Protoplasm : Structure, components physical and chemical properties.

Cell division (formation) - free cell formation, Amitosis & Meosis, Duplication of D.N.A.

Ecology : Ecological factors (atmospheric, edaphic, climatic, geological & biotic factors).

Ecosystem : Structure, components of ecosystem eg. Water soluble minerals and gases, producers consumers, decomposers, Pond and forest ecosystem.

Atmospheric pollution-causes and control, Types of pollution - Detergents, chemicals automobile exhaust, Radioactive matter, Smog, sound, Pesticides.

Genetics : Mendalism, Mendals experiment and law of inheritance.

Modern Classification of plant kingdom - (according to ostwald & Tipppo) (outline).

Seeds in angiospermic plants : description of development of angiospermic plants (life history of angiospermic plants).

Fruits : Dispersal of fruits and seeds

Cell differentiation Plant Tissue : difference between dicot and Monocot stem. Secondary growth of stem and root. Anatomy of hydrophytes, Xeophytes & Mesophytes.

Important phylums :

Algae : Habitat, general characters & uses, description of ulothrix & spirogyra.

Bacteria : structure - types of nutrition, reproduction and economic importance.

Fungi : structure description of Rhizopus and yeast and their economic importance, Fermentation.

Broyophyta : structure and economic importance, description of funaria (Moss)

Pteridophyta : general structures of pteridophytes description of fern (Droypteris)

General study of gymnosperms and life history of cycas.

Classification of angiospermn,

Description of families - identification and economic importance

Cruciferae, Malvaceae, Leguminosae, compositeae, cucurbitaceae.

Soil :

Absorption of water through root hairs osmosis, Translocation and Root pressure.

Nitrogen cycle.

Special modes of nutrition in plants (Autotrophic, heterotrophic, Parasites, saprophytes, Symbionts insectivorous and their ecological relation.

Photosynthesis : Chloroplast, light, chlorophyll and Carbon dioxide, Mechanism of photosynthesis formation of A.T.P. and their functions and importance of photosynthesis.

Transpiration : factors and importance, Mechanism of opening and closing of stomata.

Respiration : aerobic, anaerobic respiration, mechanism of respiration (Glycolysis, Krebs' cycle, E.T.S.)

Growth & movement : definition of growth, Region of growth & their measurements, types of movements in plants, Growth hormone.

PAPER - 4 (APTITUDE TEST FOR GENERAL AWARENESS (BHMCT))

(A) Reasoning & Logical Deduction :

- ◆ Geometrical designs & Identification
- ◆ Selection of related letters / words / numbers / figures
- ◆ Identification of odd thing / item out from a group
- ◆ Completion of numerical series based on the pattern / logic
- ◆ Fill in the blanks of the series based on the numerical pattern and logic of the series.
- ◆ Syllogisms (logic based questions), Identification of logic & selection of correct answers based on the logic.

(B) Numerical Ability & Scientific Aptitude :

- ◆ Arithmetical questions up to 10th standard
Calculation of fraction, percentages, square roots etc.
- ◆ Profit & Loss and Interest calculations
- ◆ Data / Table analysis, Graph & Bar Diagram and Pie Chart analysis
- ◆ Questions related to common use of science (Physics & Chemistry)
- ◆ Health & Nutrition

(C) General Knowledge :

- ◆ Current affairs / Events (Political, Social, Cultural & Economic)
- ◆ Historical events
- ◆ Geography including Tourist Places / Spots
- ◆ Current affairs relating to Business & Trade
- ◆ Countries & Currencies

- ◆ Latest Who's Who?
- ◆ Sports & Games

(D) English Language :

- ◆ Word Meanings
- ◆ Antonyms & Synonyms
- ◆ Meaning of Phrases & Idioms
- ◆ Fill in the blanks
- ◆ Complete / Improvement of the sentences with correct use of Pronouns, Verbs, Adverbs & Adjectives
- ◆ Reading comprehension's followed by questions

PAPER - 5 (APTITUDE TEST FOR MCA)

1. Mathematics

Modern Algebra : Idempotent law, identities, complementary laws, Demorgan's theorem, mapping, inverse relation, equivalence relation, Pano's Axiom, definition of rational numbers and integers through equivalence relation.

Algebra : Surds, solution of simultaneous and quadratic equations, arithmetic, geometric and harmonic progression, Binomial theorem for any index, logarithms, exponential and logarithmic series, determinants.

Probability : Definition, dependent and independent events, numerical problems on addition and multiplication of probability, theorems of probability.

Trigonometry : Simple identities, trigonometric equations, properties of triangles, use of mathematical tables, solution of triangles, height and distance, inverse functions, DeMoiver's theorem.

Co-Ordinate Geometry : Co-Ordinate geometry of the straight lines, pair of straight lines, circle, parabola, ellipse and hyperbola and their properties.

Calculus : Differentiation of function of functions, tangents and normal, simple example of maxima of minima, limits of functions, integration of function (by parts, by substitution and by partial fraction), definite integral (application to volumes and surfaces of frustums of sphere, cone and cylinder).

Vectors : Position vector, addition and subtraction of vectors, scalar and vector products and their applications.

Dynamics : Velocity, composition of velocity, relative velocity, acceleration, composition of acceleration, motion under gravity, projectiles, laws of motions, principles of conservation of momentum and energy, direct impact of smooth bodies, pulleys.

Statics : Composition of co-planar, concurrent and parallel forces, moments and couples, resultant of set of coplanar forces and conditions of equilibrium, determination of Centroides in simple case, problems involving friction.

(ii) **Statistics** : Theory of probability, Mean, Median, Mode, Dispersion and Standard Deviation.

(iii) **Logical Ability** : Questions to test analytical and reasoning capability of candidates.

PAPER- 6 (APTITUDE TEST FOR DIPLOMA HOLDERS IN ENGINEERING)

Engineering Mechanics, Engineering Graphics, Basic Electrical Engg., Basic Electronics Engg., Elements of computer science, Elementary Biology, Basic Workshop Practice and Physics/Chemistry/Maths of Diploma standard.

PAPER-7 (APTITUDE TEST FOR DIPLOMA HOLDERS IN PHARMACY)

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|--|--|
| 1. Pharmaceutics-I | 7. Pharmaceutics-II |
| 2. Pharmaceutical Chemistry-I | 8. Pharmaceutical Chemistry-II |
| 3. Pharmacognosy | 9. Pharmacology and Toxicology |
| 4. Biochemistry and Clinical Pathology | 10. Pharmaceutical Jurisprudence |
| 5. Human Anatomy and Physiology | 11. Drug Store and Business management |
| 7. Health Education & Community Pharmacy | 12. Hospital and Clinical Pharmacy |

PAPER- 8 (APTITUDE TEST FOR B.SC.GRADUATE IN ENGINEERING)

Linear Algebra : Matrix Algebra, Systems of linear equations, Eigen values and eigen vectors.

Calculus : Mean value theorems, Theorems of integral calculus, Evaluation of definite and improper integrals, Partial Derivations, Maxima and minima, Multiple integrals, Fourier series. Vector identities, Directional derivatives, Line, Surface and Volume integrals, Stokes, Gauss and Green's theorems.

Differential equations : First order equation (linear and nonlinear), Higher order linear differential equations with constant coefficients, Method of variation of parameters, Cauchy's and Euler's equations, Initial and boundary value problems, Linear partial differential equations with constant coefficients of 2nd order and their classifications and variable separable method.

Complex variables : Analytic functions, Cauchy's integral theorem and integral formula, Taylor's and Laurent's series, Residue theorem, solution integrals.

Probability and Statistics : Sampling theorems, Conditional probability, Mean, Median, mode and standard deviation, Random variables. Discrete and continuous distributions, Poisson, Normal and Binomial distribution, Correlation and regression analysis.

Fourier Series : Periodic functions, Trigonometric series, Fourier series of period 2π , Euler's formulae, Functions having arbitrary period, Change of interval, Even and odd functions, Half range sine and cosine series.

Transform Theory : Laplace transform, Laplace transform of derivatives and integrals, Inverse Laplace transform, Laplace transform of periodic functions, Convolution theorem, Application to solve simple linear and simultaneous differential equations.

Fourier integral, Fourier complex transform, Fourier sine and cosine transforms and applications to simple heat transfer equations.

Z-transform and its application to solve difference equations.

16. ENGINEERING COURSES AICTE APPROVED

Appendix-B

Sl. No.	Name of Institution	Govt./Pvt.	Branch Name	Intake*
1.	G.B. Pant Engineering College, Pauri	Govt.	Civil Engg. Computer Science & Engineering Electrical Engineering Electronics & Comm Engineering Mechanical Engineering Production Engineering	30 60 60 60 60 15
2.	Kumaon Engineering College, Dwarahat	Govt.	Bio-Chem Engg Computer Science & Engineering Electronics & Comm Engineering Mechanical Engineering Civil Engineering Electrical Engineering	30 60 60 30 30 30
3.	Dehradun Institute of Technology, Dehradun	Pvt.	Applied Elec. & Instrumentation Computer Science & Engineering Electrical Engineering Electronics & Comm Engineering Industrial & Production Engg. Information Technology Mechanical Engineering Civil Engineering	60 120 60 120 60 120 120 60
4.	Birla Institute of App. Sc., Bhimtal, Nainital	Pvt.	Computer Science & Engineering Electronics & Comm Engineering	30 30
5.	Devbhomi Institute of Technology, Dehradun	Pvt.	Computer Science & Engineering Electronics & Comm. Engg. Information Technology Mechanical Engineering Electrical & Electronics Engg.	120 120 60 60 60
6.	College of Engineering Roorkee, Roorkee	Pvt.	Civil Engineering Computer Science & Engineering Electrical & Electronics Engg. Electronics & Telecomm Engg. Information Technology Mechanical Engineering Applied Electronics & Instrumentation Engg.	60 120 120 120 90 120 60
7.	Roorkee Institute of Technology, Roorkee	Pvt.	Computer Science & Engineering Electrical & Electronics Engg. Electronics & Comm. Engg. Information Technology Mechanical Engineering	90 60 60 60 90

ENGINEERING COURSES AICTE APPROVED

Sl. No.	Name of Institution	Govt./Pvt.	Branch Name	Intake*
8.	Uttaranchal Institute of Technology, Dehradun	Pvt.	Computer Science & Engineering Electrical & Electronics Engg. Electronics & Comm. Engg. Information Technology Mechanical Engineering	120 60 120 60 60
9.	Tula's Institute, Dehradun	Pvt.	Computer Science & Engineering Electrical & Electronics Engg. Electronics & Comm. Engg. Mechanical Engineering Information Technology	120 60 60 120 60
10.	Amarpali Institute of Technology & Science, Haldwani	Pvt.	Computer Science & Engineering Electronics & Comm. Engg. Electrical & Electronics Engg. E& I Engg. Information Technology Mechanical Engg.	60 60 60 60 60 60
11.	Shivalik College of Engineering Sihiniwala, P.O. Sherpur, Shimla Road, Dehradun	Pvt.	Computer Science & Engineering Electronics & Comm Engineering Mechanical Engineering Information Technology Electrical & Electronics Engg.	60 60 60 60 60
12.	Quantum School of Technology, 22 KM, Mile Stone, NH-73, Village Kajibans, Dehradun-Roorkee Highway-Roorkee UK.	Pvt.	Computer Science & Engineering Electronics & Comm Engineering Mechanical Engineering Information Technology	90 60 60 60
13.	Devbhoomi Institute of Technology for Women Navgaon, Marduwala, Dehradun	Pvt.	Information Technology Electrical & Electronics Engg. Electronics & Comm Engg. Computer Science & Engineering Applied Elec. & Instrumentation	60 60 60 60 60
14.	GRD Insitute of Management & Technnology, 214, Rajpur Road, Dehradun.	Pvt.	Information Technology Electronics & Comm Engineering Computer Science & Engineering Applied Elec. & Instrumentation	60 60 60 60
15.	Doon College of Engg. & Technology Thakurpur, Premnagar, D.Dun.	Pvt.	Computer Science & Engineering Electronics & Comm Engineering Automobile Engineering Chemical Engineering	60 60 60 60

ENGINEERING COURSES AICTE APPROVED

Sl. No.	Name of Institution	Govt./Pvt.	Branch Name	Intake*
16.	GSBA Engineering, Pharmacy & Management Institute, Roorkee	Pvt.	Information Technology Electronics & Comm Engineering Computer Science & Engineering Industrial Engg. & Management	60 60 60 60
17.	J.B. Institute of Technology, Dehradun	Pvt.	Computer Science & Engineering Electronics & Comm Engineering Information Technology Mechanical Engineering	60 60 60 60
18.	Beehive College of Engineering & Technology, Central Hopetown, Selakui, Dehradun	Pvt.	Computer Science & Engineering Electrical & Electronics Engg. Information Technology Mechanical Engineering	60 60 60 60
19.	Drona's College of Management & Technical Education, Village Kalagaon, Shastradhara Road, Dehradun	Pvt.	Computer Science & Engineering Electronics & Comm Engineering Information Technology Electrical & Electronics Engg.	60 60 60 60
20.	Harmes College of Engineering Roorkee (Guru Nanak Education Trust)	Pvt.	Computer Science & Engineering Civil Electronics & Comm. Engg. Mechanical Engineering	60 60 60 60
21.	Doon Institute of Engineering & Technology Rishikesh, Dehradun	Pvt.	Computer Science & Engineering Electronics & Comm Engineering Information Technology Electrical & Electronics Engg	60 60 60 60
22.	Phonics School of Engineering College, Roorkee (Seth Bimal Prasad Jain Education Trust)	Pvt.	Computer Science & Engineering Electronics & Comm Engineering Mechanical Engineering Electrical & Electronics Engg.	60 60 60 60
23.	"Techwords" Wali Gramodyogy Vikas Sansthan, Grou-of Institutions Canal Road, Manglore, Roorkee	Pvt.	Computer Science & Engineering Electronics & Comm. Engg. Mechanical Engineering Information Technology	60 60 60 60
24.	Surajmal Laxmi Devi Sawarthia Education Trust's Group of Institutions Sorolly Kichh Distt US Nagar	Pvt.	Electrical & Electronics Engg. Electronics & Comm. Engg. Computer Science & Engineering Information Technology	60 60 60 60

ENGINEERING COURSES AICTE APPROVAL

Sl. No.	Name of Institution	Govt./Pvt.	Branch Name	Intake*
25.	Institute of Technology Roorkee (ITR) Roorkee	Pvt.	Computer Science & Engineering Electronics & Comm. Engg. Mechanical Engineering Information Technology Electrical & Electronics	60 60 60 60 60
26.	College and Technology, (G.B. Pant University of Agriculture & Technology) Pantnagar	Govt.	Agriculture Engineering Civil Engineering Computer Engineering Electrical Engineering Electronics and Comm. Engg. Mechanical Engineering Production Engineering Information Technology	51 60 75 60 75 60 45 45
27.	College of Basic Science & Humanities, (G.B. Pant University of Agriculture & Technology) Pantnagar	Govt.	Biotech	40

* 10% seats of total intake will be available for admission in B.Tech. 2nd year through lateral entry. 5% of Diploma Holders & 5% for B.Sc. In case B.Sc. candidates are not available, seats will be filled by Diploma Holders. Reservation applicable as per state government notification.

BHMCT COURSE

Sl. No.	Name of Institution	Govt./Pvt.	Branch Name	Intake*
1.	Amrapali Institute of Hotel Management, Haldwani, Nainital	Pvt.	BHMCT	60
2.	Govt. Institute of Hotel Management & Catering Technology, Dehradun	Govt.	BHMCT	60
3.	Govt. Institute of Hotel Management, Almora	Govt.	BHMCT	60
4.	Kukreja Institute of Hotel Management, Dehradun	Pvt.	BHMCT	60
5.	Ram Institute of Hotel Management, Dehradun	Pvt.	BHMCT	90

B. PHARM AND M.PHARM COURSE

Sl. No.	Name of Institution	Govt./Pvt.	Branch Name	Intake*
1.	Dehradun Institute of Technology, Dehradun	Pvt.	B. Pharma	60
2.	GRD Institute of Management & Technology, Dehradun	Pvt.	B. Pharma	60
3.	Roorkee College of Pharmacy, Roorkee	Pvt.	B. Pharma	60
4.	S. Bhagwan Singh Post Graduate Institute of Biomedical Sciences and Research, Balawala, Dehradun.	Pvt.	B. Pharma	60
5.	Shri Guru Ram Rai Academy of Pharmaceutical Sciences, Dehradun	Pvt.	B. Pharma	60
6.	Himalayan Institute of Pharmacy & Research, Dehradun	Pvt.	B. Pharma	60
7.	Sidharta Institute of Pharmacy, Dobachi, Near I.T. Park, Sahastradhara Road, Dehradun.	Pvt.	B. Pharma	60
8.	Devbhomi Institute of Technology, Dehradun	Pvt.	B. Pharma	60
9.	Om Bio-Sciences & Pharma College, Anchayanpur Bharapur, P.O. Bharapur, Hardwar-Roorkee, Haridwar	Pvt.	B. Pharma	60
10.	Gyani Inder Singh Human Development and Education Society Mussoorie Diversion Road, Opp. Malsi Deer Park, Dehradun.	Pvt.	B. Pharma	60
11.	Devsthali Vidyapeeth College of Pharmacy Kachi Khamaria Ialpur Kiccha Road, Rudrapur, US Nagar	Pvt.	B. Pharma	60
12.	Shree Dev Bhoomi Institute of Education Science & Technology Village Mazhon, Post Poundha, Via Premnagar, Dehradun.	Pvt.	B. Pharma	60
13.	Smt. Tararwati Institute of Bio-Medical & Allied Sciences Roorkee 6 th Km. Stone, Roorkee Dehradun Highway, Saliyar, Roorkee.	Pvt.	B. Pharma	60
14.	Global Institute of Pharmaceutical Education and Research Jaspur Road, Kashipur, US Nagar	Pvt.	B. Pharma	60
15.	Kumaon University (Deptt. of Pharmacy) Nainital	Govt.	B. Pharm	30

* 10% seats of total intake will be available for admission in B.Pharm 2nd year through lateral entry. Reservation applicable as per state government notification.

MCA COURSE

Sl. No.	Name of Institution	Govt./Pvt.	Branch Name	Intake*
1.	G.B. Pant Engineering College, Pauri	Govt.	MCA	60
2.	Kumaon Engineering College, Dwarahat	Govt.	MCA	40
3.	Academy of Management Studies, Dehradun	Pvt.	MCA	45
4.	Amarpali Institute of Management & Computer Applications, Haldwani, Nainital	Pvt.	MCA	60
5.	Birla Institute of App. Sc., Nainital	Pvt.	MCA	45
6.	College of Engineering Roorkee, Roorkee	Pvt.	MCA	60
7.	Dehradun Institute of Technology, Dehradun	Pvt.	MCA	120
8.	DAAS College of Management & Technology Village Lavarkha Patti Sakina, Tehsil-Dhanulti, Distt. Tehri Garhwal	Pvt.	MCA	60
9.	Devbhomi Institute of Technology, Dehradun	Pvt.	MCA	60
10.	Institute of Management Studies (IMS), Dehradun	Pvt.	MCA	120
11.	Mahadevi Institute of Technology, Dehradun	Pvt.	MCA	60
12.	Roorkee Institute of Technology, Roorkee	Pvt.	MCA	60
13.	Shri Guru Ram Rai Instt. of Tech. & Sc., Dehradun	Pvt.	MCA	60
14.	Saraswati Instt. of Management & Technology, Rudrapur	Pvt.	MCA	60
15.	Tula's Institute of Technology, Dehradun	Pvt.	MCA	60
16.	Uttaranchal Institute of Management, Dehradun	Pvt.	MCA	60
17.	Surajmal Agrawal Girs's Institute of Management and Technology, US Nagar	Pvt.	MCA	60
18.	Institute of Management Studies, Roorkee	Pvt.	MCA	60
19.	Gramodyogy Vikas Sansthan, Group-Institutions Canal Road Manglore, Roorkee	Pvt.	MCA	60

Note : The number of seats and the number of Institutes / other Universities may increase or decrease at the time of UKSEE-2010 counselling.

17. Format of Certificates for Categories and Sub Categories

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18. CHECK LIST

Before mailing/submitting the OMR application Form the candidates are required to check that :

- The OMR applicaiton form has been filled completely in all respects and declaration made by the candidate and his/her parents (father/mother) is dully signed by them only.
- One unattested passport size black & white photograph (showing portion of the body chest upwards) is pasted on the application form at the prescribed place. Do not get it attested.
- The candidates has put his/her signature with black/blue ball pen within the prescribed box in the application form.
- The candidate has written his/her name and complete mailing address in **capital letters** with blue/black ball pen within the prescribed box in the application form.
- The candidate has noted down the application form number for future correspondene with UKSEE office.
- The category, sub-category, weightage, domicile status, courses, place of examination city etc. as applicable have been claimed and properly filled in the application form and the corresponding circles have been darkened. The category, sub-category, weight-age, domicile status etc. shall not be changed at a later stage under any circumstances.
- All entries on the envelope are complete.
- Only one OMR application form has been kept in the envelop without folding it.
- No certificate/attested copy of certificate is enclosed with the application form.
- Use HB pencil to fill circles in OMR application form. Machine reads only pencil-darkened circles. What you write in the rectangular boxes with black ball pen above the circles is only for your guidance to enable you to fill the correct circles.
- Each candidate should submit only one OMR application form irrespective of number of courses he/she intends to appear.

NOTE :

Application form, incomplete in any respect, shall stand rejected without any information to the candidate. Fill the application form completely and carefully. Note down the application form number. No further correspondence shall be entertained without application Form Number / Roll Number (after receipt of admit card).

ओ.एम.आर. आवेदन पत्र भेजने/जमा करने से पूर्व अभ्यर्थी निम्न बातों की जाँच कर लें कि :-

आवेदन पत्र पूरी तरह भरा गया है तथा घोषणा पत्र अभ्यर्थी तथा उसके पिता/अभिभावक द्वारा हस्ताक्षरित है।

एक अप्रमाणित श्वेत रयाम पासपोर्ट आकार का फोटो (जिसमें सीने के ऊपर का भाग दिख रहा हो) आवेदन पत्र पर निर्धारित खाने में चिपकाया गया है। फोटो को प्रमाणित न करायें।

अभ्यर्थी ने अपने हस्ताक्षर नीले/काले बाल पेन से आवेदन पत्र के निर्धारित खाने में कर दिये हैं।

अभ्यर्थी ने अपना नाम तथा पूरा पता नीले/काले बाल पेन से Capital letters में आवेदन पत्र के निर्धारित खाने में लिख दिया है।

अभ्यर्थी ने भविष्य में UKSEE कार्यालय से पत्राचार हेतु आवेदन पत्र संख्या अपने पास नोट कर ली है।

अभ्यर्थी ने आवेदन पत्र में निर्धारित स्थानों पर श्रेणी, उप श्रेणी, अधिमान, स्थाई निवास आवश्यकतायें, पाठ्यक्रम, परीक्षा स्थान आदि जैसा लागू हो सही-सही भर दिया है तथा सम्बन्धित गोलों को काला कर दिया है। बाद में किसी भी परिस्थिति में मुख्य श्रेणी, उप श्रेणी, अधिमान स्थायी निवास आवश्यकतायें आदि बदली नहीं जायेंगी।

लिफाफे पर सभी प्रविष्टियां कर दी गयी हैं।

एक लिफाफे में केवल एक ओ.एम.आर. आवेदन पत्र बिना मोड़े रखा गया है।

आवेदन पत्र के साथ कोई भी मूल प्रमाण पत्र/अभिप्रमाणित प्रति संलग्न नहीं की गयी है।

ओ.एम.आर. आवेदन पत्र के गोलों को केवल एच.बी. पेंसिल से ही भरे। मशीन केवल पेंसिल से भरे गये गोलों को ही पढ़ती है। गोलों के ऊपर के चौकोर खानों में आप काले बाल पेन से जो लिखेंगे वह केवल गोलों को सही भरने में आपको सहायता हेतु है।

प्रत्येक अभ्यर्थी केवल एक ही आवेदन पत्र जमा करे, चाहे कितने भी पाठ्यक्रमों में वह बैठना चाह रहा हो।

नोट :-

अपूर्ण आवेदन पत्र बिना किसी पूर्व सूचना के अस्वीकार कर दिया जायेगा। आवेदन पत्र ध्यान से पूरा भरे। आवेदन पत्र संख्या अपने पास नोट कर लें। आवेदन पत्र संख्या/रोल नं. (प्रवेश पत्र मिलने के बाद) के बिना किसी प्रकार का पत्राचार स्वीकार नहीं होगा।

URGENT ATTENTION

Subject	Dates
Sale of Application Form from Dehradun GPO, Roorkee HO, Kotdwar HO, Haldwani HO, Tallital, Pantnagar, Rudrapur, Kichha, Ramnagar, Kashipur, Mussoorie, Hardwar, Rishikesh, MDG, Rudraprayag, Pauri, Srinagar, Tehri, Almora, Ranikhet, Bageshwar, Pithoragarh, Doiwala, Vikasnagar, Chakrata, Bajpur, Lansdowne, Gopeshwar, Khatima and outside of Uttarakhand from Post Offices of Lucknow GPO, Meerut City HO and New Delhi GPO.	15 th April, 2010
Last date for receipt of completed Application Form in the office of Registrar, Uttarakhand Technical University, Post Box No. 202, GPO, Dehradun - 248001.	10 th May, 2010 5.00 p.m. Closing Time
Dates of Examination	23 rd May, 2010
Declaration of Result	Second Week of June, 2010

SCHEDULE OF EXAMINATION

Date of Examination	Paper Code	Subjects	Timing	Total Period
First Shift 23 rd May, 2010 (Morning) Sunday	Paper 5	Aptitude test for MCA	8.00 AM to 10.30 PM	2 Hours 30 Minutes
	Paper 1	Physics & Chemistry		
Second Shift 23 rd May, 2010 (Evening) Sunday	Paper 2	Mathematics	2.30 PM to 4.00 PM	1 Hour 30 Minutes
	Paper 3	Biology (Botany & Zoology)		
	Paper 4	Aptitude Test for General Awareness (BHMCT)		
	Paper 6	Aptitude Test for Diploma Holder in		
	Paper 7	Engg/Diploma Holders in Pharmacy/		
	Paper 8	Pharmacy/B.Sc. Graduates.		

HOW AND WHOM TO CONTACT

<i>Contact Address</i>	<i>Phones / Fax / website</i>
The Registrar Uttarakhand Technical University, Govt. Polytechnic, Suddhowala,	Phone : 09411959190 0135-2771123 Website : http://www.uktech.in