

JOINT ENTRANCE TEST (JET) - 2018



GENERAL INSTRUCTIONS For Admission to

- B.Sc. (Hons.) Agriculture**
- B.Sc. (Hons.) Horticulture**
- B.Sc. (Hons.) Forestry**
- B.F.Sc. (Hons.) (Fisheries Science)**
- B.Sc. (Hons.) Food Nutrition and Dietetics**
- B. Tech. (Dairy Technology)**
- B. Tech. (Food Technology)**
- B.Sc. (Ag.)-MBA(ABM) 5 year integrated course**



Conducted by
Maharana Pratap University of Agriculture and Technology
Udaipur 313001 (Rajasthan)

1. ONLINE SUBMISSION OF APPLICATION FORM

- Only online application form will be accepted.
- The online application form can be filled as per the schedule.
- Recent passport size photograph along with signature as single image (7H x 4W cm with 80 pixels per inch, 30 to 50 KB) should be in the jpg/jpeg/pjpeg/png/bmp/tif/ gif file format and documents in pdf format with 100 to 200KB size can be uploaded.
- The candidate can edit the application form till given date except the information related to fee. **Do not disclose the password to any one as he/she may change your details and misuse it.** The organizers will not be responsible for such changes and consequences thereon.
- **Deposition of application fees:** The fee is Rs.2800/-(excluding bank charges if any) for UR/ OBC/ SBC candidates and Rs.1400/- (excluding bank charges if any) for SC/ST/PC>39% candidates. **Amount is to be deposited online only. This amount is not refundable/ transferable/ adjustable in any case.**

2. ELIGIBILITY CRITERIA FOR ADMISSION

A candidate must ensure that he/she is eligible for admission to various courses before filling the online application form for JET. If a non eligible candidate is admitted due to any reason then the admission of such candidate will be cancelled as soon as the mistake is detected even at later stage. Various eligibility criteria for admission through JET are as under:

- **EDUCATIONAL QUALIFICATION:**

The candidates who have passed the Senior Secondary (10+2) examination conducted by the Board of Secondary Education Rajasthan, Ajmer or any other Statutory Board or any examination recognized equivalent to it by the university in any of the combination of following subjects are eligible to appear in JET: Agriculture, Biology, Chemistry, Mathematics and Physics i.g. PCM, PCMB, PCB, PCA, Ag. Stream etc. For Bachelor of Technology, Chemistry, Mathematics and Physics are essential at 10+2 level. Candidate with Arts and Commerce stream are not eligible.

Candidate may attempt any three subjects in JET examination out of five but, those who want admission in Bachelor of Dairy and Food Technology not have any choice and must attempt only PCM.

A candidate must have secured at least 50% marks in the aforesaid examinations (10+2). A relaxation of 5% marks would be allowed to candidate belonging to SC/ST/OBC (Non creamy layer)/SBC (Non creamy layer) category. **The candidates taking the advantage of 5% relaxation will not be considered in UR category.** Candidates having supplementary in the 10+2 recent examination is not eligible for JET.

Candidates who have appeared at any of the aforesaid qualifying examinations and whose results have not been declared before the commencement of the JET shall provisionally be allowed to appear in the JET. The result of the examinations (10+2) is essential at the time of filling the option form.

- **AGE**

The maximum age limit is 25 years as on 01-01-2018 i.e. candidate born before 01-01-1993 are not eligible. The date of birth as mentioned in the Secondary Examination mark sheet/ certificate will be considered as authentic.

• **DOMICILE CRITERIA/RESIDENTIAL REQUIREMENT**

The JET is open to the candidates of Rajasthan domicile only or a candidate must fulfill the following conditions for admission:

The candidate must have studied for the last three years in the qualifying examination continuously as a regular student in recognized institution in Rajasthan i.e. passed 10th and 10+2 (in the qualifying subjects) from Rajasthan.

OR

Natural Father/Mother of the candidate has been continuously residing in Rajasthan for a period of last 10 years and the candidate has studied for at least 5 years during this period in the recognized educational institution in Rajasthan.

OR

The candidate must be a bonafide resident of Rajasthan. He/She may be presently studying in any of the states other than Rajasthan.

OR

The candidate is a son/daughter of a serving or retired employee of (a) Government of Rajasthan and Officer of All India Services the State Cadre of Rajasthan or (b) Undertaking/ Corporation/ Improvement Trust/ Municipal Bodies duly constituted by the Government of Rajasthan by an act of Law or (c) any of the Universities in Rajasthan or Board of Secondary Education, Rajasthan provided that the employee has worked in Rajasthan for three years preceding the last date of submission of the application.

OR

Candidate is a son/daughter of a permanent or retired employee of Indian Defense Service and the employee is either of Rajasthan origin irrespective of his/her place of posting or is posted in Rajasthan at the time of last date of the application for admission provided that in case the defense personnel is of Rajasthan origin, a Certificate has to be submitted by him/her from the employer to the effect that his/her State of origin is Rajasthan at the time of entry in to service.

OR

Candidate is a son/daughter of permanent (serving/retired) employee of Para-Military Forces of India and the employee is either of Rajasthan origin irrespective of his/her place of posting or is posted in Rajasthan at the time of last date of application for admission provided that in case of Para-Military Personnel from the Rajasthan origin, a certificate has to be submitted by him/her from the employer to the effect that his/her State of origin is Rajasthan at the time of entry into service.

OR

Candidate is a son/ daughter of a Judge of Rajasthan High Court subject to that he/she submit an undertaking/affidavit stating that such benefit is not claimed or availed by them in any other State.

Note:

- The relevant original documents / certificates which are the basis of eligibility of the candidate are to be furnished by the candidate at the time of registration in the college along with one self attested set of above documents and photograph.
- The certificate of bonafide resident of Rajasthan will have to be duly signed by the District Magistrate of the concerned District or officer authorized by him, and must bear

the authenticated photograph of the candidate.

- In case of serving personnel, where in-service conditions have resulted into eligibility, a certificate of the employer will have to be submitted by the candidate, with appropriate authentication, identification and verification.

3. RESERVATION OF SEATS

- The reservation of seats for various categories will be as per the rules of Government of Rajasthan and subsequently adopted by MPUAT, Udaipur.
- The caste certificate must bear the photograph of candidate and must be issued by the competent authority.
- In case of OBC/SBC the certificate should not be more than one year old i.e. not earlier than 01-03-2017 and must clearly indicate non creamy layer. Such certificate along with affidavit of non creamy layer should not be earlier than 01-03-2015.
- Reservation for wards of defense personals will be in following priority order:

Priority-I : Widows/Wards of Defense Personnel killed in action (Category I).

Priority-II : Wards of serving personnel and ex-serviceman disabled in action (Category II).

Priority-III: Widows/Wards of Defense Personnel who died in peace time with death attributable to military service (Category III).

Priority-IV : Wards of Defense Personnel disabled in peace time with disability attributable to military service (Category IV).

Priority-V : Wards of ex-servicemen and serving personnel who are in receipt of Gallantry Awards like Param Vir Chakra, Ashok Chakra, Sarvottam Yuddh Seva Medal, Maha Vir Chakra, Kirti Chakra, Uttam Yuddh Seva Medal, Vir Chakra, Shaurya Chakra, Yuddh Seva Medal, Sena, Nausena, Vayusena Medal and Mention-in-despatches (Category V).

Priority-VI : Wards of ex-servicemen (Category VI).

Priority-VII: Wards of serving personnel (Category VII)

- Candidates are requested to upload the valid relation certificate issued by competent Army authority where priority should be clearly mentioned. Please note that Army Canteen Cards or ID cards etc. will not be considered as valid document.

4. INSTRUCTIONS FOR FILLING JET ONLINE APPLICATION FORM

The application for JET will be accepted online only. The process of online submission of application form for JET will be available at the website <http://www.rcaudaipur.com>. Link of this web site will also be available on MPUAT, Udaipur website www.mpuat.ac.in

Date of commencement for filling of the online application : 01-03-2018

Date of closure for filling of online application : 10-04-2018

Last date for editing the application : 12-04-2018

Candidates must perform the following activities while submitting the online application form: **Step-1:**

Off line preparation for filling the Online Application Form:

Candidates are advised to go through these instructions and before starting filling of application form he or she must keep all relevant documents ready to avoid any reason for non accepting the form by the system.

- Take a photograph of 5H x 4W cm size. Paste the photograph on plain paper and sign below the photograph 2H x 4W cm size. Scan it in jpg/jpeg/pjpeg/png/bmp/tif/gif format

with 80 pixels per inch resolution. The image size of photo with signature should be in between 30 to 50 KB. Sample image is already given on web site.

- Fee concession certificate i.e. caste category and/or physically challenge certificate indicating >39% disability should be scan in “pdf” format having size 100 to 200KB.
- Scan mark sheets of X and XII (if passed already) examination in “pdf” format having size 100 to 200KB.
- Mobile number on which candidate wants to get SMS related to this examination from JET office. All the information will be sent through SMS on this mobile. Use your own or close relative mobile number avoid mobile number of Coaching Centre and Emitra. Not more than three applications will be accepted on a common mobile number.
- **Incase non availability of mobile number or change in mobile number candidate will not get the information for which this office will not bear any responsibility.**

Step-2: Depositing the fees

- Candidate must read the instructions given on the web site carefully.
- Fees of JET Application form is Rs. 2800/- + bank charges if any for General/OBC/SBC candidates and Rs.1400/- + bank charges if any for candidates of SC/ST/PC >39%. Fees will be acceptable online only after filling the essential information.
- This fee is not refundable/ transferable/ adjustable in any case.
- Deposit the fees from your own or close relative account/ credit/ debit card avoid the account or credit/ debit card of Emitra or any other agency to avoid difficulty in case of refund if any.
- Candidates are advised to keep the details of bank account viz., Name of the bank and branch, account holders’ name, number, type of the account etc. for ready reference in near future.

Step-3: Filling of Online Application Form

- The entries of online application form must be filled as required.
- Candidate should ensure that the photo and signature belongs to the same person i.e. his/her only.
- The changes (if required) will be allowed in online application form up to a given date using registration number and password. **Keep the password very safe as anyone can change your details and misuse it due to this for any change in your application form this office will not be responsible. Do not share the password details.**

Step-4: Printing of application form

- Click the Print button on the web portal and get print of application form. Keep this print for your record.
- **Candidates need not to send hard copy of application to the Coordinator.**

5. ADMIT CARD

Admit card will be available on web site www.rcaudaipur.com from 15-05-2018 to till commencement of exam. **No admit card will be sent by post or personally to the candidates.** The Coordinator reserves the right to withdraw the permission granted by error to a candidate who is not eligible to appear in the examination even though the admission card has been issued and produced by the candidate before the centre superintendent.

6. EXAMINATION SCHEME

- In the very nature of competitive examination, no syllabus can be prescribed. However, it is an exercise to pick up the best. There would be a single question paper for all the candidates appearing in JET wants admission in different courses.
- The Question Paper would be available in the following five (5) subjects namely, Agriculture, Biology, Chemistry, Mathematics and Physics, however, candidate has to attempt three subjects. Broad outline of subject content is given in the syllabus.
- The candidates desiring admission in Agriculture/ Horticulture/Forestry/Fisheries/Food and Dietetics may attempt any three subjects.
- **For admission in Dairy Technology and Food Technology, candidates must attempt Physics, Chemistry and Mathematics only.**
- The question paper will be bilingual (English and Hindi) and consists of multiple choice type questions. In case of any discrepancy English version will be considered correct.
- The question paper will be in the form of a test booklet containing different subjects viz. Agriculture, Biology, Chemistry, Mathematics and Physics. Each having 40 questions. There would be four suggested option [(1), (2), (3), (4)] to each question.
- The candidates are required to choose the most appropriate option and blacken the corresponding circle with the black ball point pen in the OMR sheet (Details for filling answer sheet are given on back side of OMR sheet). The test booklet may be used by the candidates for rough work and the squares printed in it may be used for deciding the correct answer. Assessment will be made only on the basis of marking on the OMR sheet. At the end of examination candidates may carry question booklets with them.
- **Marking scheme:** Four marks will be awarded for every correct answer and one mark will be deducted for every wrong answer (Negative marking). If more than one option is chosen, it will be treated as wrong answer. No marks will be awarded or deducted for unmarked/ unattempted questions.
- The merit list will be prepared on the basis of obtained marks only.
- After obtaining the objections, if any question found ambiguous or having ambiguous answer, correct answer more than one, no correct answer will be dropped and merit will be prepared on the basis of obtained marks of remaining questions.

7. WRITTEN EXAMINATION SCHEDULE:

JET will be conducted as per schedule from 11.00 AM to 1:00 PM.

The schedule of the test will be:

Candidate should report to the examination centre	:	10:00 AM
No candidate will be permitted after	:	10:45AM
Commencement of the examination	:	11:00 AM
Candidate will not be allowed to leave the examination hall before	:	01:00 PM

NOTE: Information regarding college wise number of seats, filling of option form etc. for seeking admission will be displayed after declaration of result.

SYLLABUS:

Objective of such entrance test is to select the best therefore no syllabus can be prescribed however a broad outline is given as follows:

AGRICULTURE

UNIT – 1

General proficiency and general knowledge in Agriculture: General knowledge of the physiographic conditions of Rajasthan. Contribution of major arable crops and livestock to state exchequer, major endowments of Rajasthan and relief measures provided in the successive plans; Major handicaps to agricultural and horticultural production. Elements of climate and weather and their effect on crop growth. Agroclimatic zones of Rajasthan. Soil fertility and productivity. Saline and alkaline soils, acidic soils and their management. Soil types of Rajasthan. Soil erosion, methods of soil and water conservation. Essential plant nutrients, their functions, availability and sources. Importance and types of organic manures and fertilizers, nitrogen, phosphorus and potassium fertilizers, straight, mixed and compound fertilizers. Methods of fertilizer application. Importance of irrigation in crop production, sources of irrigation, water requirement of crops and factors affecting it, scheduling of irrigation. Drainage and its importance, types of drainage. Characteristics of weeds, classification of weeds, weed-crop interference, prevention, control and eradication of weeds, methods of weed control. Use of herbicides for weed control in crops. Study of the following crops with reference to climate and soil requirements, land preparation, varieties, seed treatment, seed rate, time of sowing, fertilizer application, irrigation, intercultural operations, plant protection, harvesting and threshing, yield, storage and crop rotations keeping in view the agro-climatic conditions of Rajasthan. Cereals - Paddy, maize, sorghum, pearl millet, wheat and barley.

Pulses - Green gram, cowpea, pigeonpea, black gram, kidney bean, gram and pea. Oil seeds - Groundnut, sesame, soybean, mustard, linseed, safflower, sunflower and taramira. Cash crop - Sugarcane, potato and tobacco. Fiber crops - Cotton and Sunhemp. Fodder crops - Berseem, lucerne, oat, cluster-bean and pearl millet.

Spices - Fenugreek, cumin and coriander. Characteristics of quality seed, seed germination and factors affecting it. Seed production-nucleus, foundation and certified seeds. Dry farming- importance, characteristics and principles. Crop production technology in dry farming areas. Mixed cropping, its types and benefits. Crop rotation, its principles and advantages. Tillage: objectives, primary and secondary tillage. Sowing methods. Seed treatment, seed dormancy and ways to remove it.

UNIT – 2

Importance of fruits and vegetables production, present status and future scope. Nursery management, propagation and transplanting of saplings. Selection of site and planning for fruit orchard. Different layout systems of orchard. Effect of adverse weather conditions like frost, hot, winds, hail, storm, drought, dust storms, heavy rainfall and their protective measures. Problems of unfruitfulness and its remedial measures. Use of plant growth regulators. Study of following important horticultural crops with reference to climate and soil, improved varieties, propagation methods, manures & fertilizers, irrigation, harvesting, yield and important insect-pest and diseases control: Mango, citrus (orange, lime), guava, pomegranate, papaya, ber, datepalm, aonla, tomato, onion, cauliflower, okra, cucurbits (melons, bottle gourd) and Rose. Importance, present position and scope of fruits and vegetable preservation, principles and methods of fruit preservation. Techniques of canning, drying and dehydration. Preparation of Jam, Jelly, Ketchup, Squash, pickles and sauce. Cultivation of medicinal plants namely: Safed musli, Aswagandha, Aloe vera, Jatropha, Senna & Isabgol.

UNIT – 3

Importance of livestock in agriculture, importance of management in dairy animals for milk production, habitat, characteristics and utility of following breeds: Cow - Gir, Tharparkar, Nagori, Rathi, Jersey and Holstein Friesian Buffalo - Murrah, Surti and Nili-Ravi Goat - Jamunapari, Barbari, Sirohi, Marwari Sheep - Marwari, Chokla, Malpura, Merino, Karakul, Sonadi Poultry Rhode Island Red, White Leghorn and hybrids Poultry farming and camel management Judging of cattle and determination of age. Types, uses, doses and method of administration of following common medicines: Antiseptics - Phenyl, carbolic acid, Potassium Permanganate, Lysol. Purgative - Magnesium sulphate, castor oil Simulators - Alcohol, camphor Anthelmintics - Copper sulphate, phenol Astringents - Tincture of iodine, alum Body massage oil - Turpentine oil. Causes, symptoms, treatment and control of following diseases: Rinder pest, Foot and Mouth, Black quarter, Anthrax, Haemorrhagic septicemia, Tick fever. Milk production, composition of milk and colostrum, clean milk production, milk preservation, milk analysis, quality control of milk. Determination of fat, apparent density, acidity and separation of cream and equipments required for separation, curd and ghee. Cleaning and sterilization of dairy utensils and equipments.

BIOLOGY

SECTION - I BOTANY

UNIT - A

Unity of Life: Structural organization of the cell. Electron Microscopic structure of cell. Prokaryotic and eukaryotic cells. Plant and animal cells. Cell organelles and

their functions-nucleus (including DNA and RNA structure), mitochondria, chloroplast, endoplasmic reticulum, golgi complex, lysosomes, microbodies, microfilaments, ribosomes, centriole, cell wall, cilia and flagella, vacuoles, cell inclusions-starch grains, mineral crystals. Cell division : amitosis, mitosis and meiosis. Comparison of mitosis and meiosis. Significance of meiosis, cell cycle.

Continuity of Life: Mendel's experiments with pea and the reasons for his success. Mendel's laws of inheritance, Mono and dihybrid crosses. Chromosome structure and morphology, chromosomes and genes, chromosome hypothesis. Linkages and crossing over. Mutations. Sex determination, genetic code, transcription and translation.

Plant Physiology: (i) Plant water relation, semi permeable membranes, osmosis, diffusion, diffusion pressure deficit (DPD), water potential, plasmolysis. Transpiration-types, factors affecting rate of transpiration. Guttation. Absorption of water, root as organ for absorption. Active and passive absorption of water and minerals. (ii) Ascent of sap, path of ascent of sap, theories explaining ascent of sap (iii) Mineral nutrition-role of minerals in plant growth, macro and micro elements for plant growth, trace elements. (iv) Enzymes-introduction, enzymes as bio-catalysts, nature, classification and mode of enzyme action. (v) Respiration-definition, comparison of respiration and fire. Types of respiration-aerobic, anaerobic and fermentation processes. Respiratory substrate, respiratory quotient, respiration sites. Mechanism of aerobic and anaerobic respiration. Glycolysis, Krebs cycle and alcoholic fermentation, Electron transport chain and Oxidative phosphorylation. Energy yield (Kilo calories). Factors affecting respiration. (vi) Photosynthesis-definition, role of water, chlorophyll and carbon-di-oxide. Light and dark reactions, photophosphorylation, Hill reaction, Red drop, two pigment system, Calvin cycle, Photorespiration, chemosynthesis (brief account). Factors affecting photosynthesis. (vii) Growth-definition, phases of growth, plant hormones (Auxins, Gibberellins, Cytokinin and ethylene) and growth regulation, action on various physiological processes. Factors affecting growth. (viii) Vernalization and Photoperiodism. (ix) Plant movements : a brief account of various types of plant movements with suitable examples.

UNIT – B

Environmental Biology: Definition of ecology and environment. Environmental factors climatic, edaphic and biotic. Plant communities and their characteristics (Density, frequency and abundance), Plant adaptations in relation to water-xerophytes, mesophytes, hydrophytes etc. Interaction between environment and organism, Ecosystem concept, trophic levels producers, consumers, decomposers. Food chain and food web. Ecological pyramids, Environmental Pollution-air and

water sources and major pollutants, their effects and methods of control of pollution including nuclear fallout and waste disposal. Noise pollution-sources and effects. Natural resources and their conservation, waste land their improvement and forest conservation. Causes for the extinction of wild life. Conservation of wild life and concept of endangered species(Red data book). Indian examples.

UNIT – C

Botany and Human Welfare: Domestication of plants-historical account, improvement of crop plants-Plant breeding and plant introduction. Use of bio-fertilizers, economic and ecological aspects. Use of pesticides : advantages and hazards, Economic botany (Botanical name, family, plant parts used and uses) of the following:

Cereals - Wheat and rice

Millets - Bajra, jowar

Pulses - Gram, urd and mung

Fibres - Cotton and sunnhemp

Oil seeds - Groundnut, rapeseed & mustard and castor

Sugar - Sugarcane

Fruits - Mango and banana

Medicinal plants- Guggal, serpgandha, belladonna, opium and isabgol.

Section – II: Zoology

(A) Invertebrates

(1) Description of animals and their economical importance with special reference to Agriculture;

(i) Protozoa – Amoeba

(ii) Helminthes – Soil Nematode

(iii) Annelida – Earthworm

(iv) Platy helminthes – Liver fluke

(v) Mollusca – Snail & Slug

(vi) Arthropoda (various classes)

(a) Arachnida – Mites (b) Crustacea – Prawns, Lobsters

(c) Diplopoda – Millipede (d) Chilopoda – Centipedes

(e) Insecta – Cockroach

(2) Important insects of crops and storage (General introduction, importance, host plants, losses, life cycle and their control).

(i) Red hairy caterpillar

(ii) White grub

(iii) Termites

- (iv) Locust
- (v) Pod borers
- (vi) Khapra beetle
- (3) Methods of insect control (Insect control: General introduction)
 - (i) Physical and mechanical control
 - (ii) Cultural control
 - (iii) Chemical control (pesticides, insecticide formulation, classification of insecticides, miticides, nematicides, rodenticides) and safe use of chemicals
 - (iv) Bio-control (Natural enemies of insects: Predators and parasitoids, pheromone traps, *Trichoderma*, NPV, botanical Insecticides.
 - (v) Integrated pest management
 - (vi) Sprayers and Dusters

(B) Vertebrates

- (i) Nutrition in animals – Nutritive elements of food, energy yielding chemicals, minerals and vitamins, balance diet.
- (ii) Respiration in animals – Gaseous exchange.
- (iii) Circulation in animals – Blood – Composition, Blood groups, Rh-factor, Blood coagulation.
- (iv) Reproductive system – male and female reproductive system.
- (v) Reproduction & development
 - (a) Asexual & sexual reproduction in animals
 - (b) Gametogenesis: Spermatogenesis, structure of sperm, oogenesis and type of Ovum, female reproductive cycle
 - (c) Fertilization: External and internal fertilization.
 - (d) Mechanism of fertilization.

CHEMISTRY

UNIT - A

Structure of Atom: Development of Classical model of an atom: (i) Bohr's model of atom: Calculation of radius of Bohr's orbit and energy of an electron, (ii) Dual nature of matter and radiation: Quantization of electronic energy levels. Spectral evidence for quantization, (iii) Sommerfield's extension (no mathematical treatment), (iv) De-Broglie's Relationship, (v) Uncertainty Principle, (vi) Orbitals and quantum numbers : Shapes of orbitals, spatial distribution of atomic orbitals, (vii) Distribution of extra nuclear electrons, Aufbau principle, Pauli's exclusion principle, Hund's rule, $n+1$ Rule, variation in relative energies of orbitals with increase in atomic number, electronic configuration of elements (s, p, d, f, block elements). Stability of half-filled and completely filled orbitals.

Periodic Table and Periodicity in Properties: (i) Electronic configuration and periodic Table: The long form of periodic table and s, p, d, f, block elements. Advantages over Mendeleev's periodic table, (ii) Electronic configuration and Periodicity in properties, periodic perspectives, (iii) Detailed study of periodicity in physical and chemical properties with special reference to: Density, Melting and boiling points of elements. Atomic and ionic radii, Ionization potential, Electron affinity. Electro negativity, variation of effective nuclear charge in a period, metallic character, diagonal relationship.

Chemical Bonding and Molecular Structure: (i) Lewis structure – Octet rule and its limitations, (ii) ionic bond: Characteristics of ionic compounds, Solubility of ionic compounds, (iii) Covalent bond, introductory concept of over-lapping of orbitals and bonds, valence bond theory: Characteristics of covalent compounds. Coordinate bond, partial covalent character in ionic bond, partial ionic character in covalent bond. Fajan's rule, Polarities of covalent molecules, (iv) Bond length, bond angle and bond-energy general consideration, (v) Hybridization of orbitals illustrated with example of compounds of first and second row elements in periodic table: Shapes of common molecules – VSEPR Theory, (vi) Hydrogen bond, (vii) Vander Waals forces of attraction.

Redox reaction: (i) Concept of formal charge on ions, (ii) Oxidation number, (iii) Oxidation reduction electron transfer concept with examples, (iv) Redox reaction-examples, (v) Balancing of equations by ion-electron method.

Chemical Equilibrium: (i) Concept of reversibility equilibrium constant, (ii) Law of mass action generalized

expression, (iii) Experimental method for verification of the law of mass action. Factors affecting equilibrium (concentration, pressure, temperature), (iv) Application to systems such as $N_2 + 3H_2 \leftrightarrow 2NH_3$, $PCl_5 \leftrightarrow PCl_3 + Cl_2$, $N_2 + O_2 \leftrightarrow 2NO$ (v) Le Chatelier's Principle-Application.

Chemical Kinetics: (i) Rate of a reaction, (ii) Instantaneous rate of a reaction and order of reaction (Zero and I order), (iii) Factors affecting the rate of reaction, concentration of reactant molecule, effect of temperature on the reaction rate, concept of activation energy, Catalysis, (iv) Effect of light on rate of reaction, (v) How fast are chemical reactions?

Ionic Equilibria: (i) Electrolytes and non-electrolytes, (ii) Arrhenius theory: Evidence in favour of dissociation theory, (iii) Ionic product of water, (iv) Hydrolysis, degree of hydrolysis, hydrolysis constant, (v) Relation between Hydrolysis constant, Ionic product of water and dissociation constant, (vi) Common ion effect, (vii) Solubility product and its application to qualitative analysis.

Acids and Bases: (i) Hydrogen and hydroxyl ion in aqueous solution, (ii) Bronsted-Lowry concept of acids and bases, (iii) Lewis concept (iv) Dissociation of acids, (v) pH value, (vi) Buffer solutions, (vii) Theory of indicators of acid-alkali titrations, (viii) Choice of indicators.

Energetics: (i) Energy changes during a chemical reaction, (ii) Internal energy and enthalpy (Internal energy, enthalpy and enthalpy change. Origin of enthalpy change in a reaction, Hess's law of constant heat summation), (iii) Heats of reactions (Heat of neutralization, heat of combustion, heat of fusion and vaporization), (iv) What decides the direction of spontaneous change in a chemical reaction (an elementary idea of entropy and free energy change).

UNIT – B

Colloidal State of Matter: (i) Crystalloid and colloids, (ii) Classification of colloids : Emulsion, Preparation of colloids, Lyophilic and lyophobic colloids, (iii) Properties: Electrophoresis, Dialysis, Tyndall phenomenon, Brownian movement, Coagulation-Hardy and Schulze's law, Peptisation, Absorption, Applications.

Metals: (i) Nature of metallic state : Structural packing of atom in metals. Metallic Bond-Valence bond concept, (ii) Occurrence of metals in nature, (iii) General principles of metallurgy: Activity series of metals, Standard Electrode Potential, Metallurgical Processes, (iv) Extraction of metals : Copper, silver, Aluminum and iron.

's'- Block elements: (i) General characteristics, (ii) Trends in variation of properties in periodic table of alkali and alkaline earth metals, (iii) General principles of extraction of the elements, (iv) General chemistry of their compounds.

d-Block elements: (i) General characteristics, (ii) Elementary idea about paramagnetism and diamagnetism, (iii) Different oxidation states, (iv) Chemistry of transition elements as illustrated by different oxidation states of the following metals : Silver, Gold, Chromium, Manganese and Iron.

Note: Numerical problems on principles involved in topics included in syllabus and on the volumetric exercises would be set.

UNIT – C

Valency of carbon and Hybridisation: (i) Tetra-Valency of carbon atom, Kekule, Vant-Hoff and Le-Bell theories, (ii) Orbital representation of covalent bond, multiple bonding (sigma bond: Pi bond), (iii) Hybridization (sp, sp², sp³ Hybridization), (iv) Orbital structure of acetylene, ethylene and methane, (v) Concept of bond length, bond strength and bond angle, (vi) Electronegativity

inductive effect, polarity of covalent bond, formal charge, polarity of carbon, Halogen bond.

Structure and Reactivity: (i) Bond fission, Free radicals, Ions (Carbocations and carbanion), (ii) Acids and bases, Arrhenius concept, Bronsted-Lowry concept, Lewis concept, (iii) Nucleophilic and Electrophilic reagents, (iv) Types of Organic Reactions and their mechanism : Substitution Rearrangement Reaction, (v) Markvnikov's Rule and Peroxide effect.

Pyrolysis: (i) Petroleum as a source of Hydrocarbons, (ii) Origin of Petroleum, (iii) Mining of Petroleum, (iv) Refining of petroleum, (v) Artificial production of petrol (a) cracking (b) isomerization (c) synthetic method, (vi) Knocking , (vii) Octane number, (viii) Flash point.

(Grignard reagents) Organo Metallic compounds: (i) Organometallic compounds, definition, and preparation of Grignard reagents, (ii) Properties and synthetic uses of Grignard reagents.

Saturated Hydrocarbons (upto 5 carbon atoms): (i) Nomenclature and isomerism, (ii) General methods of preparation of alkanes, (iii) General properties and uses of alkanes, (iv) Individual members Propane, Butane, Pentane, (v) Interconversions of alkanes.

Unsaturated Hydrocarbons: (i) Nomenclature and isomerism, (ii) General methods of preparation of Alkenes and Alkynes, (iii) General properties and uses of alkenes and alkynes with reaction mechanism, (iv) Individual members, Propene, Butene, Propyne and Butyne.

Organic Chemistry based on functional groups a: (i) Halides, Nomenclature and isomerism, General methods of preparation of mono alkyl halides: General properties of mono alkyl halides with reaction mechanism. Preparations and properties of dihalogen derivatives, Synthetic uses of alkyl halides, (ii) Hydroxy compounds: Nomenclature and Isomerism; Classification of Monohydric alcohols; General methods of preparation of Monohydric alcohols; General properties and uses of Monohydric alcohols; Hydrogen bonding in alcohol and its effect on boiling point and solubility; Test for alcoholic groups; Inter conversion of methanol and ethanol.

Organic Chemistry based on functional groups b: (i) Carbonyl groups : Nomenclature and isomerism of aldehydes and ketones, General preparations of aldehydes and ketones, General properties and uses of aldehydes and ketones with reaction mechanism; Polarity of carbon-oxygen double bond; Test for aldehydes and ketones, (ii) Carboxylic group, Nomenclature and isomerism. General preparations of monocarboxylic acids, general properties and uses of carboxylic acid, hydrogen bonding in carboxylic acids, resonance.

Aliphatic amines: (i) Nomenclature and Isomerism, (ii) General methods of preparation of primary amines, (iii) General properties and uses of primary amines, (iv) Laboratory method of preparation of methyl amine and ethylamine, (v) Properties and uses of methylamine and ethylamine, (vi) Tests for amines.

Aromatic compounds: (i) Characteristics of Aromatic compounds, (ii) Nomenclature and isomerism, (iii) Substitution in Benzene ring, (iv) Preparations, properties and uses of Benzene (with reaction mechanism), (v) Preparation of Nitro benzene, (vi) Properties and uses of Nitrobenzene, Test for Nitrobenzene, (vii) Methods of preparation properties and uses of aniline, (viii) Test of aniline, (ix) Methods of preparation, properties and uses of phenol, (x) Test of phenol, (xi) Difference between alcohols and phenols.

Synthetic and Natural Polymers: (i) Classification of polymers, (ii) Some important natural and synthetic polymers with their general methods of preparation.

Chemistry in Action: (i) Dyes, (ii) Chemicals in medicines, (iii) Fertility contraceptives, material schemo- sterilints.

MATHEMATICS

UNIT – A

Algebra of complex numbers: Meaning of the symbol i , definition of a complex number algebra of complex number, cube roots of unity. General and principal value, geometrical representation of a complex number (Argand diagram), modulus and amplitude of a complex number, some properties of modulus of a complex number, De Moivre's theorem and its applications. Circular and inverse circular functions of real and complex quantities, hyperbolic and inverse hyperbolic functions, separation of complex quantities, (circular hyperbolic logarithmic, exponential function and their inverses) into real and imaginary parts.

Relations and functions: Concept of a relation, kinds of relation, equivalence relation, order relation and inverse of a relation. Function: Injective, surjective and bijective mappings, inverse of a function composite function and their properties.

Matrices: Transpose of a matrix, adjoint and inverse of a square matrix, definition and ranks of a matrix, Application of matrix in solving simultaneous equations in three variables, consistency and inconsistency of linear equations in three variables.

Vector: Scalar (dot) and vector (cross) product of two vectors, their geometric significance, scalar triple product, vectors triple product; Application of vector in the use of establishment of various geometrical results and problems of mechanics.

UNIT – B

Co-ordinate geometry: Circle : Parametric co-ordinates, Pair of tangents, chord of contact, equation of common chord of two circles, Pole and polar system of circles, circles passing through points of intersection of two given circles, one circle and one line, condition for orthogonality of two circles, definition and equation of radical axis of two circles.

Parabola: Definition, its standard equation, equation of the tangent and normal from a given point, chord of contact, diameter, pair of tangents, pole and polar and simple properties connected with parabola.

Three Dimensional Geometry: Concept of co-ordinates, distance between two points, division of the join of two points in a given ratio, direction cosines and direction ratios of a line, Cartesian equation of a line and plane in three dimensions. Angle between two lines, between a line and a plane also between two planes; distance of a point from a line and from a plane skew lines & shortest distance between them.

Probability: Concept of probability, Mathematical formulae for finding the probability of an event, mutually exclusive events and independent events, use of the following formulae:

- (i) $P(A+B) = P(A) + P(B)$ for any two mutually exclusive events A and B
 - (ii) $P(A+B) = P(A) + P(B) - P(AB)$ for any two events A and B
 - (iii) $P(\text{not } A) = 1 - P(A)$
 - (iv) $P(AB) = P(A) P(B)$ for any two independent events A and B.
- Conditional probability.

UNIT – C

Function: Definition of function, variables, domain, range, explanation of the terms “undefined” “indeterminate”, definition of even functions, odd functions, periodic functions, increasing and decreasing functions, monotonic functions, composite functions, discussion of the graphs of exponential, logarithmic trigonometric and inverse trigonometric functions.

Limit and Continuity: Definition of the limit of a function, left and right hand limit, existence of limit, discussion of problems of limits of various functions, mathematical definition of continuity discussion of continuity and discontinuities at a given point.

Differentiability: Definition, left hand and right hand derivative, existence of derivative at a point, differentiability is a sufficient condition for continuity.

Derivatives: Derivatives of standard functions from the definition (Ab-initio), Derivative of sum difference, product, quotient and function of a function,

logarithmic, exponential function derivatives of implicit and explicit functions and of Parametric functions, derivative of one function with respect to the other.

Application of derivatives: Geometrical significance of dy/dx and its application in finding equation of tangent and normal at a point to a curve in Cartesian and Parametric forms, orthogonal curves, use of dy/dx in determining intervals in which a function is monotonic or strictly monotonic and as a rate measures. Statement and geometrical illustration of Rolle's theorem, statement, proof and geometrical, significance of Lagrange's mean value theorem.

Successive differentiation: Successive differentiation, expansion of functions by Maclaurin's theorems, Maxima and Minima of one variable connected by a relation.

Methods of Integration: Definition of integration as the inverse of differentiation, elementary integration, integration of sum and difference function, integration by substitution and by parts.

Integration of functions: Integration of rational and irrational, algebraic functions, integration of trigonometric functions.

Definite Integral: Definite integrals and their properties, definite integral as the limit of a sum.

Quadrature: Application of definite integrals in finding the area of a region bounded by a curve in Cartesian coordinates and x-axis or y-axis, area of the region included between two curves.

PHYSICS

UNIT – A

Dynamics of a particle: Conservative and non-conservative force, Motion of a particle under different types of forces or potentials: constant, linearly varying and variable conservation of linear momentum and energy. Application, direct and oblique collision between particles, elastic and inelastic collisions. Static and dynamical problems involving forces and conservation laws.

Rotational motion: Centre of mass and its calculation for a two or more particle system and for rigid body. General motion of a rigid body, nature of rotational motion, rotational motion of single particle in a plane torque, angular momentum and its geometrical and physical meaning, conservation of angular momentum. Examples of circular motion : car on a level circular road, car on a banked road, pendulum or particle swinging in a vertical plane. Rigid body rotation and conservation of its angular momentum. Comparison of linear and rotational motions. Definition of moment of inertia, parallel axis theorem, Perpendicular axis

theorem for a plane lamina. Calculation of M.I. in case of ring disc, cylinder and sphere, Motion of a rigid body on an inclined plane.

UNIT – B

Heat & Thermodynamics: Heat & Temperature, Zeroth law of thermodynamics, mechanical equivalent of heat, First law of thermodynamics, thermodynamics state isothermals and adiabatics. Pressure temperature and pressure volume indicator diagrams. Work done during isothermal and adiabatic process, equilibrium process and phase changes, Evaporation. Thermal expansion, variation of volume and pressure of a gas with temperature, Transter of heat conduction, convection and radiation.

Thermodynamics: Reversible and irreversible thermodynamics processes, Carnot cycle, Second law of thermodynamics, efficiency of heat engine, Heat engines; external and internal combustion engines (description only).

Radiation: Nature of heat radiation emissive and absorptive powers of body, black body, emissivity. Kirchoff's law with illustrations, Stefan's law and Newton's law of cooling, distribution of energy in Black body spectrum, Wien's displacement Law, idea of Plank's law of radiation.

UNIT – C

Waves: Wave motion, longitudinal and transverse waves, wave length, frequency, time period, amplitude of a wave. Sound waves, velocity of sound waves. Equation of a simple harmonic wave displacement, velocity and acceleration of a particle during propagation of a wave. Reflection and refraction of a wave. Superposition of waves, interference of sound waves, beats stationary waves, nodes and antinodes. Stationary waves in pipes and strings, Resonance tube, Elementary ideas of musical scale and acoustic of buildings. Doppler effect in sound waves.

Wave Optics: Interference phenomenon; conditions of sustained interference, Young's double slit experiment, Fresnel's Bi-Prism, Fringe-width and determination of wave length, Diffraction: diffraction phenomena : Fresnel's and Fraunhofer class of diffraction, Fresnel's half period zone theory, Diffraction due to a circular obstacle and circular aperture on axial points. Diffraction due to a single silt (qualitative). Resolving power of telescope and microscope, Polarization: polarized and unpolazised waves. Plane polarized, circulary polarized and elliptically polarized light. Identification of polarized and unpolarized light by-polaroid. Methods of obtaining the plane polarizing length.

UNIT – D

Electrostatics: Electric field vector, Free and bound charges in conductors and insulators, Behaviour of electric field and potential inside and on the surface of a conductor and a dielectric flux, Gauss's theorem and its applications in calculating electric field at any point due to a uniformly charged spherical shell (inside and outside), spherical conductor, sphere made up of volume distribution of charge, sheet of uniform charge density of infinite dimensions made up of a dielectric or of a conducting material, a line charge of infinite length. Force on the surface of a charged conductor Energy density in an electric field. Capacitors: Combination and types. Capacity: capacity of a parallel plate and spherical condenser, condensers in series and parallel, Energy of a charged condenser.

Kirchoff's Laws: Kirchoff's Laws of electrical circuits and its application to electrical circuits. Potentiometer: Principle of potentiometer, Measurement of EMF and small potential difference, calibration of voltmeter and ammeter and measurement of internal resistance of a primary cell.

Magnetic effects of current: Ampere's law and its applications: Magnetic induction at any point due to a long straight current carrying wire, magnetic induction inside a long solenoid, magnetic induction inside a toroid.

Electromagnetic Induction: Magnetic flux, induced EMF. Faraday's law Lenz's law. Induced current and energy balance in a rectangular loop moving in a non uniform magnetic induction with a constant velocity, Back EMF developed when a uniform magnetic induction between them, potential difference developed across a conducting rod moving with a conducting wire moves two parallel conducting rails carrying current with a uniform velocity across a uniform magnetic induction, a conducting rod rotating in a uniform magnetic induction with a constant angular velocity and a metal disc rotating in a uniform magnetic induction with a constant angular velocity, Rectangular coil rotating in a uniform magnetic induction, Self and Mutual induction.

Alternating currents: Direct current alternating current, fluctuating D. C. and sinusoidal currents, Instantaneous, Average and root mean square value for A. C. Phase relationship between current and EMF in sinusoidal A. C., circuit containing (i) Pure resistance (ii) a resistance and an inductance, (iii) resistance and a capacitor, Impedance, resistance, reactance and susceptance. Series – L. C. R. resonant circuit, Q factor & Band with power in an A. C. circuit wattles current Electrical devices & machines: transformers, induction coil, A. C. and D. C. generators and motors, choke and starter.

Electromagnetic waves: Short history of EM waves (Maxwell, Hertz, Bose, Marconi), Basic concepts of electromagnetic oscillations, electromagnetic spectrum (radio-microwaves, infra red, optical, ultra violet, X-rays, gamma rays).

Photo Electric Effect and Matter Waves: Photo electric effect, Einstein's explanation, Photo electric equation, photo cells. De Broglie's concept of matter waves Davisson and Germer experiment. Thompsons experiment.

Semiconducting Electronic Devices: Electrons in solids, classification of metals, semi-conductors and insulators, Intrinsic and extrinsic semi-conductors. P-type and N-type semi conductors. Semi conducting p-n junction diode and its characteristic. P-n-p and n-p-n junction transistors their characteristics and parameters. Application in simple ideas and working of C.R.O. radio television and computer (explanation of working with block diagrams)

INSTRUCTIONS FOR WRITTEN EXAMINATION

- The examination will be held as per the programme given. The doors will be opened at 10.00 AM.
- The candidate should ensure that he/she occupies the allotted seat at allotted place only. Any candidate occupying the seat of another candidate or change the place shall be treated as case of unfair means and his/her candidature will not be considered for admission.
- Candidates should bring the following documents/ items at the time of examination.
 - i. The admit card downloaded from the www.rcaudaipur.com website.
 - ii Original recent photo ID.

Black ball point pen for marking the answers will be provided at the centre.

- Candidates should not bring any text-book or notes, log tables, calculators, cell phone, purse/bag, watch, jewelry, any electronic gadget by which communication is possible and any other objectionable material with them in the examination hall.
- All Jewelry should be removed at the home so that no problem may arises at centre to remove the same and theft if any as centers will be responsible for security of belongings of candidates. With jewelry candidate will not be allowed in examination.
- Candidates should carefully read the instructions given in the question paper booklet and OMR before they begin to mark their answers.
- The question paper will be in English as well as in Hindi. However, in case of any discrepancies only English version will be treated as correct.
- Soon after the question booklet is given to the candidate, he/she should ensure that it is sealed and contains all the pages and no question is missing before writing role number.
- Entry of booklet number and series on OMR should be done only after getting proper question booklet and satisfying yourself.
- Question booklet/ OMR sheet shall be replaced to candidate only when there is any printing defect/torn condition within 10 minutes i.e. up to 11:10 AM.
- Before attempting the answers, the candidate shall write his/her Roll number and other details at the place provided for the purpose on the test booklet and OMR sheet. The

candidate should indicate the answer by blackening the circle with black ball point pen provided for the purpose in the OMR sheet itself, otherwise his/her answer will not be evaluated. Candidate must ensure that their OMR has been duly signed by invigilator also.

- The candidate should not write his/her name or mark any sign/mark at any place on the answer sheet, which may disclose his/her identity else there candidature will be cancelled.
- No candidate shall leave his/her seat or the examination hall till the end of the examination without the permission of the Invigilator /Centre Superintendent.
- During the course of examination, the candidate shall be under the discipline and control of the Centre Superintendent and shall abide by the instructions issued during the examination by the invigilators or the Centre Superintendent from time to time.
- Candidate found acting in a manner, which in the opinion of the invigilator, is liable to give unfair advantage to another candidate, shall be treated case of unfair means and his/her candidature will be cancelled.
- The invigilators, Flying squad and Centre Superintendent shall be competent to take search of any candidate. A candidate possessing objectionable material or resisting search shall be punishable as per rules of unfair means and loose his/her candidature.
- Candidate resorting to use of unfair-means shall be turned out of the examination hall/room and his examination shall be treated as cancelled. The Centre Superintendent shall be the judge to determine whether unfair-means have been resorted to. He/she will submit the report stating full facts of the case of unfair-means to the Coordinator for further necessary action.
- Urinals for use of examinees shall be provided at the Centre and every examinee shall be required to use one of those urinals only. For this the candidate shall not leave the examination room without the permission of the invigilator and escort. Permissible only in case of emergency.
- Smoking and consumption of other intoxicants are strictly prohibited in the examination hall/room/centre and will be treated as unfair means.
- No guarantee is given to the candidates regarding the order of the questions in question paper.
- The result of the test will be declared on specified date. No enquiries by email, telephone or post concerning the result will be attended by the Office of the Coordinator.
- Candidate should note that there will be no re-evaluation of the OMR sheet.
- All original documents are to be submitted to the allotted college at the time of registration.
- Sample of OMR is given in Fig 1.

EVALUATION OF OMR SHEETS

- The OMRs will be evaluated and marks will be displayed as per schedule.
- Four marks will be awarded for every correct answer and one mark will be deducted for every wrong answer (Negative marking). If more than one option is chosen, it will be treated as wrong answer. No marks will be awarded or deducted for unmarked/ un-attempted questions.

- After obtaining the objections, if any question found ambiguous or having ambiguous answer, correct answer more than one, no correct answer will be dropped and merit will be prepared on the basis of obtained marks of remaining questions.
- Revised marks will be updated and allow to fill the option form as per schedule.

8. FILLING THE ONLINE OPTION FORM

- There is online option form fee of Rs 5000/-. The bank charges will be charged extra. Deposit the online fee from your own or relatives bank account/ debit or credit card. Avoid Emitra account or close the account so you may not face any problem in refund if any.
- Candidate must read the instructions very carefully before filling up the option form to avoid any mistake.
- Candidate must keep ready the information and list of colleges along with order of choice on a separate paper and mark sheets or desired certificates if any.
- **There will be no provision for any change/modification after final submission of the option form however candidate may edit the option up to stipulated date.**
- All the JET appeared candidates eligible for filling the online option form.
- **For admission in B. Tech. (Dairy Technology) and B. Tech. (Food Technology) only the candidates attempted the PCM (Physics, Chemistry & Maths) in JET Examination are eligible.**
- Candidate willing to seek admission **on payment seat** should also fill the option for the same with appropriate number of choice. These seats will also be filled from the same merit.
- Details about college, fees and hostel facility may be obtained from “About the colleges” of this web site or he/ she may contact to the college directly.
- Fees of Rs. 5000/- deposited with option form (online) will be adjusted in college fees of the candidate. **In case of not reporting in time this amount will be forfeited** i.e. neither it will refunded to the candidate nor transferred to the institute where candidate admitted provisionally.
- **Candidate is advised to check the correctness of information before submitting the option form. In case of any wrong information the admission will be cancelled at college level and candidate will be treated as not reported and this seat will be allotted to another candidate in next counseling and option form fee will be forfeited.**
- If candidate will not get admission in any of the institute filled in option form the fee will be refunded through the same channel where from he/she paid the fees.
- **In case amount is deposited from Emitra or any other agency account take all bank details wherefrom this amount has been deducted. As amount will be refunded in this account and he may not refuse to pay the refund.**

Seat Allotment

- On the basis of obtained marks and reservation policy the institution will be allotted on the basis of option form.
- In case of any tie, the tie will be break on the basis of higher marks obtained in 12th than in 10th than more in age will be given priority.

- Through above option form three times seats will be allotted.
- The reserve seats will be allotted to reserve candidates only, if option form of those category candidates is available else the seat will filled from the candidates wherefrom that seat get reserve.

Upward Assessment

First upward assessment:

- The candidates get institution in first allotment either deposit the fees of that institution online or apply for upward assessment in case he/she wants to change the institution have to pay online fee of Rs 800/- for upward assessment else candidate will be treated as not reported.
- The seats of not reported candidates and candidates applied for upward assessment and gets other institution will be filled by the remaining candidates and candidates applied for upward assessment on the basis of merit and taking reservation under consideration.

Second upward assessment:

- Candidates get seat in second allotment (upward or new) have to either deposit the fees of that institution online or apply for upward assessment in case he/she wants to change the institution have to pay online fee of Rs 800/- else candidate will be treated as not reported.
- The seats of not reported candidates and candidates applied for upward assessment and gets other institution will be filled by the remaining candidates and candidates applied for upward assessment on the basis of merit and taking reservation under consideration.
- On or before stipulated date the candidates get seat in third allotment has to deposit the fees of that institution online else candidate will be treated as not reported.
- The upward assessment fee Rs.800/ is non refundable whether candidate get better choice from the option form or not.
- After upward assessment if he/she get any other college or allotment remain unchanged he or she will be required to accept final allotment and deposit the requisite fee of allotted college otherwise the admission will be treated as cancelled and amount Rs.5000/ deposited will be forfeited.

9. REPORTING IN THE INSTITUTION

- Candidate accepted the allotment and deposited the online fee has to report in the institution on the schedule date along with all original documents and their self attached copies viz. 10th and 12th mark sheets and certificates, domicile certificate, reservation certificate, self declaration (in case of OBC and SBC) certificate, recent income certificate and fee deposition receipt.
- Failing to report on the given date or lacking any document will be treated as not reported candidate and the option form fee will be forfeited. Vacant seat will be filled by other candidate in next counseling. Institution fee (other than option form fee) will only refund if the seat will filled.

10. ONLINE SPOT COUNSELLING

- If seats remain vacant after above reporting same will be filled through online spot counseling.

- Online option form will be invited as per the schedule.
- Candidates not get admission or not reported candidates will be eligible for online option form. Candidates reported in the institutions will not eligible.
- Online option form may be filled after paying Rs 5000/- + bank charges.
- Candidates not get seat through previous option form need not to pay the option form fee again but, have to fill the fresh option form.
- Vacant seats will be filled by the category candidates if available else from the candidates wherefrom the seat get reserve using merit and above option form.
- Candidate has to deposit the fee of allotted college online and report in the college on given date along with all original documents and their self attached copies.
- Seats of not reported candidates will be filled from remaining candidates filled the option form by the category candidates if available else from the candidates wherefrom the seat get reserve.
- Candidate has to deposit the fee of allotted college online and report in the college on given date along with all original documents and their self attached copies.

11. ON THE SPOT ONLINE COUNSELLING

- If seats remain vacant same will be filled through this counseling.
- This counseling will be held at Udaipur, Kota, Jaipur, Jodhpur and Bikaner centres.
- Name of the institutions will be declared lateron.
- Candidate has to report at desired centre.
- Candidates not get admission or not reported candidates will be eligible for filling the option form. Candidates reported in the institutions will not eligible.
- Online option form may be filled after paying Rs 5000/- + bank charges. Candidates not get seat through previous option form need not to pay the option form fee again.
- Vacant seats will be filled by the category candidates if available else from the candidates wherefrom the seat get reserve using merit and above option form.
- Candidate has to deposit immediately the fee of allotted college (online) and all original documents and their self attached copies.
- Candidate has to report in the college on given date. The admission process will be closed with this process even seat remains vacant. As per the Hon,ble Governor, Govt. of Rajasthan the last date of admission is 31-07-2018.

Change if any will be notified time to time.

JOINT ENTRANCE TEST-2018

ANSWER SHEET, SIDE-I

(USE PROVIDED BLACK BALL POINT PEN ONLY)

ROLL NO. (IN FIGURES)

1	2	3	4	5	6	7	8
---	---	---	---	---	---	---	---

ROLL NO. (IN WORDS)

ONE	TWO	THREE	FOUR	FIVE	SIX	SEVEN	EIGHT
-----	-----	-------	------	------	-----	-------	-------

QUESTION BOOKLET NO.

1	2	3	4	5
---	---	---	---	---

 SERIES

A

INSTRUCTIONS FOR FILLING SIDE II OF ANSWER SHEET (OMR)

Example for filling side II of Answer Sheet

ROLL NO.								Number	Example
1	2	3	4	5	6	7	8	2	2
●	●	●	●	●	●	●	●	●	●
●	●	●	●	●	●	●	●	●	●
●	●	●	●	●	●	●	●	●	●
●	●	●	●	●	●	●	●	●	●
●	●	●	●	●	●	●	●	●	●
●	●	●	●	●	●	●	●	●	●
●	●	●	●	●	●	●	●	●	●
●	●	●	●	●	●	●	●	●	●
●	●	●	●	●	●	●	●	●	●
●	●	●	●	●	●	●	●	●	●

There are 1 to 40 questions of multiple choice for each subject darken only one circle out of four option.

Example

Q. Jaipur is the capital of ?

1. Punjab 2. Uttar Pradesh 3. Gujarat 4. Rajasthan

1	2	3	4
---	---	---	---

Instructions for marking Answers

1. Use provided black ball point pen only for blackening (shading) the circle on side II of the Answer sheet.
2. Blacken the circle completely and uniformly so that the letter/number inside the circle is not visible.
3. Blacken only ONE circle for each answer as shown in the example below.



4. Blacken/Darken the circle with pen in the space provided. Do not make any stray mark on the Answer sheet, or touch pen on any other circle.
5. Rough work **must not be done** on the Answer sheet. Use your test booklet for doing the rough work.
6. Once you darken the circle, you cannot change the answer. Do not use any eraser or fluid.
6. For every correct answer four marks will be awarded.
7. There will be negative marking (one mark will be deducted for every wrong answer).

Name & Signature of the Candidate

**JOINT ENTRANCE TEST-2018
OMR ANSWER SHEET, SIDE-II**
Roll No.

<input type="text"/>							
1	1	1	1	1	1	1	1
2	2	2	2	2	2	2	2
3	3	3	3	3	3	3	3
4	4	4	4	4	4	4	4
5	5	5	5	5	5	5	5
6	6	6	6	6	6	6	6
7	7	7	7	7	7	7	7
8	8	8	8	8	8	8	8
9	9	9	9	9	9	9	9
0	0	0	0	0	0	0	0

CENTRE SEAL

Booklet Series

A
B
C
D

OMR SHEET NO. & BARCODE



1 2 3 4 5 6

SIGNATURE OF CANDIDATE

SIGNATURE OF INVIGILATOR

AGRICULTURE	1	1	2	3	4	9	1	2	3	4	17	1	2	3	4	25	1	2	3	4	33	1	2	3	4
	2	1	2	3	4	10	1	2	3	4	18	1	2	3	4	26	1	2	3	4	34	1	2	3	4
	3	1	2	3	4	11	1	2	3	4	19	1	2	3	4	27	1	2	3	4	35	1	2	3	4
	4	1	2	3	4	12	1	2	3	4	20	1	2	3	4	28	1	2	3	4	36	1	2	3	4
	5	1	2	3	4	13	1	2	3	4	21	1	2	3	4	29	1	2	3	4	37	1	2	3	4
	6	1	2	3	4	14	1	2	3	4	22	1	2	3	4	30	1	2	3	4	38	1	2	3	4
	7	1	2	3	4	15	1	2	3	4	23	1	2	3	4	31	1	2	3	4	39	1	2	3	4
	8	1	2	3	4	16	1	2	3	4	24	1	2	3	4	32	1	2	3	4	40	1	2	3	4
BIOLOGY	1	1	2	3	4	9	1	2	3	4	17	1	2	3	4	25	1	2	3	4	33	1	2	3	4
	2	1	2	3	4	10	1	2	3	4	18	1	2	3	4	26	1	2	3	4	34	1	2	3	4
	3	1	2	3	4	11	1	2	3	4	19	1	2	3	4	27	1	2	3	4	35	1	2	3	4
	4	1	2	3	4	12	1	2	3	4	20	1	2	3	4	28	1	2	3	4	36	1	2	3	4
	5	1	2	3	4	13	1	2	3	4	21	1	2	3	4	29	1	2	3	4	37	1	2	3	4
	6	1	2	3	4	14	1	2	3	4	22	1	2	3	4	30	1	2	3	4	38	1	2	3	4
	7	1	2	3	4	15	1	2	3	4	23	1	2	3	4	31	1	2	3	4	39	1	2	3	4
	8	1	2	3	4	16	1	2	3	4	24	1	2	3	4	32	1	2	3	4	40	1	2	3	4
CHEMISTRY	1	1	2	3	4	9	1	2	3	4	17	1	2	3	4	25	1	2	3	4	33	1	2	3	4
	2	1	2	3	4	10	1	2	3	4	18	1	2	3	4	26	1	2	3	4	34	1	2	3	4
	3	1	2	3	4	11	1	2	3	4	19	1	2	3	4	27	1	2	3	4	35	1	2	3	4
	4	1	2	3	4	12	1	2	3	4	20	1	2	3	4	28	1	2	3	4	36	1	2	3	4
	5	1	2	3	4	13	1	2	3	4	21	1	2	3	4	29	1	2	3	4	37	1	2	3	4
	6	1	2	3	4	14	1	2	3	4	22	1	2	3	4	30	1	2	3	4	38	1	2	3	4
	7	1	2	3	4	15	1	2	3	4	23	1	2	3	4	31	1	2	3	4	39	1	2	3	4
	8	1	2	3	4	16	1	2	3	4	24	1	2	3	4	32	1	2	3	4	40	1	2	3	4
MATHEMATICS	1	1	2	3	4	9	1	2	3	4	17	1	2	3	4	25	1	2	3	4	33	1	2	3	4
	2	1	2	3	4	10	1	2	3	4	18	1	2	3	4	26	1	2	3	4	34	1	2	3	4
	3	1	2	3	4	11	1	2	3	4	19	1	2	3	4	27	1	2	3	4	35	1	2	3	4
	4	1	2	3	4	12	1	2	3	4	20	1	2	3	4	28	1	2	3	4	36	1	2	3	4
	5	1	2	3	4	13	1	2	3	4	21	1	2	3	4	29	1	2	3	4	37	1	2	3	4
	6	1	2	3	4	14	1	2	3	4	22	1	2	3	4	30	1	2	3	4	38	1	2	3	4
	7	1	2	3	4	15	1	2	3	4	23	1	2	3	4	31	1	2	3	4	39	1	2	3	4
	8	1	2	3	4	16	1	2	3	4	24	1	2	3	4	32	1	2	3	4	40	1	2	3	4
PHYSICS	1	1	2	3	4	9	1	2	3	4	17	1	2	3	4	25	1	2	3	4	33	1	2	3	4
	2	1	2	3	4	10	1	2	3	4	18	1	2	3	4	26	1	2	3	4	34	1	2	3	4
	3	1	2	3	4	11	1	2	3	4	19	1	2	3	4	27	1	2	3	4	35	1	2	3	4
	4	1	2	3	4	12	1	2	3	4	20	1	2	3	4	28	1	2	3	4	36	1	2	3	4
	5	1	2	3	4	13	1	2	3	4	21	1	2	3	4	29	1	2	3	4	37	1	2	3	4
	6	1	2	3	4	14	1	2	3	4	22	1	2	3	4	30	1	2	3	4	38	1	2	3	4
	7	1	2	3	4	15	1	2	3	4	23	1	2	3	4	31	1	2	3	4	39	1	2	3	4
	8	1	2	3	4	16	1	2	3	4	24	1	2	3	4	32	1	2	3	4	40	1	2	3	4

IMPORTANT DATES AT A GLANCE

1. Notification : 01-03-2018
2. Opening of Online Application Form : 01-03-2018
3. **Last date** for depositing the online Application Forms fee : **10-04-2018**
4. **Last date** for editing Application Forms : **12-04-2018**
5. Online admit cards available : 14-05-2018
6. **Date of entrance examination** : **20 -05 -2018 (Sunday)**
7. Display of OMR sheets, answer key by : 25-05-2018
8. Last date for objections if any : 27-05-2018
9. Declaration of result & opening of online option form : 05-06-2018
10. **Last date** for depositing the online option form fee : **13 -06 -2018**
11. **Last date** for editing the online option form : **14 -06 -2018**
12. Display of 1st provisional admission list : 18-06-2018
13. Last date for accepting allotment and depositing the fee or submitting request for upward assessment : 21-06-2018
14. Display of 2nd provisional admission list : 24-06-2018
15. Last date for accepting allotment and depositing the fee or submitting request for 2nd upward assessment : 27-06-2018
16. Display of 3rd provisional admission list : 30-06-2018
17. Last date for accepting allotment and depositing fee : 03-07-2018
18. Reporting with original document in respective college : 05-07-2018
- If seats remains vacant**
19. Opening of option form for online spot counseling : 10-07-2018
20. Last date for online option form : 12-07-2018
21. Display of provisional list : 15-07-2018
22. Last date for depositing the online fees : 17-07-2018
23. Reporting in the college : 19-07-2018
24. Display of 2nd provisional list : 22-07-2018
25. Last date for depositing the online fees : 24-07-2018
26. Reporting in the college : 26-07-2018
- If seats remains vacant**
27. On the spot counseling : 30-07-2018
28. Reporting in the college : 31-07-2018
29. Commencement of classes : As per academic calendar

Admission process for 2018-19 will be over by 31st July 2018

Coordinator reserves the right to change the dates

Coordinator
JET/Pre PG 2018