

PROSPECTUS

(2018 – 2019)

**For Admissions to Undergraduate, Masters'
(for bonafide residents of Uttarakhand) &
Ph.D. Programmes**

**GOVIND BALLABH PANT
UNIVERSITY OF AGRICULTURE & TECHNOLOGY,
PANTNAGAR – 263145, U.S. NAGAR
UTTARAKHAND, INDIA**

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APPLICATION FORM AND PROSPECTUS

Please Note: For Undergraduate and Masters' programmes only Bonafide Residents of Uttarakhand are eligible (See Chapter –II (5). In M.Tech. programmes (except Agricultural Engineering programmes) over and above the sanctioned seats, 30 percent of sanctioned seats are allotted to Other State candidates. In Ph.D. programmes (except Ph.D. in Management) over and above the sanctioned seats, 25 percent of sanctioned seats shall be filled from the other State candidates through the Entrance Examination conducted by the University.
Admissions to B.Tech. Programmes is through Joint Entrance Examination not through this Univeristy Entrance Examination.

1. Application Procedure

- (i) Only ONLINE application form procedure is available. To submit application form candidates should log on to the website: www.gbpuat.ac.in
- (ii) **The candidates appearing in the qualifying examination can also apply provided that they must produce original mark-sheet of final year indicating class/division obtained at time of counselling failing which their candidature will not be considered for counselling.**

2. Online filling of Application form

- (a) Online filing of application form for UG, Masters, MCA and Ph.D. : 16-02-2018 to 31-03-2018 Programmes
- (b) Online filing of application form for M.Tech. Programmes and Sponsored candidates for Masters', M.Tech. and Ph.D. : 16-02-2018 to 30-04-2018 programmes (GBPUAT employees and Development Departments of State Govt. are eligible)

3. Last date for receipt of print out of online application form

- (a) UG, Masters', MCA and Ph.D. programmes : 09-04-2018
- (b) M.Tech. programmes and Sponsored candidates for Masters', M.Tech. and Ph.D. programmes : 09-05-2018

4. Application and Examination fee Details

	Amount (Rs.)
For General/OBC	Rs. 1200.00
For SC/ST/PH	Rs. 600.00

5. List of documents to be submitted alongwith the application form

1. Confirmation page print out of application form.
2. Copy of Online Fee Receipt
3. Self attested copy of Category and Weightage Certificate, if eligible
4. Self attested copy of Certificate/Marksheet qualifying examination (appearing in qualifying examination can submit before counselling).
5. Self attested copy of High School Certificate

Documents to be put in an **Envelope of size 12" x 9"** and superscribing "**Application for Undergraduate/Masters'/ MCA/M.Tech./Ph.D.**" so as to reach positively by due date at the following address:

To,

**The Coordinator Admissions
G.B. Pant University of Agriculture & Technology,
Pantnagar – 263145, Distt.- U.S. Nagar (Uttarakhand)**

IMPORTANT INSTRUCTIONS FOR CANDIDATES

1. The application form must be filled up in all respects. Incomplete application is liable to be rejected.
2. (i) Candidates claiming Rural weightage of Uttarakhand (Certificate No. 6)/Sports weightage (Certificate No. 8) or Agriculturalist weightage (Certificate No. 9) or NCC weightage certificate are required to submit self attested photocopy of relevant certificate along-with the print out of online application form.
(ii) Candidate should attach the required documents in support of his application. The document/certificate once submitted with the application shall not be returned. No document/certificate/information furnished after the closing date shall be entertained except certificate of Bonafide Residents of Uttarakhand, O.B.C. certificate and the marks-sheet of the qualifying examination.
3. If the candidate provides any wrong information in the application form, his/her application shall be summarily rejected. If any candidate secures admission in the University by providing wrong information his/her admission shall be cancelled on detection of the facts at the cost and risk of the candidate.
4. All admissions shall be provisional in the first instance and the Vice-Chancellor of the University reserves the right to cancel the admission granted to a candidate without assigning any reason.
5. If a candidate who is not eligible to appear in the entrance examination does so, he/she will not have any claim whatsoever for admission and the examination fee deposited by him/her shall not be returned.
6. Ph.D. candidates must mention the Code of the Ph.D. programme to which the admission is being sought in the prescribed column, failing which any programme could be allotted to him/her according to the eligibility and he/she will have no claim for changing the programme subsequently.
7. The candidates are advised in their own interest to fill online application form and submit the print out of online application form well in time. The last date for the receipt of print out of online application form is **09.04.2018**. The application delivered either by post or personally after **09.04.2018** shall not be entertained under any circumstances.
8. The candidate should fully ensure before despatching the printout of online application form that he/she fulfills the eligibility requirements for admission/appearing in the entrance examination. The fee once paid shall not be refunded in the event of rejection of the application. Only eligible candidates will be considered for admission.
9. Candidates are advised in their own interest, to send the printout of online application form and required documents under registered/speed post.
10. It may be carefully noted that the candidate who has been punished at any time in his/her earlier academic career for having taken part in the activities of indiscipline or use of unfair means in any of the examination shall not be eligible for admission. In case, he/she secures admission by concealing any of the facts on these points or through oversight or clerical error on the part of Coordinator Admission's office, the admission is liable to be cancelled as and when it is detected.
11. The records of the Entrance Examination shall be preserved only for a period of six months.
12. In all matters relating to admission, decision of the Admissions Committee of the University shall be final.
13. A candidate found using unfair means in the Entrance Examination will invite cancellation of his/her result, non-refund of examination fee and punishment as may be deemed proper by the Admissions Committee of the University.
14. University has all the rights to change the centre of examination.
15. The candidate shall have to deposit the total amount of fee prescribed by the University before issuing the I.D. number.

16. The candidate shall have to complete the registration formalities within one week of the commencement of registration. Late reporting will not be accepted for admission in any circumstances.
17. In no circumstances candidate admitted in 1st year of various degree programmes will be permitted for registration after the appointed date of commencement of registration.
18. The second counselling shall be held after one week of the date of the first registration. Information pertaining to the second counselling will be uploaded at University website. Candidates are advised to see the website regularly.
19. The candidate admitted after the second counselling shall complete their registration formalities by the last date of the registration decided by the University.
20. The seats remained vacant in the first semester in Ph.D. programmes shall be filled in the II semester 2018-19.
21. There shall be verification of the fingerprints of the admitting candidates.
 - (i) The thumb impression of the left hand in application form.
 - (ii) At the time of Entrance Examination.
 - (iii) At the time of the counselling.
22. The candidates will not be allowed to carry question booklets alongwith them after the examination.
23. No question booklet and Answer key will be supplied to the candidates.

अभ्यर्थियों के लिए महत्वपूर्ण निर्देश

1. अभ्यर्थी इस विवरण पत्रिका में दिये गये निर्देश सावधानी पूर्वक पढ़ें। आवेदन-पत्र सब प्रकार से पूर्ण होना चाहिए। अपूर्ण अथवा त्रुटिपूर्ण आवेदन-पत्र निरस्त किया जा सकता है।
2. (i) यदि कोई अभ्यर्थी प्रवेश में उत्तराखण्ड के ग्रामीण क्षेत्र के लिये अधिमान (प्रमाण पत्र सं० 6)/खेलकूद के लिये अधिमान (प्रमाण पत्र सं० 8)/एग्रीकल्चरिस्ट के लिए अधिमान (प्रमाण पत्र सं० 9)/एन.सी.सी. के लिए अधिमान (प्रमाण पत्र) का लाभ लेना चाहता है तो ऑन लाइन आवेदन-पत्र की हार्ड कापी के साथ प्रमाण पत्र की सत्यापित छाया प्रति (निर्धारित प्रारूप पर) संलग्न करे।
(ii) आवेदन पत्र के साथ सभी आवश्यक प्रमाण-पत्र संलग्न होने चाहिए। आवेदन-पत्र के साथ जमा किये गये प्रमाण-पत्र लौटाये नहीं जायेंगे। स्थायी निवास प्रमाण-पत्र, पात्रता परीक्षा की अंकतालिका यदि अभ्यर्थी इसी वर्ष परीक्षा में बैठ रहा हो तथा ओबीसी प्रमाण पत्र को छोड़कर कोई भी प्रमाण-पत्र आवेदन पत्र जमा करने की तिथि के पश्चात स्वीकार नहीं किये जायेगे।
3. यदि कोई अभ्यर्थी अपने आवेदन-पत्र में गलत सूचना देता है तो उसका आवेदन-पत्र निरस्त कर दिया जायेगा और यदि कोई अभ्यर्थी गलत सूचना के आधार पर प्रवेश पा जाता है तो पता लगने पर उसका प्रवेश निरस्त कर दिया जायेगा जिसके लिए वह स्वयं उत्तरदायी होगा।
4. प्रथम चरण में सभी प्रवेश तदर्थ होते हैं और विश्वविद्यालय के कुलपति को यह अधिकार है कि वह किसी भी अभ्यर्थी का प्रवेश बिना कारण बताये निरस्त कर सकते हैं।
5. यदि कोई अभ्यर्थी प्रवेश परीक्षा के लिए अर्ह नहीं है परन्तु फिर भी वह प्रवेश परीक्षा में सम्मिलित होता है तो उसका प्रवेश हेतु कोई दावा मान्य नहीं होगा तथा उनके द्वारा जमा किया गया आवेदन शुल्क वापस नहीं किया जायेगा।
6. पीएच.डी. पाठ्यक्रम हेतु आवेदन-पत्र के निर्धारित खाने में पाठ्यक्रम का कोड लिखना अनिवार्य है अन्यथा शैक्षिक योग्यता के अनुसार किसी भी पाठ्यक्रम का प्रश्न पत्र आवंटित किया जा सकता है जोकि बाद में बदला नहीं जा सकता।

7. अभ्यर्थियों को सलाह दी जाती है कि वे अपने आनलाइन आवेदन-पत्र समय से भेजें। आनं लाइन आवेदन-पत्र की हार्ड कापी जमा करने की अन्तिम तिथि **09.04.2018** है। अन्तिम तिथि **09.04.2018** के उपरान्त डाक या व्यक्तिगत रूप से प्राप्त होने वाले आवेदन-पत्र को किसी भी स्थिति में स्वीकार नहीं किया जायेगा।
8. आनलाइन आवेदन-पत्र भेजने से पूर्व अभ्यर्थी प्रवेश परीक्षा हेतु मांगी गई न्यूनतम शैक्षिक योग्यता सुनिश्चित कर लें क्योंकि एक बार आवेदन-पत्र निरस्त होने की दशा में जमा किया गया परीक्षा शुल्क वापस नहीं होगा। केवल अर्ह योग्यता वाले अभ्यर्थियों के प्रवेश दिये जाने पर ही विचार किया जायेगा।
9. अभ्यर्थियों को सलाह दी जाती है कि वे अपने आनलाइन आवेदन-पत्र की प्रति एवं सम्बन्धित अभिलेख पंजीकृत/स्पीड डाक द्वारा ही भेजें।
10. कोई भी अभ्यर्थी जो अपने पूर्व अध्ययन काल में छात्र के रूप में किसी भी प्रकार की अनुशासनहीनता अथवा परीक्षा में अनुचित साधनों का प्रयोग करते हुए संस्थाओं से दंडित हुआ है तो वह प्रवेश के योग्य नहीं है। यदि कोई अभ्यर्थी उक्त तथ्यों को छिपाकर या संयोजक (प्रवेश) कार्यालय की त्रुटि से प्रवेश पा जाता है तो पता लगने पर उसका प्रवेश निरस्त कर दिया जायेगा।
11. प्रवेश परीक्षा संबंधी अभिलेख प्रवेश अनुभाग में केवल छः महीने के लिए ही सुरक्षित रखे जायेंगे।
12. प्रवेश के मामलों में अन्तिम निर्णय का अधिकार विश्वविद्यालय प्रवेश समिति को ही है।
13. प्रवेश परीक्षा में अभ्यर्थी को अनुचित साधनों का प्रयोग का दोषी पाये जाने पर अभ्यर्थी का परीक्षाफल निरस्त कर दिया जायेगा और परीक्षा शुल्क भी नहीं लौटाया जायेगा। इसके अतिरिक्त विश्वविद्यालय की प्रवेश समिति को अपने विवेकानुसार अभ्यर्थी को कोई अन्य दण्ड देने का भी अधिकार होगा।
14. परीक्षा केन्द्र को बदलने के सभी अधिकार विश्वविद्यालय के होंगे।
15. अभ्यर्थी को विश्वविद्यालय का षटमास का पूरा शिक्षण शुल्क नामांकन संख्या प्राप्त करने से पूर्व जमा करना होगा।
16. अभ्यर्थी को पंजीकरण के तिथि से एक सप्ताह के अन्दर सभी पंजीकरण की प्रक्रियायें पूर्ण करनी होंगी। किसी भी स्थिति में देरे से आने वाले अभ्यर्थी को पंजीकरण की अनुमति नहीं दी जायेगी।
17. प्रथम काउन्सिलिंग के बाद प्रवेश पाने वाले अभ्यर्थियों का पंजीकरण किसी भी परिस्थित में पंजीकरण प्रारम्भ होने की तिथि के एक सप्ताह के बाद अनुमन्य नहीं होगा।
18. प्रथम पंजीकरण के उपरान्त रिक्त सीटों के लिये द्वितीय काउन्सिलिंग प्रथम काउन्सिलिंग की तिथि से एक सप्ताह के बाद प्रारम्भ की जायेगी। जिसकी सूचना विश्वविद्यालय वेबसाइट पर डाल दी जायेगी। अभ्यर्थियों से अनुरोध है कि उक्त सूचना के लिये विश्वविद्यालय वेबसाइट को निरन्तर अवलोकन करें।
19. जिन अभ्यर्थियों का प्रवेश द्वितीय काउन्सिलिंग के तहत होगा वे अपनी पंजीकरण प्रक्रिया विश्वविद्यालय द्वारा निर्धारित पंजीकरण की तिथि के अनुसार करेंगे।
20. परास्नातकोत्तर पाठ्यक्रम के लिये प्रथम काउन्सिलिंग के उपरान्त रिक्त सीटों की प्रवेश प्रक्रिया द्वितीय षटमास 2018-19 में की जायेगी।
21. प्रवेशार्थियों द्वारा सत्यापन हेतु अंगूठे के निशान निम्न प्रकार लिये जायेंगे।
 - (1) आवेदन पत्र में बाये हाथ के अंगूठे का निशान।
 - (2) प्रवेश परीक्षा देते समय।
 - (3) काउन्सिलिंग के समय।
22. परीक्षा के उपरान्त अभ्यर्थियों को प्रश्न पत्र पुस्तिका अपने साथ ले जाने की अनुमति नहीं होगी।
23. प्रश्न पत्र पुस्तिका एवं उत्तर कुंजी की प्रति किसी भी अभ्यर्थी को उपलब्ध नहीं कराई जायेगी।

INSTRUCTIONS TO CANDIDATES FOR FILLING OF ONLINE APPLICATION

- If Candidates have a valid personal e-mail ID, they are requested to enter it in the Application Form. The Registration number, password and any other important communication will be sent on the same registered e-mail ID of candidate (**also check mail in spam box**). The candidates are requested to check regularly their e-mail for any communication from GBPUAT. The candidate should not disclose password to any other candidate/person.
- **Please note that the Admit Card for written test will not be sent by post. Admit card has to be downloaded by the candidate himself/herself.**
- Candidate should take utmost care to furnish the correct details while filling in online application form. Any mistake committed by the candidate shall be his/her sole responsibility.
- The candidate should ensure the completion of all Steps of the registration process and deposition of examination fee as mentioned in the instructions by the stipulated date.
- Application once submitted will not be allowed to be withdrawn and fee once paid will not be refunded in any case, neither it shall be held reserved for any other examination or selection process in future.

अभ्यर्थियों द्वारा ऑन लाइन आवेदन पत्र भरने हेतु निर्देश

- यदि अभ्यर्थियों का उपयुक्त व्यक्तिगत ई-मेल आईडी है, तो इसे आवेदन पत्र में अंकित करें। लिखित परीक्षा हेतु पंजीकरण संख्या, पासवर्ड एवं कोई महत्वपूर्ण सूचना अभ्यर्थी के पंजीकृत ई-मेल आईडी पर प्रेषित की जायेगी (स्पाम बॉक्स के मेल भी देखें)। अभ्यर्थी गोविन्द बल्लभ पंत कृषि एवं प्रौद्योगिक विश्वविद्यालय से सम्बन्धित किसी भी सूचना हेतु अपने ई-मेल नियमित रूप से चैक करें। अभ्यर्थी अपना पासवर्ड किसी अन्य अभ्यर्थी/व्यक्ति को न बताएँ।
- कृपया नोट करें कि लिखित परीक्षा हेतु प्रवेश पत्र डाक द्वारा प्रेषित नहीं किया जाएगा। प्रवेश पत्र अभ्यर्थी स्वयं विश्वविद्यालय की वेब साइट से डाउनलोड करें।
- ऑन लाइन आवेदन पत्र भरते समय अभ्यर्थी सही विवरण देने हेतु विशेष सावधानी बरतें। अभ्यर्थी द्वारा की गई किसी भी त्रुटि के लिये वे स्वयं उत्तरदायी होंगे।
- अभ्यर्थी निर्देशों में दी गई पंजीकरण प्रक्रिया व परीक्षा फीस जमा करने सम्बन्धी समस्त कार्यवाही निर्धारित तिथि तक पूर्ण करना सुनिश्चित करें।
- एक बार जमा किये गए आवेदन पत्र वापस नहीं किये जायेंगे तथा जमा की गई फीस किसी भी स्थिति में न तो वापस की जायेगी और न ही भविष्य में आयोजित होने वाली किसी भी परीक्षा या चयन प्रक्रिया हेतु सुरक्षित रखी जायेगी।

1. Examination appearing for – Select any one option
2. The candidate is required to write his/her name in the same order as entered in his/her qualifying examination Marks-sheet /Certificate.
3. Aadhaar Number or Aadhaar Enrolment Number
4. Write Father's Name (do not use any prefix such as Shri/Dr./Mr.)
5. Write Mother's Name (do not use any prefix such as Smt./Dr./Mrs.)
6. Date of Birth must be entered in Christian era as recorded in High School Certificate.
7. Gender - Select any one option
8. Place Option(s) – Select two options for UG; any one option for Masters'.
9. Bonafide Resident of Uttarakhand – Select: Yes/No
10. Blood Group – Select any one option; RH Factor – Select: RH+/RH-
11. Son/Daughter/Spouse of regular employee of this University - Select: Yes /No
12. Group of Paper/Subject group – Select any one option.

13. Qualifying Examination - Select: Passed/Appearing
14. Have you ever been student of GBPUA&T – Select: Yes/No
15. Category – Select any one option; Sub Category – Select: PH/Not PH
16. Religion - Select any one option
17. Nationality – Select: Indian/ Other
18. Category Code – Select any one option
19. Mobile Number – Fill the mobile No. (10 digits); Landline Number – Fill the STD Code (e.g. 05944) Landline No.
20. Email address/Confirm Email Address: – Fill the Email address
21. Password/Confirm Password: - Fill the password.
22. Submit Fee
23. Fill up the Qualification Details.
24. Fill up the Correspondence Address Details.
25. Fill up the Permanent Address Details.
26. Upload the Photograph Image,
27. Upload the Signature Image
28. Upload the Left Hand Thumb Impression Image
29. Print Confirmation Page

The candidate can submit fee in the following ways:

Debit/Credit Card/Internet Banking: The Applicant can submit fee by Online, the Applicant can pay fee via, **Debit Card/Credit Card/Internet Banking**. Applicants are advised to keep with them the copy of the “**Online Fee Receipt**” as a token of remittance of fee for future reference.

On successful registration of on-line application, candidates are advised not to attempt for registration for the same Course again since multiple registration numbers and passwords may create problem for candidates in future. In case of multiple registrations for the same Course, the candidature is liable for cancellation/rejection without any notice/intimation to the candidate.

30. Upload the Photograph, Signature and Left Hand Thumb Impression Image.

Instructions regarding scanning of PHOTOGRAPH, SIGNATURE and LEFT HAND THUMB IMPRESSION: Scanned (digital) image of his/her photograph, signature and thumb impression should be uploaded as per the specifications given below:

i. Photograph Image:

- Photograph must be a recent passport style colour picture.
- Make sure that the picture is in colour, taken against a light-coloured, preferably white, background.
- Look straight at the camera with a relaxed face.
- If the picture is taken on a sunny day, have the sun behind you, or place yourself in the shade, so that you are not squinting and there are no harsh shadows.
- If you have to use flash, ensure there's no “red-eye”.
- If you wear glasses make sure that there are no reflections and your eyes can be clearly seen.
- Caps, hats and dark glasses are not acceptable. Religious headwear is allowed but it must not cover your face.
- Dimensions 200X230 pixels (preferred).
- Size of file should be between 20kb-50kb.
- Ensure that the size of the scanned image is not more than 50kb. If the size of the file is more than 50kb, then adjust the settings of the scanner OR adjust the size of PHOTO in Paint or any other Picture Tools.

ii. Signature image:

- The applicant has to put signature on white paper with Black/Blue ink pen.
- The signature must be signed only by the applicant and not by any other person.
- The signature will be used to put on admit card and wherever necessary.
- If the Applicant's signature on the answer script, at the time of the examination does not match the signature on the admit card, the applicant will be disqualified.
- Please scan the signature area only and not the entire page.
- Dimensions 140X60 pixels (preferred).
- Size of file should be between 10kb – 20kb.
- Ensure that the size of the scanned image is not more than 20kb.

iii. Left Hand Thumb Impression Image:

- The applicant has to put left hand thumb impression on white paper.
- After Scanning ensure that the size of the scanned image is not more than 20kb.
- Dimensions 140X60 pixels (preferred).
- Size of file should be between 10kb – 20kb.

If the file size and format of Photograph, Signature and Thumb do not match with prescribed size and format or not properly loaded, an error message will be displayed. In such case the candidate has to rectify the size and reload it.

List of documents to be submitted alongwith the application form:

1. Confirmation page print out of application form.
2. Copy of Online fee Receipt.
3. Self attested copy of Category and Weightage Certificate, if eligible
4. Self attested copy of Certificate/Marksheet qualifying examination (appearing in qualifying examination can submit before counselling).
5. Self attested copy of High School Certificate

Documents to be put in an **Envelope of size 12” x 9”** and superscribing “**Application for Undergraduate/Masters’/ MCA/M.Tech./Ph.D.** so as to reach positively by due date at the following address:

To,
**The Coordinator Admissions
G.B. Pant University of Agriculture & Technology,
Pantnagar – 263145, Distt.- U.S. Nagar (Uttarakhand)**

The candidate must retain a photocopy of his/her filled in Confirmation Page and fee receipt for future correspondence.

THIS COMPLETES THE PROCESS OF ONLINE FILLING OF APPLICATION FORM AND SUBMISSION TO COORDINATOR ADMISSIONS.

CHAPTER-I

1. The Govind Ballabh Pant University of Agriculture & Technology was established in 1960 by an Act of the State Legislature of Uttar Pradesh, enacted in 1958. The objectives of the University, as outlined in the Act are: -
 - (a) making provision for the education of rural people of the State in different branches of study, particularly agriculture, rural industry, business and other allied subjects;
 - (b) furthering the prosecution of research, particularly in agriculture and other allied sciences; and
 - (c) undertaking field and extension programmes.
2. This is purely a residential University. All students should reside in the hostels in main campus.
3. The University ensures individual attention to each and every student through its advisory system. The advisory system is supplemented by a system of student counsellors. For each group of 15 to 20 first-degree students, a teacher advisor is appointed. At postgraduate level, for each student, an advisory committee, consisting of 3-4 teachers is appointed. The teacher-advisor guides, supervises and monitors the academic performance of his/her advisees besides helping them in their personal problems. He/She also maintains a close contact with parent/guardians of his/her advisees.
4. The structure and objective envisaged for the University represent a departure from the system of education prevalent in the country, which had essentially scholastic orientation. It was meant to function primarily as an instrument of development by integrating research, teaching and extension and assuming specific responsibility for introducing improvements, wherever necessary, in every aspect of rural life. The imperative is reflected in both the character of the faculties and departments as well as in the establishment of Directorates of Experiment Station and Extension Education, which are expected to take a holistic view of development and ensure not only inter-disciplinary research but also synthesize ideas emanating from different Colleges.
5. The diverse activities of the University are reflected in the departmental organization of various Colleges. Details of Teaching faculty can be seen on the website of the University.

COLLEGE OF AGRICULTURE

Deptt. of Agricultural Communication
Deptt. of Agricultural Economics
Deptt. of Agrometeorology
Deptt. of Agronomy
Deptt. of Entomology
Deptt. of Food Science & Technology
Deptt. of Genetics and Plant Breeding
Deptt. of Horticulture
Deptt. of Plant Pathology
Deptt. of Soil Science
Deptt. of Vegetable Science

COLLEGE OF BASIC SCIENCE & HUMANITIES

Deptt. of Biochemistry
Deptt. of Biological Sciences
Deptt. of Chemistry
Deptt. of Environmental Sciences
Deptt. of Mathematics, Statistics & Computer Sc.
Deptt. of Microbiology
Deptt. of Molecular Biology & Genetic Engg.
Deptt. of Physics
Deptt. of Plant Physiology
Deptt. of Social Sc. & Humanities

COLLEGE OF VETERINARY & ANIMAL SCIENCES

Deptt. of Veterinary Anatomy
Deptt. of Animal Nutrition
Deptt. of Animal Genetics & Breeding
Deptt. of Veterinary Gynaecology & Obstetrics
Deptt. of Livestock Production Management
Deptt. of Livestock Products Technology
Deptt. of Veterinary Medicine
Deptt. of Veterinary Microbiology
Deptt. of Veterinary Parasitology
Deptt. of Veterinary Pathology
Deptt. of Veterinary Pharmacology and Toxicology
Deptt. of Veterinary Physiology & Biochemistry
Deptt. of Veterinary & Animal Husbandry Extension Education
Deptt. of Veterinary Public Health & Epidemiology
Deptt. of Veterinary Surgery and Radiology

COLLEGE OF TECHNOLOGY

Deptt. of Civil Engineering
Deptt. of Computer Engineering
Deptt. of Information Technology
Deptt. of Electrical Engineering
Deptt. of Electronics and Communication Engineering
Deptt. of Farm Machinery and Power Engineering

Deptt. of Irrigation and Drainage Engineering
Deptt. of Mechanical Engineering
Deptt. of Post Harvest, Process and Food Engineering
Deptt. of Industrial and Production Engineering
Deptt. of Soil & Water Conservation Engineering

COLLEGE OF FISHERIES

Deptt. of Aquaculture
Deptt. of Fisheries Resource Management
Deptt. of Aquatic Environment Management
Deptt. of Fish Harvest & Processing Technology
Deptt. of Fisheries Extension Education

COLLEGE OF AGRI BUSINESS MANAGEMENT

Deptt. of Agribusiness Economics & Policy
Deptt. of Financial Management
Deptt. of Human Resource & Personnel Management
Deptt. of Marketing Management

Deptt. of Production Management

Centers

Business Management Clinic
Information Technology Management
Management Development Programme
Placement and Counselling

COLLEGE OF HOME SCIENCE

Deptt. of Human Development & Family Studies
Deptt. of Clothing and Textiles
Deptt. of Family Resource Management
Deptt. of Foods and Nutrition
Deptt. of Home Science Extension

COLLEGE OF POST GRADUATE STUDIES

The College consists of 62 departments. 67 and 53 Masters and Ph.D. degree programmes respectively are offered by these departments.

6. To support the functions of various departments, the supportive services comprises of Communication Centre, Computer Centre, Radiation and Isotopic Tracers Laboratory, Electron Microscopic Laboratory, Veterinary Clinics, Plant Clinics, Seed Testing Laboratory, ARIS Cell, Environmentally Controlled Poly Carbonate Chamber, Green House Gases Monitoring Centre, Seismological Lab., Agricultural Information Centre, the Research Station, University Farm and Library.

7. DEPARTMENT OF STUDENT WELFARE

The Department of Student Welfare provides ample opportunities and facilities for the all round development of personality and leadership qualities to the students. Special emphasis, however, is laid on discipline, besides higher standard of academic performance. Students participate effectively in the management of hostels, food services, games & sports, cultural and literary activities. Professional societies of every colleges function under the guidance of Staff Counsellor. It coordinates activities and provides facilities as well as services as under:-

(A) Extra-Curricular Activities

University as well as College level extra-curricular activities such as literary, cultural, social activities and N.C.C. etc. are organized quite oftenly through 08 professional societies besides hostel level activities. An elegant university auditorium with 900 seating capacity, two mini auditoria, college halls, musical instruments, double film projector and audio-visual aids are available for the organization of various events viz. debates, elocution's, arts and crafts, music, dance, folk songs and drama besides contests, professional competitions and personality development activities.

(B) Games and Sports

More than 16 games & sports activities are organized in the university through different clubs. There are separate staff counsellors for each games and sports for boys and girls. The University provides sufficient sports material to all the hostels as well as University level teams. There exists sufficient numbers of play grounds for sports and games in addition to full fledged stadium, adequately equipped gymnasium and physical fitness centre for athletic.

(C) Liberal Education

The Liberal Education programme coordinated by the Department of Student Welfare which attempts to provide a holistic and more creative dimension to the student's personality development. The Liberal Education, while inculcating social, cultural, spiritual, ethical and aesthetics values amongst students, it provides them ample opportunity to learn various provincial and international languages, art, cultures, yoga's etc. In addition to students, campus inmates also participate in the Liberal Education programmes.

This is basically a certificate course, absolutely voluntary and having no bearing on the Overall Grade Point Average of the students.

(D) Hostels

All students of the University are required to reside in hostels. There are 23 hostels including 10 hostels for girl's students and one for married students with separate arrangements for post-graduate and undergraduate students. There is a common room facility in each hostel for entertainment, indoor games for the hostel inmates and a small library having selected books, magazines and newspaper etc. In most of the hostels, courts for volleyball, badminton, basketball and table tennis are available. The hostel cafeteria is equipped with refrigerator, R.O. system, water cooler and utensils in adequate quantity. Each hostel cafeteria is run and managed by the students on cooperative basis. The students are required to vacate the hostel rooms in the summer vacation in order to facilitate annual repairs and white washing etc. All students residing in the hostel are to abide by hostel and cafeteria regulations/rules. Every Hostel has one landline telephone with incoming facility. A motor vehicle is provided to facilitate the student's activity and also taking students for medical aid in case of any emergency.

The students are not permitted to keep firearms, motorized vehicles, record players and tape recorders in the hostel or carry with them in the campus. They are also advised not to keep jewellery, camera and heavy cash with them in the hostel. During tournaments and sports competitions, the students are expected to be in the proper attire.

In case, a student indulges himself/herself in the acts of indiscipline, he/she likely to be removed from the hostel and they have to make own arrangements outside the campus at their own risk and cost.

(E) Grievances Redressal Registry: The University has established a Registry for redressal of grievances of the students and DSW is the Officer-In-Charge of that Registry. The aggrieved students of the University may register complaints in Registry Cell of Dean Student Welfare Office.

(F) Financial Aid/Bursaries/Scholarships

(i) Ph.D. Programmes: Two University fellowships are awarded @3000/- per month on the basis of merit to the eligible students admitted in a major (discipline) for a period of 36 months. However, in case of sanctioned fellowships in a department remain unutilized due to non-availability of students in the Major, same fellowship may be transferred to the students of other Majors.

(ii) Masters' Programmes: Master's degree (except self-financing programmes) students upto 50% of the total in respect of each Majors are awarded Graduate Research/Teaching Assistantship as per regulations on the subject. However, the value of Assistantship will be of Rs. 2000/- per month for the student who stands first in the merit and for the rest the value of the assistantship shall be Rs.900/- per month in each degree programme. GATE fellowships are provided to GATE qualified M.Tech. students for a period of 24 months.

(iii) Exemption in tuition fee: The exemption in tuition fee is awarded to the wards (sons/daughters/spouses) of regular employees of the University as per rules.

(iv) Under Graduate Programmes: financial assistance provided are provided by the University to the Undergraduate student as per the details given below:

Sl.	Name	Value	Remarks
1.	University Merit Scholarship	Rs. 800/- per month	Awarded to the best three students in each degree programme in each batch.
2.	Free ship in Tuition fee		Awarded to 25% undergraduate students on rolls of the University on the basis of merit-cum-means as per prescribed rules.
3.	Sports Scholarship	Rs.800/- per month	Awarded to the best six all round three sportsmen and three sports women as per prescribed rules.

In addition, following scholarships and financial assistance are also available from outside agencies:

1. Merit-cum-Means Scholarship (ICAR).
2. Backward Class Scholarship.
3. S.C. and S.T. Scholarship.
4. Scholarship for Nominees of different States.
5. P.P.I.C. Scholarship Gurgaon.
6. Nepal Aid Fund.
7. National Talent Scholarship (ICAR)
8. ICAR Sr./Jr. Fellowship.
9. UGC Sr./Jr. Fellowship.
10. CSIR Sr./Jr. Fellowship.
11. Indian Oil Scholarship.
12. ONGC Scholarship.
13. NCERT Scholarship.
14. Shamji Memorial Trust Scholarship.
15. Uttarakhand Krishi Utpadan Mandi Parishad Scholarship
16. S.J. Jindal Trust Scholarship
17. Major H.S. Sandhu Scholarship.
18. Mata Raj Karni Scholarship for Scheduled/ Backward Castes.
19. I.C.A.R. Scholarships for Foreign Students under various cultural exchange programmes.
20. Indian Herbs Scholarship.
21. Monsanto Scholarship
22. Sh. Satguru Dayanand Memorial Scholarship
23. Smt. Uma Gupta Fellowship
24. S.K. Mukherjee Scholarship.
25. GATE Fellowship
26. Bayers Fellowship
27. Priyank Pathak Scholarship
28. Bharti Scholarship
29. Amit Gautam Award
30. S.N. Nayar Memorial Scholarship
31. INSPIRE Fellowship.
32. UGC Scholarship for M.Tech.
33. DOW Agro Sciences Scholarship.
34. Scholarship for Physically Handicapped.
35. Dr. Dhyan Pal Singh Memorial Award
36. Merit Scholarships to the students of Agricultural Engineering.
37. Lt. Shri Varun Panwar Memorial Award
38. Dr. K.C. Sharma Fellowship
39. Dhanuka Agri. Tech. Fellowship

(G) Medi-claim Facilities

The University has implemented cashless Medi-claim policy for the students from the academic year 2007-2008. The Medi-claim fees, as prescribed by the University, is payable by the students at the beginning of an academic year. Payment of bills for the treatment of the students is paid as per insurance policy and cashless treatment through paneled hospitals is also being provided to the students.

8. PLACEMENT & COUNSELLING

The University imparts job-oriented professional education in the field of Agriculture, Animal Science, Veterinary Science, Home Science, Forestry, Fisheries, Engineering, Management and Basic Sciences. The duty of the University towards its students does not end here, but also includes finding suitable employment for its alumni, so that their training and abilities are used for the benefit of the nation. In order to achieve this object the University has setup a full-fledged Directorate of Placement and Counselling, which is a unique feature of the University.

9. UNIVERSITY LIBRARY

University Library is a knowledge hub of agricultural education and research of the highest quality providing comprehensive access to documents of diverse disciplines Library has a remarkable infrastructure and great ambiance in the reading and reference areas with a seating capacity of 500 readers. Library has a collection of approximately 4.2 Lac documents and subscribing to 300 periodicals in print and more than 7000 online journals and e-books series. To foster a vibrant community of the University Local Area Networking has been enhanced to fast network with Cat-6 UTP cable and gigabit switches. The CCTV has been installed on the first floor for surveillance and improving the security of the students' property counter. The existing infrastructure of the library is

being upgraded to Smart Library having Kiosk based self checking/check out system, security gate, book drop facilities, SMS alert for overdue books, faster inventory management and Smart Cards for quick and efficient loans. The Library is member of Consortium for e-Resources in Agriculture (Ce-RA) maintained by ICAR, New Delhi and INDEST-AICTE Consortium maintained by IIT, New Delhi to access full-text online journals provided by group of reputed publishers. The In-house activities of the library are being managed by KOHA (open access software). Library has its own web page through which the users can avail its digital services. Library is also maintaining KRISHIKOSH the Institutional Repository having access to online Ph.D. thesis submitted by the students of the University.

10. MEDICAL HEALTH SERVICES

(a) Outdoor ward facilities: The University hospital has following outdoor facilities:

1. **Medical Officers**
2. **Dental Surgeon**
3. **Eye Surgeon**
4. **Lady Medical Officer**
5. **Orthopedic Surgeon (Monday Only)**

(b) Indoor ward facilities: The University hospital has indoor facilities on the male as well as female wings where the University students are kept under observation for a short period. Those need prolong hospitalization are referred and shifted to Sushila Tewari Hospital, Haldwani (Nainital) and to hospitals providing care through insurance agency whose list is provided by the Dean Student Welfare for needful treatment as per University rules. Emergency services are available round the clock and doctors are on call duty & remain present at their residence.

(c) Investigation facilities: The facilities of limited pathological investigation as well as Plain X-ray are available at the University hospital/College of Veterinary and Animal Sciences.

(d) Ambulance facilities: Facilities of ambulance is also available for transportation of seriously ill students from their hostel to the Hospital and on the request of Warden concerned for transportation to an outside hospital, if necessary.

(e) Prophylactic Measures: Immunization and vaccinations are performed every Wednesday and Friday.

CHAPTER – II

ADMISSION CRITERIA AND ENTRANCE EXAMINATION

1. **ADMISSION TO THE UNIVERSITY IMPLIES ACCEPTANCE WITHOUT ANY MODIFICATION BY THE CANDIDATE AND HIS/HER PARENTS/GUARDIANS OF ALL PROVISIONS GIVEN IN THE UNIVERSITY ACT, STATUTES, REGULATIONS AND ADMISSION POLICY AND CHANGES THAT ARE MADE FROM TIME TO TIME THEREIN.**
2. **THE STUDENTS WHO HAVE BEEN PERMANENTLY DROPPED OR TEMPORARILY DISMISSED FROM THIS UNIVERSITY EITHER ON ACCOUNT OF ACTS OF INDISCIPLINE, OR THOSE WHO HAVE BEEN DEBARRED FROM SEEKING ADMISSION FROM THIS UNIVERSITY SHALL NOT BE ALLOWED TO APPEAR IN THE ENTRANCE EXAMINATION, OR SEEK ADMISSION AS A SPONSORED/ NOMINATED CANDIDATE. THE STUDENTS WHO ARE/WERE DROPPED FROM A DEGREE PROGRAMME OF THE UNIVERSITY ON ACCOUNT OF POOR ACADEMIC PERFORMANCE SHALL BE ALLOWED TO TAKE ADMISSION AFRESH IN OTHER DEGREE PROGRAMMES BY CLEARING THE ENTRANCE EXAMINATION AS IN CASE OF OTHERS. HOWEVER, THEY WILL NOT BE ALLOWED TO TAKE ADMISSION IN THE SAME PROGRAMME. IN CASE THEY ARE AGAIN DROPPED ON ACCOUNT OF POOR ACADEMIC PERFORMANCE THEY WILL NOT BE ALLOWED TO TAKE ADMISSION IN ANY PROGRAMME OF THE UNIVERSITY IN FUTURE.**
3. **IF ANY DOCUMENT SUBMITTED BY THE CANDIDATE IS FOUND TO BE FALSE AT ANY STAGE DURING HIS/HER STAY IN THE UNIVERSITY, HIS/HER ADMISSION WILL BE CANCELLED.**
4. **THE INFORMATION INDICATED IN THIS PROSPECTUS ARE ONLY FOR GENERAL GUIDANCE AND CAN BE MODIFIED/CHANGED FROM TIME TO TIME BY THE BOARD OF MANAGEMENT/ ACADEMIC COUNCIL OF THE UNIVERSITY.**
5. All admissions shall be made strictly on merit as determined on the basis of marks obtained by the candidates in the Entrance Examination to be conducted by University, **except the following:**
 - (a) Admissions to **B.Tech.** Programmes shall be made by the University on the basis of merit of **Joint Entrance Examination conducted by CBSE, New Delhi.**
 - (b) Admissions to Master's programme in **Molecular Biology and Biotechnology** shall be made through the entrance examination conducted by **J.N.U., New Delhi.** For application forms and other details candidates may contact **J.N.U., New Delhi.**
 - (c) Admission to **Ph.D. programmes in Agronomy and Plant Pathology** for Other State candidates shall be made through ICAR entrance examination only. Candidate need not apply for Pantnagar entrance examination for Other State seats in the mentioned disciplines of **Agronomy and Plant Pathology.**
 - (d) Admission to Masters' programmes in **MBA/ MBA (Agribusiness)** shall be made through **CAT** and **CMAT** score and Group Discussion and an Interview conducted by the University.
 - (e) In M.Tech. programmes, admission shall be made first based on the **GATE qualifying marks in the subject (Major) in which admission is sought.** Vacant seats shall be filled based on OGPA/percentage (%) of marks of B.Tech. The candidate should have secured at least an OGPA of not less than 6.000/10.000 or 3.000/5.000 or 55% marks in aggregate in case of the Institutions/ Universities where these scales are not applicable in the Bachelor's degree. However, admission towards seats for Other State candidates in M.Tech. Agricultural Engineering majors shall be made through Entrance Examination conducted by ICAR. In case, domicile candidates of Uttarakhand are not available for the sanctioned seats, the same shall be filled from amongst candidates of Other States.
 - (f) Admissions to **MCA** programme shall be made on the basis of separate Entrance Examination to be conducted by the University. **In case a candidate wants to appear for other Masters' programmes in addition to MCA, he/she has to fill separate application form.**
 - (g) Candidates other than **Bonafide residents of Uttarakhand** are not eligible to seek admission directly to the Undergraduate and Masters' degree programmes in the University. However, they can apply to the Indian Council of Agricultural Research, New Delhi/Veterinary Council of India, New Delhi. They will have to submit a separate application as and when called by ICAR/VCI, New Delhi and take All India Competitive Examinations and attend counselling at New Delhi for seat allotment. For details the

candidates may contact; The Assistant Director General (HRD), Indian Council of Agricultural Research, Krishi Anusandhana Bhavan, Pusa, New Delhi-110 012 and The Controller of Examination, Veterinary Council of India, 'A' Wing, 2nd Floor, August Kranti Bhawan, Bhikaji Cama Place, New Delhi-110 066.

6. Time of Admission

Admissions to all Undergraduate and Masters' degree programmes shall be made in the first Semester of the ensuing academic year only. However, admissions to Ph.D. degree programmes shall be made in first as well as in second semester (provided seats remain vacant in the first semester).

7. Date and Time of Entrance Examination

The Entrance Examination shall be conducted on the following dates and time:

- | | | |
|--|------------|-------------------------|
| 1. Masters' and Ph.D. Programmes | 02-06-2018 | 10.00 a.m. to 1.00 p.m. |
| 2. Undergraduate Programmes and M.C.A. Programme | 03-06-2018 | 10.00 a.m. to 1.00 p.m. |

8. Places of Examination

The Entrance Examination shall be conducted at following places:

PLACE CODE	U.G. PROGRAMME	MASTERS' PROGRAMME	MCA PROGRAMME	Ph.D. PROGRAMME
1	Almora	-	-	-
2	Dehradun	Dehradun	-	-
3	Pantnagar	Pantnagar	Pantnagar	Pantnagar
4	Pithoragarh	-	-	-
5	Rishikesh	-	-	-
6	Srinagar (Garhwal)	-	-	-

Note : (i) Every effort will be made to assign the place of choice of the candidate. However, the University reserves the right to assign the candidate to any one of the above places without assigning any reason.

(ii) The place once assigned shall not be changed.

(iii) Any of the above places can be changed at the discretion of the University.

9. Application procedure

Only Online Application Form Procedure

To submit application form candidates should log on to the University website (www.gbpuat.ac.in).

The candidates appearing in the qualifying examination can also apply provided that they must produce original mark-sheet of final year indicating class/division obtained at time of counselling failing which their candidature will not be considered for counselling.

10. Application and Examination fee & last date for submission of application

- (a) (i) Last date for online filing of application form for UG, Masters, MCA and Ph.D. 31.03.2018
(ii) Last date for online filing of application form for M.Tech. Programmes and Sponsored Candidates for Masters, M.Tech. and Ph.D. programmes 30.04.2018
- (b) (i) Last date for submission of printout of online application form for UG, Masters', MCA and Ph.D. programmes 09.04.2018
(ii) Last date for submission of printout of online application form for M.Tech. programmes and sponsored candidates for Masters, M.Tech. and Ph.D. programmes 09.05.2018
- (c) Application fee for M.Tech. /sponsored candidate/fellowship holder of UGC/ICAR/CSIR/DBT etc. Rs. Rs. 1200/- (General and OBC) and Rs. 600/- (SC, ST and PH).
- (d) Application fee including Examination fee is NON-REFUNDABLE.

Examination Fee for all programmes: Rs. 1200/- (General and OBC) and Rs. 600/- (SC, ST and PH).

Note: The candidate seeking admission to MCA programme is required to fill separate application form.

(e) Examination fee for submission of application form can be deposited by one of the following modes: Debit/Credit Card/Internet Banking.

11. Admission of Sponsored/Nominated Candidates

- (a) The candidate(s) sponsored/nominated by the GBPUAT, Pantnagar/Development Departments of State Govt. shall not be required to appear in the Entrance Examination. His/her admission shall be governed by the eligibility requirements, as prescribed in **Appendix-1 (B)**.
- (b) The last date for receipt of application of GATE qualified candidates for admission to M.Tech. programme and sponsored candidates for all programmes shall be **09.05.2018**.

12. No. of Seats & Eligibility Qualification:

A. Ph.D. Programmes

S. No.	Name of Programmes	Code No.	No. of seats		Minimum Eligibility Qualifications
			UA Domicile	Other States	
Agriculture Majors					
1.	Agricultural Economics	01	02	Nil	M.Sc.Ag. Agril. Economics/Rural Banking & Agril. Eco. or M.Sc. Dairy Economics/Livestock Economics/ Forest Economics/Veterinary Economics/ Fisheries Economics/ Animal Husbandry Economics.
*2.	Agronomy	02	05	Nil	M.Sc.Ag. Agronomy/M.Sc. Ag. with specialization in Soil Water Management#/Forage Production#/ Water Science and Technology#.
3.	Agrometeorology	03	03	01	M.Sc. Ag./M.Sc. in Agrometeorology/Agricultural Physics.
4.	Agricultural Extension & Communication	04	04	01	Masters' degree in the area of Development Communication/ Agricultural Extension/ Extension Education/Agricultural Extension & Communication/ Home Science Extension Education/ Dairy Extension / Veterinary Extension/Fisheries Extension.
5.	Entomology	05	08	02	M. Sc. Ag. Entomology or M.Sc. Zoology with specialization in Entomology/ M.Sc. Plant Protection with specialization in Entomology.
6.	Genetics & Plant Breeding	06	06	02	M.Sc. Ag./M.Sc. in Genetics & Plant Breeding/ Plant Breeding/Agril. Botany/ Genetics /M.Sc.Ag. in Mol. Biology & Biotechnology/Biotechnology.
7.	Horticulture	07	04	01	M.Sc.Ag. in Horticulture/Horticulture (Floriculture & Landscaping)/M.Sc. Horticulture/M.Sc. Pomology/ M.Sc. Fruit Science.
8.	Horticulture (Floriculture and Landscaping)	08	04	01	M.Sc.Ag. in Horticulture/ Horticulture (Floriculture & Landscaping)/Floriculture/ Floriculture & Landscape Architecture
*9.	Plant Pathology	09	04	Nil	M.Sc.Ag. in Plant Pathology/M.Sc. Botany with specialization in Plant Pathology /Mycology/ M.Sc. in Plant Protection.
10.	Soil Science	11	04	01	M.Sc. Ag. in Soil Science/Agril. Chemistry/ Agril. Physics/ Soil Science and Agricultural Chemistry/ Agricultural Physics (Soil Physics and Soil and Water Conservation)/Soil Chemistry/Water Science and Technology.
11.	Horticulture (Vegetable Science)	12	04	01	M.Sc. Ag. in Vegetable Science/Olericulture or Horticulture/Horticulture with specialization in Vegetable Science.

Engineering Majors					
1.	Electrical Engineering	20	03	01	Bachelor's degree in Electrical Engg./Electrical & Electronics Engg. from a recognized University/ Institute and Masters' degree in the field of Electrical Engg. from a recognized University/ Institute.
2.	Electronics & Communication Engineering	21	02	Nil	Bachelor's Degree in Electronics & Communication Engg./Communication Engg./Telecommunication Engg./ Electronics Engineering from a recognized University/Institute and Masters' Degree in related field of Electronics & Communication Engineering from a recognized University/Institute.
3.	Farm Machinery & Power Engineering	22	04	01	Master's Degree in Farm Machinery & Power Engg. /Agricultural Engineering/Mechanical Engg./ Renewable energy from a recognized University.
4.	Civil Engineering	23	02	Nil	Bachelor's degree in Civil Engineering and Master's degree in Civil Engineering/Earthquake Engineering / Computer Aided Design in Structural Engineering from a recognized University/Institute.
5.	Irrigation & Drainage Engineering	24	04	01	Master's Degree in Agricultural Engg. with specialization in Irrigation & Drainage Engineering/ Soil & Water Conservation Engineering/Soil & Water Engineering/Land and Water Resources Engineering/Hydrology/Water Resources/Water Science and Technology/Masters' degree in Civil Engineering from a recognized University.
6.	Mechanical Engineering	25	04	01	Master's Degree in Mechanical Engineering with specialization in Thermal Engineering/Thermal Power Engg./Energy Engg./Automobile Engg./ Production Engg./Manufacturing Engg. and Management/ Design and Production Engg./Machine Design Engineering/ Machine Design and Analysis/ CAD, CAM and Robotics/ Computer Aided Design and Manufacturing/ Design/Product Design and Development/Materials Engg./ Material Science and Engg./ Mechatronics and Automation from a recognized University/Institute.
7.	Process & Food Engineering	26	04	01	Master's Degree in Agricultural Engineering/ Chemical Engg./ Agricultural Processing/ Agril. Processing and Structures/Agril. Structures and Process Engg./Food Process Engineering/ Post Harvest Engg./Food and Bioprocess Engg./Food Engineering / Process and Agril. Structures/Process & Food Engg./ Mech. Engineering /Biochemical Engg. / Dairy Engg./ Food Engg. / Food Biotech Engg. /Renewable Energy Engg. from a recognized University.
8.	Soil & Water Conservation Engineering	28	04	01	Master's Degree in Agril. Engineering with specialization in Soil & Water Conservation Engineering/Soil & Water Engineering/ Irrigation & Drainage Engineering / Land and Water Resource Engineering or Masters' Degree in Civil Engineering/Water Resources/Hydrology/Aquatic Engineering/ Water Science and Technology from a recognized University.

9.	Information Technology	29	02	Nil	ME/M.Tech. degree in Information Technology/Computer Engg./Computer Science & Engg./Computer Science/Information Communication Technology/Electronics & Communication Engineering from a recognized University.
Home Science Majors					
1.	Human Nutrition	35	04	01	M.Sc. in Foods & Nutrition/Food Science & Tech./Nutrition/Nutrition & Dietetics/ Food Science & Nutrition.
2.	Clothing & Textiles	36	04	01	B.Sc. (Home Science) alongwith M.Sc. Clothing & Textiles/ Textiles & Clothing/ Textile and Apparel Designing/Fabric and Apparel Science/ Textiles Sciences and Apparel Design/Apparel and Textiles Sciences.
3.	Family Resource Management	37	04	01	M.Sc. Family Resource Management/Resource Management & Consumer Sciences/Human Ecology in Consumer Science/Family and Community Sciences / Resource Management and Design Application/ Resource Management and Ergonomics/ Family and Community Resource Management.
Fisheries Science Major					
1.	Aquaculture	38	03	01	M.F.Sc. Aquaculture/Mariculture/Aquatic Environmental Management/Inland Aquaculture
2.	Fisheries Resource Management	39	02	Nil	M.F.Sc. in Fishery Biology/Fisheries Resource Management/Aquatic Environment Management.
Science Majors					
1.	Agricultural Chemicals	40	04	01	M.Sc. Ag./M.Sc. in Agricultural Chemicals/ Chemistry.
2.	Biochemistry	41	03	01	M.Sc. Ag./M.Sc. in Biochemistry/ Microbiology/Molecular Biology & Biotech./Chemistry/Agril. Chemicals /Foods & Nutrition/ Biophysics/Biotechnology.
3.	Botany	42	02	Nil	Master degree in Botany/Plant Sciences/Plant Physiology/ Environmental Sciences.
4.	Chemistry	43	04	01	M.Sc. Chemistry from a recognized University.
5.	Environmental Science	44	02	Nil	M.Sc.Ag./ M.Sc. in Environmental Science/ Environmental Biology/Agroforestry/ Agricultural Physics/Agriculture with specialization in Environmental Science.
6.	Food Technology	45	02	Nil	M.Sc. Food Technology/Food Science & Technology / Food Science/Masters' degree in Post Harvest Technology/M.Tech. Food Science & Technology
7.	Mathematics	46	03	01	M.Sc. in Mathematics /Applied Mathematics.
8.	Microbiology	47	02	Nil	M.Sc. Ag. in Microbiology/M.Sc. in Microbiology/M.Sc. Environmental Microbiology/Biochemistry / Food Technology/Biotechnology/ Environmental Science / Foods & Nutrition/ Molecular Biology and Biotechnology.
9.	Molecular Biology & Biotechnology	48	04	01	M.Sc.Ag./M.Sc./M.V.Sc. in Biochemistry / Microbiology / Biotechnology/Molecular Biology & Biotechnology/ Animal Biotechnology/Genetic Engineering/M. Tech. Biotechnology.

10.	Physics	49	06	02	Master's Degree in Physics/Applied Physics/Astro Physics/Bio-Physics/ Engineering/ Material Science / Electronics/ Computer Science.
11.	Plant Physiology	50	03	01	M.Sc./M.Sc.Ag. in Plant Physiology/ Crop Physiology/Agronomy/ Horticulture/ Botany/ Biochemistry /Microbiology/ Bio-Sciences/ Plant Sciences/ Environmental Sc. / Biophysics.
Veterinary Science Majors					
1.	Veterinary Public Health & Epidemiology	51	03	01	M.V.Sc. in Veterinary Public Health & Epidemiology/ Veterinary Public Health / Vety. Epidemiology/Vety. Microbiology/Vety Biotechnology/ Livestock Product Technology/Molecular Biology & Biotechnology.
2.	Veterinary Gynaecology & Obstetrics	52	03	01	M.V.Sc. Gynaecology & Obstetrics/Animal Reproduction/ Gynaecology & Obstetrics and Animal Reproduction.
3.	Livestock Production & Management	53	03	01	M.V.Sc./M.Sc.Ag. in LPM/APM/Animal Nutrition/ Animal Genetics & Breeding/ Animal Breeding/Dairy Husbandry/ Animal Husbandry/Animal Husbandry & Dairying/ Animal Science.
4.	Veterinary Medicine	54	03	01	M.V.Sc. in Medicine/Veterinary Medicine/ Veterinary Clinical Medicine/Veterinary Preventive Medicine/Epidemiology & Preventive Medicine.
5.	Veterinary Microbiology & Immunology	55	02	Nil	M.V.Sc. in Veterinary Microbiology & Immunology/ Veterinary Microbiology/Veterinary Bacteriology/ Veterinary Virology/ Veterinary Immunology/ Molecular Biology & Biotechnology/ Animal Biotechnology/ Veterinary Public Health & Epidemiology/Mycology.
6.	Veterinary Pathology	56	03	01	M.V.Sc. Pathology
7.	Veterinary Pharmacology & Toxicology	57	03	01	M.V.Sc. Vety. Pharmacology/Vety. Pharmacology & Toxicology.
8.	Veterinary Physiology	58	03	01	M.V.Sc. Veterinary or Animal Physiology
9.	Poultry Science	59	03	01	M.V.Sc./M.Sc.Ag. in Poultry Science/ Poultry Husbandry/ LPM/Animal Nutrition/ Poultry Nutrition/ Animal Genetics & Breeding/Poultry Breeding.
10.	Vety. Surgery & Radiology	60	03	01	M.V.Sc. Surgery/Surgery & Radiology.
11.	Veterinary Biochemistry	61	02	Nil	M.V.Sc. in Veterinary Biochemistry/ Molecular Biology & Biotechnology/ Animal Biotechnology/ Biotechnology.
12.	Animal Genetics & Breeding	62	03	01	M.V.Sc. in Genetics & Animal Breeding/Animal Genetics & Breeding or M.V.Sc. in LPM/ Poultry Science /Molecular Biology & Biotechnology with thesis research in the area of Animal Breeding/ M.V.Sc. Genetics. M.Sc. Ag.(Animal Breeding) or M.Sc.Ag. Dairy/ Poultry / Animal Husbandry with specialization in Animal Breeding or M.Sc. in Animal Breeding.
13.	Animal Nutrition	63	03	01	M.V.Sc./M.Sc.Ag. in Animal Nutrition or LPM/Poultry Science/Dairy Husbandry/ Poultry Husbandry/Animal Husbandry with specialization in Animal Nutrition
14.	Veterinary Anatomy	64	03	01	M.V.Sc. in Vety. Anatomy/Vety. Physiology/Vety. Pathology/ Vety. Surgery & Radiology/Vety. Anatomy & Histology.

15.	Veterinary Parasitology	65	02	Nil	M.V.Sc. in Veterinary Parasitology
16.	Livestock Products Technology	66	02	Nil	M.V.Sc. in Livestock Products Technology/Meat Science & Technology/Animal Products Technology.
Management Major					
**1.	Management	70	01	Nil	Masters' Degree or equivalent in Business Administration/ Management.

*Admission to **Ph.D. programmes in Agronomy and Plant Pathology** for Other State candidates shall be made through ICAR entrance examination only. Candidate need not apply for Pantnagar entrance examination for Other State seats in the mentioned disciplines of **Agronomy and Plant Pathology**.

****Self –Financing**

#Students will have to read some remedial Courses.

The candidate possessing above qualifications and fulfilling the conditions laid down hereunder shall have to qualify the written test and secure a place in the merit list so as to be eligible for admission:

- At Master's level, the candidate should have secured an OGPA not less than 6.500/10.000 or 4.000/5.000 or 1st Division in case of the Universities where these grading scales are not applicable. At Bachelor's level the candidate must possess an Overall Grade Point Average of not less than 6.000/10.000 or 3.000/5.000 or 55% marks in aggregate in case of the Institutions/Universities where these grading scales are not applicable.
- Besides a candidate must also possess the eligibility qualifications prescribed for Masters programmes of the University in the relevant discipline.
- A relaxation of 5% marks, or an equivalent relaxation of grade, may be allowed to those belonging to SC/ST/OBC (non-creamy layer)/Differently-Abled and other categories of candidates. The eligibility marks (or an equivalent grade in a point scale wherever grading system is followed) and the relaxation of 5% to the categories mentioned above are permissible based only on the qualifying marks without including the grace mark procedures.

B. Masters' Programmes

S. No.	Name of the Programmes	No. of Seats	Minimum Eligibility Qualifications
Agriculture Majors			
1.	Agricultural Economics	08	B.Sc. in Agriculture/ Fisheries/Forestry/ Horticulture/ Home Sc./Agril. Marketing/ Agricultural Marketing and Cooperation.
2.	Agrometeorology	03	B.Sc. in Agriculture/Forestry/ Horticulture or B.Sc. with Physics as one of the major subject.
3.	Agronomy	10	B.Sc. Ag./B.Sc. Ag. & A.H.
4.	Agricultural Extension & Communication	08	B.Sc. in Agri./Forestry/ Horticulture/Home Sc./ Fisheries/ Food Sc. & Technology/Dairy Sc./ Sericulture/B.V.Sc. & A.H./B.V.Sc.
5.	Entomology	12	B.Sc. in Agriculture/Forestry/Horticulture/Sericulture/Biology (Zoology and Botany with any other subject).
6.	Genetics & Plant Breeding	12	B.Sc. in Agriculture/ Forestry/Horticulture/B.Sc. Biology (Zoology and Botany with any other subject).
7.	Horticulture	08	B.Sc. in Agri./Horticulture/Forestry/Biology (ZBC)
8.	Horticulture (Floriculture and Landscaping)	04	B.Sc. in Agriculture/Horticulture/Forestry/ Biology (Zoology, Botany & Chemistry).
9.	Plant Pathology	06	B.Sc. in Agril./Forestry/Biology (Zoology and Botany with any other subject)/ B.Sc. Horticulture.
10.	Soil Science	08	B.Sc. Agriculture/B.Sc. Horticulture/ B.Sc. Forestry/ B.Sc. (Zoology, Botany & Chemistry/Physics, Chemistry & Maths).
11.	Horticulture (Vegetable Science)	06	B.Sc. in Agriculture/Forestry/Horticulture/Biology (Zoology and Botany with any other Subject).
Engineering Majors			
1.	Agril. Engineering (Farm Machinery & Power Engg.)	10	Bachelor's Degree in Agricultural Engineering from a recognized University/Institute.

2.	Agricultural Engineering (Food & Bio Process Engg.)	04	Bachelor's Degree in Agricultural Engg. /Chemical Engg./Bio-Chemical Engg./B.Tech. (Biotechnology)/B.Tech. Food Tech./B.Tech. Dairy Tech./ B.Tech. Food Sc./B.Tech. Food Engg. from a recognized University /Institute.
3.	Agril. Engineering (Irrigation & Drainage Engineering)	12	Bachelor's Degree in Agricultural Engineering / Civil Engineering from a recognized University/ Institute.
4.	Agricultural Engineering (Process & Food Engineering)	08	Bachelor's Degree in Agricultural Engineering / Mechanical Engineering / Chemical Engg./ B.Tech. Food Sc./B.Tech. Food Tech./ B.Tech. Dairy Technology /B.Tech. Food Engg. from a recognized University/ Institute.
5.	Agril. Engineering (Soil & Water Conservation Engg.)	10	Bachelor's Degree in Agricultural Engineering /Civil Engineering from a recognized University /Institute.
6.#	Computer Engineering	08	B.Tech./B.E. degree in Computer Engineering/Computer Science & Engineering/Computer Science/Information Technology/Information Communication Technology from a recognized University/Institute.
7.#	Design & Production Engineering	08	Bachelor's Degree in Mechanical Engg./Mechanical & Automation / Production Engg./ Industrial & Production Engg. from a recognized University/Institute.
8.#	Electrical Energy System	06	Bachelor's Degree in Electrical Engineering/Electrical and Electronics Engineering from a recognized University/Institute.
9#	Electronics & Communication Engineering	09	Bachelor's Degree in Electronics & Communication Engineering/ Electronics Engineering/Communication Engineering/Tele Communication Engineering from a recognized University/ Institute.
10.#	Hydraulic Engineering	04	Bachelor's Degree in Civil Engg. from a recognized University/ Institute.
11.#	Information Technology	06	B.E./B.Tech. degree in Information Technology/Computer Engineering/ Computer Science & Engineering/Computer Science/ Information Communication Technology from a recognized University/ Institute.
12.#	Manufacturing Engineering and Management	03	B.Tech./B.E./B.Sc. (Engg.) Degree in Mechanical Engg./ Production Engg./ Industrial Engg./ Mechanical/Production and Tool Engg./Production Technology and Manufacturing Engg./ Mechatronics/ Manufacturing Process and Automation/ Production and Industrial Engg./ Industrial and Production Engg./ Manufacturing Technology/ Mechanical and Production Engg./ Automation Engg. from a recognized University/Institute.
13.#	Soil Mechanics & Foundation Engineering	04	Bachelor's Degree in Civil Engineering from a recognized University/ Institute.
14.#	Structural Engineering	04	Bachelor's Degree in Civil Engineering from a recognized University/Institute.
15.#	Thermal Engineering	08	Bachelor's Degree in Mechanical Engineering/ Automobile Engineering from a recognized University/Institute.
Fisheries Science Majors			
1.	Aquaculture	04	Bachelor's Degree in Fisheries Science
2.	Aquatic Environment Management	04	Bachelor's Degree in Fisheries Science
3.	Fisheries Resource Management	04	Bachelor's Degree in Fisheries Science
4.	Fish Processing Technology	04	Bachelor's Degree in Fisheries Science
Home Science Majors			
1.	Clothing & Textiles	06	B.Sc. Home Science/Home Economics/Family & Community Sciences with Intermediate Science.
2.	Family Resource Management	04	B.Sc. Home Science/Home Economics/Family & Community Science with Intermediate Science.

3.	Foods & Nutrition	06	B.Sc. Home Science with Intermediate Science /B.Sc. Food Tech.
4.	Human Development & Family Studies	04	B.Sc. Home Science/ Home Economics/Family & Community Sciences with Intermediate Science.
Science Majors			
1.	M.Sc. Ag. Agricultural Chemicals	02	B.Sc. with Chemistry as one of the major subjects/B.Sc. Agriculture / Horticulture/Forestry.
2*.	Agricultural Statistics/ Statistics	04	B.Sc. Ag./B.Sc. Horticulture/B.Sc. Forestry/B.Sc. Sericulture/ Agricultural Marketing & Cooperation/B.F.Sc./B.V.Sc. & A.H./ B.Tech. in Agricultural Engineering/B.Sc. with Maths/Statistics as one of the major subjects.
3.	Biochemistry	06	B.Sc. in Biochemistry/Biotechnology/Microbiology/ Agriculture/ Home Science/Fisheries/Veterinary Science/ Forestry /Food Tech./ B.Sc. with Chemistry as one of the major subjects/ B.Sc. Horticulture.
4.	Botany	06	B.Sc. with Botany as one of the major subjects.
5.	Chemistry	10	B.Sc. with Chemistry as one of the major subjects.
6.	Environmental Science	05	B.Sc. with Environmental Science/Environmental Biology as one of the major subjects/ B.Sc. in ZBC/ Agriculture/Fisheries/Home Science/ Forestry/Horticulture.
7.	Food Technology	04	B.Sc. Agriculture/ Fisheries/Home Science /Dairy Technology / Food Technology / Horticulture/Food Science and Technology/ B.E. (Agril.)/ B.Tech. (Agril. Engg.)/B.Tech. (Food Technology)/ B.Tech. Food Science & Technology.
8.	Mathematics	04	B.Sc. with Mathematics as one of the major subjects.
9.	Microbiology	03	B.Sc. in Microbiology/ Biochemistry/ Agriculture/ Fisheries/ Forestry /Home Science/Biotechnology/Biology (Zoology and Botany with any other subject)/B.Sc. Horticulture/B.Tech. (Biotechnology).
10.**	M.Sc. Ag. (Biotechnology)/ M.V.Sc. (Animal Biotechnology)	25	Bachelor's Degree in Science/Agriculture/Horticulture/ Forestry/ Veterinary Science/Fisheries Science/Biotechnology/Agriculture Biotechnology.
11.	Plant Physiology	06	B.Sc. in Agriculture/ Zoology, Botany and Chemistry/ Horticulture/ Microbiology with Chemistry/B.Sc. Forestry.
12.	Physics	12	B.Sc. with Physics as one of the major subjects.
Veterinary Science Majors			
1.	Veterinary Anatomy	04	B.V.Sc. & A.H./B.V.Sc.
2.	Veterinary Gynaecology & Obstetrics	04	B.V.Sc. & A.H./B.V.Sc.
3.	Veterinary Public Health & Epidemiology	04	B.V.Sc. & A.H./B.V.Sc.
4.	Vety. Surgery & Radiology	04	B.V.Sc. & A.H./B.V.Sc.
5.	Veterinary Biochemistry	03	B.V.Sc. & A.H./B.V.Sc.
6.	Veterinary Medicine	04	B.V.Sc. & A.H./B.V.Sc.
7.	Veterinary Microbiology & Immunology	02	B.V.Sc. & A.H./B.V.Sc.
8.	Veterinary Parasitology	04	B.V.Sc. & A.H./B.V.Sc.
9.	Veterinary Pathology	04	B.V.Sc. & A.H./B.V.Sc.
10.	Veterinary Pharmacology & Toxicology	04	B.V.Sc. & A.H./B.V.Sc.
11.	Veterinary Physiology	04	B.V.Sc. & A.H./B.V.Sc.
12.	Veterinary and Animal Husbandry Extension	04	B.V.Sc. & A.H./B.V.Sc.

13.	Livestock Products Technology	04	B.V.Sc. & A.H./B.V.Sc.
14.	Livestock Production & Management	04	B.V.Sc. & A.H./B.V.Sc.
15.	Poultry Science	04	B.V.Sc. & A.H./B.V.Sc.
16.	Animal Nutrition	04	B.V.Sc. & A.H./B.V.Sc.
17.	Animal Genetics & Breeding	04	B.V.Sc. & A.H./B.V.Sc.
18.	Animal Biotechnology	03	B.V.Sc. & A.H./B.V.Sc.
Management Programmes			
***1.	MBA (Agribusiness)	32	Bachelor's and/or Master's degree in Agriculture, Agricultural Chemicals, Agricultural Engineering, Dairy Science/Technology, Fisheries, Food Science /Food Technology, Forestry, Home Science, Horticulture, Veterinary Science or B.Tech. (Bio-Tech.)
***2.	MBA	12	Bachelor's degree in any branch of Engineering/Technology from AICTE approved Institutions/ UGC approved Universities.
M.C.A. Programme			
***1.	MCA	24	BCA/B.Sc. with Mathematics from a recognized University/B.Sc. (Information Technology)/B.Sc. Computer Science.

Candidates for Master's programme should refer para 22 for subject group code of Entrance Examination.

*****Self-Financing; #30 percent of sanctioned seats are allotted to Other State candidates.**

The candidate possessing above qualifications and fulfilling the conditions laid down hereunder shall have to qualify the written test and secure a place in the merit list so as to be eligible for admission:

(a) The candidate should have secured an OGPA of not less than 6.000/10.000 or 3.000/5.000 or 55% marks in aggregate in case of the Institutions/Universities where these scales are not applicable in the Bachelor's degree.

Note:(1) In Agriculture programmes the number of candidates admitted from pure Sciences stream shall be limited to 25%. However, in case sufficient numbers of qualified candidates are not available, this limitation of 25% shall be relaxed by the Admissions Committee. However, the minimum duration for said candidates would be six semesters.

(2) The candidates seeking admission in Agriculture & Home Science Majors and studied only 3-year degree programme instead of 4-years, the minimum degree duration would be six semesters.

* The students admitted in the programme of Agricultural Statistics/Statistics with qualifications B.Sc.(Ag.)/B.Sc. (Horticulture)/B.Sc. (Forestry) will be awarded M.Sc. (Agril. Statistics) degree and those admitted with B.Sc. degree (with Maths/Statistics as one of the major subject) will be awarded M.Sc. (Statistics) degree.

** The students admitted in the programme of M.Sc. Ag. (Biotechnology)/M.V.Sc. (Animal Biotechnology) with qualifications B.Sc. in Science/Agriculture/Horticulture/Forestry/Fisheries Science/ Biotechnology Agriculture Biotechnology will be awarded M.Sc. Agriculture (Biotechnology) degree and those admitted with B.V.Sc. degree will be awarded M.V.Sc. (Animal Biotechnology) degree.

C. Undergraduate Programmes

S. No.	Name of Programme	No. of Seats	Minimum Eligibility Qualifications
1.	B.Sc. (Hons) Agriculture	130	Intermediate Agriculture/Science with Mathematics or Biology.
2.	B.Sc. (Hons.) Community Science	70	Intermediate Science with Mathematics or Biology.
3.	B. V. Sc. & A.H.	62	Intermediate Science with Physics, Chemistry, Biology and English or equivalent examination and should have obtained a minimum of 50% marks for General Category and 47.5% for reserved categories (OBC, SC & ST) in aggregate in the subjects of Physics, Chemistry, Biology and English. For Candidates educated abroad The students who are educated abroad seeking admission in Veterinary colleges in India should has passed the subject of Physics, Chemistry, Biology or Biotechnology and English up to the 12 th Standard level with 50% marks in aggregate of these subjects.

4.	B.F.Sc.	20	Intermediate Science with Biology/Agriculture or equivalent examination.
*5.	B.Sc. (Food Technology)	24	Intermediate Agriculture/Science with Mathematics or Biology.
6.	B.Tech. Agril. Engg.	45	Pass in 10+2 examination or its equivalent with Physics and Mathematics and any one of the optional subjects Chemistry/ Biotechnology/Computer Science/ Biology.
7.	B.Tech. Civil Engg.	45	-do-
8.	B.Tech. Computer Engg.	30	-do-
9.	B.Tech. Elect. Engg.	45	-do-
10.	B.Tech. Electronics & Communication Engg.	30	-do-
11.	B.Tech. Mech. Engg.	45	-do-
12.	B.Tech. Industrial and Production Engg.	30	-do-
13.	B.Tech. Information Technology	45	-do-
*14.	B.Tech. (Biotechnology)	40	-do-

The candidate possessing above qualifications and fulfilling the conditions laid down hereunder shall have to qualify the written test and secure a place in merit list so as to be eligible for admission.

The candidate seeking admission to B.V.Sc. & A.H. programme must compulsorily attempt **PCB paper (Code 1)** in Entrance Examination.

***Self-Financing.**

13. Distribution of Seats

- (i) All the sanctioned seats in Undergraduate and Postgraduate degree programmes (except MCA) shall be allotted to bonafide residents of Uttarakhand State.
- (ii) Over and above the sanctioned seats, 30 percent of sanctioned seats are allotted to ICAR and 15% of sanctioned seats are allotted to VCI at Undergraduate level (except B.Tech. programmes) as per the conditions laid down by the ICAR/VCI for admitting candidates.
In Master's programme (except MCA) self-financing programme over and above the sanctioned seats, 30 percent of sanctioned seats are allotted to ICAR.
In M.Tech. programme (except Agricultural Engineering programmes) over and above the sanctioned seats, 30 percent of sanctioned seats are allotted to Other State candidates.
- (iii) Admission for seats allotted to ICAR/VCI in UG and Masters' programmes shall be made through Entrance Examination conducted by the ICAR/VCI.
- (iv) In case of MCA (self-financing) programme 50% of the sanctioned seats shall be filled by the candidates from the States other than Uttarakhand and 50% seats shall be filled by the candidates' Bonafide resident of Uttarakhand State through the entrance examination conducted by the University. In case seats of other State remain vacant; the same may be filled from the candidates of Uttarakhand State and vice-versa.
- (v) In case of admission for **Masters' in Agronomy and Plant Pathology** majors 50% students subject to meeting the merit requirements will be admitted from the candidates who have obtained their qualifying degree from other than G.B. Pant University of Agriculture & Technology, Pantnagar" on all India basis through ICAR.
- (vi) In Ph.D. programmes (except Ph.D. in Management) over and above the sanctioned seats, 25 percent of sanctioned seats shall be filled from the other State candidates through the Entrance Examination conducted by the University. Admission to **Ph.D. programmes in Agronomy and Plant Pathology** for Other State candidates shall be made through ICAR entrance examination only.
- (vii) In B.Tech. Agricultural Engineering programme 15% seats will be filled up on All India Basis by the ICAR.

14. Reservations*

(a) Vertical Reservations

- (i) The vertical reservation for the academic year 2018-2019 will be as under:
 - (i) OBC - 14%
 - (ii) Scheduled Caste - 19%
 - (iii) Scheduled Tribes - 04%

- (ii) The seats not filled through candidates of reserved categories in Ph.D. programmes only shall be converted to General Category seats and filled up accordingly. The conversion of seats in Ph.D. programmes only shall be made during the counselling in the II Semester 2018-2019 upon vacancy.

(b) Horizontal Reservations: Out of reservation applicable to different categories, the horizontal reservation in Undergraduate programmes only in these categories shall be as under:

(i)	Children of retired/killed or disabled Defence Personnel of Uttarakhand	2 %
(ii)	Children of Freedom Fighters of Uttarakhand	2 %
(iii)	Physically Handicapped of Uttarakhand having disability 40% or above	3 %
(iv)	**Women Candidates of Uttarakhand	30 %

* Reservation shall be implemented as per G.O. of Uttarakhand State.

** Women Candidates of Uttarakhand shall include girl candidates also.

(c) The candidates who have obtained qualifying degree from G.B. Pant University of Agriculture & Technology, Pantnagar shall be treated at par with the Bonafide residents of Uttarakhand for higher studies.

(d) Over and above the sanctioned seats, admission to the following sub-categories in Undergraduate programmes (except B. Tech.) shall be available as follows:

i. Children/Spouse of regular employees/

Daily Wage Workers (240 days) of G.B. Pant

University of Agriculture & Tech., Pantnagar - 5% seats in each programme

ii. ICAR Nominee

- 10% for Foreign Nationals who pay an Institutional Fee

US\$ 5000 per annum besides other fee.

iii. The son/daughter/spouse of the regular University employee who died in harness and whose establishment was with the G. B. Pant University shall be given special consideration for admission in the first-degree programme on compassionate grounds. His/her admission will be subject to that:

(a) He/She secures atleast marks upto cutoff point for admissions of the particular year and qualifies in General Category,

(b) He/She fulfills the minimum eligibility qualification for the programme, and

(c) 2% of the sanctioned seats in each programme subject to a minimum of one seat in each programme purely based on merit rank in the entrance examination. Further, the request for seeking admission on compassionate ground would be entertained within two years of the death of an employee of the University.

(d) His/Her admission is approved by the Vice-Chancellor.

iv One seat each in every UG Programme (except B.Tech. programmes) shall be reserved for the wards of Kashmiri migrants and wards of J & K residents. The Candidates shall be admitted based on merit subject to qualifying the entrance examination in respective categories subject to fulfilling the conditions laid down in 12-C.

Note: The University reserves the right to change the reservation pattern either on account of Govt. orders or on its own.

15. ADMISSION OF SPONSORED CANDIDATES

(a) Undergraduate Programmes		
(i)	Gram Vikas Adhikari Candidate Sponsored by Uttarakhand Govt.	5 Seats in B.Sc.Ag.
(ii)	In service candidates from Animal Husbandry department sponsored by the Govt. of Uttarakhand.	5 Seats in B.V.Sc. & A.H.
(iii)	Development and Extension Workers from Uttarakhand Fisheries Department (in service)	1 Seat in B.F.Sc.
(iv)	Seats reserved for candidates in Engineering courses nominated by M.H.R.D. Govt. of India.	As per notification of Uttarakhand Government.
(v)	In-service candidates of Pantnagar University / Farm	Admission of in-service Candidates of G.B. Pant University of Agriculture & Technology, Pantnagar/University Farm to Bachelor's degree programmes (except B. Tech.) shall be made as per rules subject to their having qualified the U.G. Entrance Examination and recommendation of the Dean of the College concerned.

(b) Post Graduate Programmes	
<p>Foreign National nominated by ICAR/ Govt. of India or Junior/Senior research fellowship Holders of UGC/ ICAR/ CSIR/DBT etc. and sponsored Staff candidates of G.B.P.U.A. &T. Pantnagar and Development Departments of State Govt. :</p> <p>Note: (i) Admissions to above category shall not exceed the number of sanctioned seats.</p> <p>(ii) Format for Forwarding of the Application Form Appendix – XII.</p>	<p>Over and above the sanctioned seats, two seats in each Master's and Ph.D. programmes shall be available to Foreign Nationals (Candidates) on Payment of an institutional fee of US\$5000 per year subject to their fulfillment of eligibility qualifications laid down in Appendix – I (B).</p> <p>25% seats for Ph.D. programmes (minimum one seat in each discipline) are to be filled through ICAR entrance examination AICE-SRF) <i>Four</i> seats are reserved in each Ph.D. major except Molecular Biology & Biotechnology for UGC/ CSIR/ICMR fellowship holders. In case of Ph.D. in Molecular Biology & Biotechnology major two seats are reserved for DBT fellowship holders and two seats for UGC/CSIR/ICMR fellowship holders.</p> <p>Two seats in each Masters' and Ph.D. Major are reserved for the candidates sponsored by the G.B. Pant University of Agriculture and Technology, Pantnagar and Development Departments of State Government subject to the following conditions:</p> <p>(a) Applicants who have earned entitlement to fellowship based on National Selection (UGC/ICAR/CSIR/DBT/ICMR) and the sponsored staff candidates of GBPUAT, Pantnagar and Development Departments of State Govt. are not required to appear in the University Entrance Examination. They shall be admitted subject to fulfillment of minimum eligibility qualification as laid down in para 12 'A' or 'B' of the Prospectus (Chapter II). The inter-se-merit of UGC/CSIR/ DBT/ICMR fellowship holders shall be determined based on academic rating of their past academic performance. However, for consideration of the admission under sanctioned seats as detailed in Para 12 'A' or 'B' the applicants are advised to appear in the Entrance Examination.</p> <p>(b) No candidate who has failed to secure the minimum cut off marks fixed by the Admissions Committee in the Entrance Examination can be sponsored /nominated for admission in the University until he/she qualifies the Entrance Examination.</p>

16. Mode of Admission

(a) Subjects & Scheme of Examination

- (i) All candidates seeking admission to Ph.D. Programmes shall take (i) Research Methodology (quantitative statistical methods, basic computer applications, research ethics and data interpretation) test (50%) and (ii) Subject matter test (50%) without any break from 10.00 a.m. to 1.00 p.m., which shall be administered programme wise as given in para 12 A. The question paper shall consist of objective type questions with 4 multiple choices.
- (ii) (a) All candidates seeking admission to Masters' programmes and MCA programme shall take (i) Aptitude Test and (ii) Subject Matter Test without any break from 10.00 a.m. to 1.00 p.m. The examination shall start with Aptitude Test and after 45 minutes the question booklet of Aptitude Test shall be taken back and question booklet for group wise Subject Matter Test paper will be distributed as per the option of the candidates (based on their qualifying examination) and major-wise.
 - (b) The Aptitude Test and Subject Matter Test shall consist of 50 and 150 questions for all groups (except Physical & Life Sciences) respectively. The Subject Matter Test for these groups shall consist of 200 questions and candidates have to attempt 150 questions. The question paper will be objective type with multiple choices for each question in English language only.
- (iii) There shall be one common Entrance Examination for admission to all Undergraduate Programmes. It shall be of three hours duration and shall consists of one question paper carrying 600 marks and would be of objective type with multiple choice. The bilingual question paper in English and Hindi will be supplied. There will be three groups of papers as detailed below:

PCB paper (Code 1): The candidate who has passed/ appeared in 10+2 examination with Physics, Chemistry and Biology stream shall have question paper consisting of questions of Mental Agility (30 questions), Physics (50 questions), Chemistry (50 questions) and Biology (70 questions). The candidate opting for this group can seek admission for degree course in Agriculture, Food Technology, Fisheries, Home Science and Veterinary Sciences.

PCM paper (Code 2): The candidate who has passed/ appeared in 10+2 examination with Physics, Chemistry and Mathematics stream shall have question paper consisting of questions of Mental Agility (30 questions), Physics (50 questions), Chemistry (50 questions) and Mathematics (70 questions). The candidate opting for this group can seek admission for degree course in Agriculture, Food Technology and Home Science.

PCA paper (Code 3): The candidate who has passed/ appeared in 10+2 examination with Agriculture stream shall have question paper consisting of questions of Mental Agility (30 questions), Physics (50 questions), Chemistry (50 questions) and Agriculture (70 questions). The candidate opting for this group can seek admission for degree course in Agriculture, Food Technology and Fisheries.

The candidate having Physics, Chemistry, Mathematics and Biology subjects at his/her 10+2 level will have to indicate his/her choice of the group of paper for Entrance Examination in the Application Form. These candidates can either opt for PCB paper (Code 1) or PCM paper (Code 2). They can seek admission for degree programme as per their qualification and group of paper in the entrance examination.

Note:(1) FOR THE PROGRAMMES OF MASTERS' AND UNDERGRADUATES 3.0 MARKS WILL BE AWARDED FOR EACH CORRECT ANSWER AND 1.0 MARK WILL BE DEDUCTED FOR EACH WRONG ANSWER ATTEMPTED BY THE CANDIDATE.

FOR Ph.D. PROGRAMME 3.0 MARKS WILL BE AWARDED FOR EACH CORRECT ANSWER.

(2) USE OF ELECTRONIC EQUIPMENT SUCH AS CALCULATOR, LOG TABLE, MOBILE PHONE ETC. IN THE EXAMINATION HALL IS STRICTLY PROHIBITED.

16. (b) Basis of Selection for Admission

(i) The Admissions Committee will decide the cutoff marks for UG and Masters' programmes for the academic year for qualifying the entrance examination after declaration of Rank-wise list of the candidates appeared in the Entrance Examination conducted by the University. For Ph.D. programmes the minimum qualifying marks for admission in the entrance examination shall be 50%.

(ii) For Ph.D. Programmes if the marks secured by two or more candidates are the same, the merit shall be decided on the basis of marks secured in the qualifying examination. For Masters' programmes in the event of two or more candidates securing equal marks the merit shall be decided on the basis of marks secured in the Aptitude Test and then qualifying examination. For Undergraduate programmes in the event of two or more candidates securing equal marks, the merit shall be decided on the basis of marks secured in Mental Agility then Physics, Chemistry and thereafter in the qualifying examination. In the event of tie again, a candidate with higher in age would be rated higher in merit.

16. (c) Counselling

(i) Qualified candidates, as per merit, shall be called for counselling on a specified date and time for consideration of admission to various Undergraduate, Masters', MCA and Ph.D. programmes. The counselling will continue till the last seat in each programme is filled-up. Merit list will be uploaded on the University website (www.gbpuat.ac.in). The candidates are advised to see regularly the website of the University for counselling dates. No separate letter will be sent to the candidates. Counselling schedule will be notified in the newspapers.

(ii) Candidates seeking admission to M.Tech. programmes based on OGPA/percentage of marks of B.Tech. will be called in II counselling only. The candidate seeking admission based on OGPA/percentage of marks of B.Tech. must submit their final year mark sheet by **26-07-2018** failing which their application will not be considered.

(iii) No letter, fax or telegram enquiring about the result of the Entrance Examination will be entertained.

(iv) The candidates will have to report at the counselling place as per schedule given in counselling letter for checking of relevant documents and depositing prescribed fee. Those candidates who do not turn up at their call will be given a chance at the end of the day. They can claim only the programmes/majors in which seats are available at that time and as per their qualifications/ groups.

(v) The candidates coming for personal appearance should bring alongwith them the following documents for checking and depositing before counselling:

1. Self Attested photocopies of High School Certificate and Marks-Sheet alongwith the originals.
2. Self Attested photocopies of Intermediate Certificate and Marks-Sheet alongwith the originals.

3. Self Attested photocopies of Marks-Sheet and Certificate of any other higher degree qualifications that he/she may possess alongwith the originals.
4. Domicile Certificate of Uttarakhand State issued by the competent authority after 20 Nov. 2001.
5. Rural/Sports/Agriculturists Weightage Certificate, in original, as given in Prospectus 2018-2019, if applicable.
6. Character and Conduct Certificate in original from the Head of the Institution last attended.
7. Five-passport size photographs with name and Roll Number written on the back.
8. Original copy of Category Certificate issued after 20 Nov. 2001. In case of OBC category, the OBC Certificate issued after 31.03.2018 must be submitted in original on the prescribed proforma given in the Prospectus 2018-19.
9. Solemn Voluntary declaration form (**Appendix – IV**).
10. A Gap Certificate accounting for discontinuity of more than three months after leaving the Institution last attended. (Those employed should bring certificate from employer, others should produce a sworn affidavit duly notarized on stamp paper of Rs.10/- + Notary stamps Rs.10/- (total value Rs.20/-).
11. The Migration/Transfer Certificate in original to be submitted within three months of the admission.
12. On the directives of the Hon'ble Supreme Court an affidavit duly signed by the candidate and his/her parents/guardian for non-participation in ragging on a non-judicial stamp paper of Rs. 10.00 duly notarized (**Appendix –V & VI**).
13. Medical fitness certificate in the prescribed format (**Appendix-II**).

Note: Candidates seeking admission to Masters' and Ph.D. programmes must submit final year Mark-Sheet/PDC (indicating percentage of marks) at the time of counselling. Without the above documents they will not be allowed to appear before Admission Committee.

- (vi) Candidate not fulfilling the eligibility condition(s) at the time of Counselling and not declared medically fit will not be granted admission.
- (vii) If any candidate fails to deposit counselling & an Advance fee and original certificates, the admission would not be granted and he/she would forfeit his/her claim for admission.
- (viii) The candidate once admitted in a programme as per his/her merit on availability of seat at the time of counselling will not stake any claim for change of programme after counselling is over.

17. Medical Examination

All the admissions are subject to the medical and physical fitness as per medical standards prescribed in **Appendix-III**. The medical fitness certificate must be obtained either from the Chief Medical Officer of a district or a Chief Medical Supdt. of Govt. Base Hospital on the format given at **Appendix II**.

18. Admit Cards

- (a) Admit Card for the Entrance Examination shall be downloaded by the candidate himself/herself from the University website (**www.gbpuat.ac.in**). No separate admit cards will be issued by the Coordinator Admissions, G.B. Pant University of Agriculture & Technology, Pantnagar.
- (b) In case a candidate fails to download the Admit Card due to any reason or has lost, a duplicate Admit Card can be obtained from the Superintendent of the Entrance Examination at the Centre of his/her examination after depositing a sum of Rs. 20.00, a copy of passport size photograph similar to that pasted on the verification form and a copy of online application form.

19. Age Limit

Maximum age limit for admission to all Undergraduate programmes except B.Tech. and B.V.Sc. & A.H. degree programmes is 22 years (25 years for SC/ST categories) as on 30-06-2018. This limit may be relaxed in case of sponsored/nominated candidates. This regulation shall not be applicable to the candidates seeking admission to P.G. Programmes.

For B.V.Sc. & A.H. degree programme the minimum age limit is 17 years and the maximum age of 25 years as on or before 31 December 2018. There shall be relaxation of maximum age by five years for SC/ST/OBC candidates.

20. Refusal of Admission

- (a) The Vice-Chancellor of the University reserves the right to refuse the admission of any candidate despite of his/her fulfilment of the academic requirements for admission on the basis of Entrance Examination, for reasons to be recorded in writing, whose admission in the opinion of the Vice-Chancellor shall not be in the best interest of the University. The decision of the Vice-Chancellor shall be final and legally binding on the candidate.
- (b) The students who have been permanently dropped or temporarily dismissed from this University either on account of acts of indiscipline, or those who have been debarred from seeking admission from this University shall not be allowed to appear in the Entrance Examination, or seek admission as a sponsored/ nominated candidate. If such a candidate appears in the Entrance Examination by concealing the facts or due to oversight on the part of Admission Cell, the candidature of such a candidate shall be rejected.
- The students who are/were dropped from a degree programme of the University on account of poor academic performance shall be allowed to take admission afresh in other degree programmes by clearing the entrance examination as in case of others. However, they will not be allowed to take admission in the same programme. In case they are again dropped on account of poor academic performance they will not be allowed to take admission in any programme of the University in future.
- (c) The candidate found using unfair means in the Entrance Examination of this University shall be rejected and further such candidate shall also be debarred from appearing in the Entrance Examination in future.
- (d) It is the responsibility of the candidate to furnish full and correct information on the application form. Any admission made on the basis of wrong or concealed information supplied by the candidate or due to any over-sight or error on the part of Admission Cell and detected subsequently the admission or joining of the candidate, would be cancelled at the cost and risk of the candidate.

21. Category

- (a) The list of category/sub-category (for office use only) is given in the following table. Once a candidate has chosen his/her category, he/she shall have no option to change it subsequently. If a candidate does not mention the category and or fails to produce valid certificate in support of his/her category/ subcategory, he/she will be considered under general category only.

(i) U.G. Programmes

Category/sub-category	Abbreviation	Code Number			
		Without Weightage	With Rural Weightage	With Sports Weightage	With Agriculturists Weightage
GENERAL					
1. Uttarakhand General	UKG	1100	1101	1102	1103
2. Physically Handicapped of Uttarakhand	UKPH	1160	-	-	-
3. Children of Retired/Killed/Disabled Defence Personnel of Uttarakhand	UKDP	1170	1171	1172	1173
4. Children of Freedom Fighters of Uttarakhand	UKFF	1180	1181	1182	1183
OTHER BACKWARD CLASSES OF UTTARAKHAND					
5. Uttarakhand Backward Classes	UKBC	1200	1201	1202	1203
6. Physically Handicapped of Backward Classes of Uttarakhand	UKPHBC	1260	-	-	-
7. Children of Retried/Killed/Disabled Defence Personnel and belong to Backward Classes of Uttarakhand	UKDPBC	1270	1271	1272	1273
8.Children of Freedom Fighters of Backward Classes	UKFFBC	1280	1281	1282	1283

SCHEDULED CASTES OF UTTARAKHAND					
9. Uttarakhand Scheduled Castes	UKSC	1300	1301	1302	1303
10. Physically Handicapped of Scheduled Castes of Uttarakhand	UKPHSC	1360	-	-	-
11. Children of Retired/Killed/Disabled Defence Personnel and belong to Scheduled Castes of Uttarakhand	UKDPSC	1370	1371	1372	1373
12. Children of Freedom Fighters of Scheduled Castes of Uttarakhand	UKFFSC	1380	1381	1382	1383
SCHEDULED TRIBES OF UTTARAKHAND					
13. Uttarakhand Scheduled Tribes	UKST	1400	1401	1402	1403
14. Physically Handicapped of Scheduled Tribes of Uttarakhand	UKPHST	1460	-	-	-
15. Children of Retired/Killed/Disabled Defence Personnel and belong to Scheduled Tribes of Uttarakhand	UKDPST	1470	1471	1472	1473
16. Children of Freedom Fighters of Scheduled Tribes of Uttarakhand	UKFFST	1480	1481	1482	1483
17. Wards of Kashmiri Migrants	WKM	2100			
18. Wards of J & K Residents	WJKR	2200			
19. University Employee	UE	4000			
20. In service candidates from Animal Husbandry department sponsored by the Govt. of Uttarakhand	UKAHDS	5000			

Irrespective of the option for one of the categories above, the wards of regular Employee of G.B. Pant University of Agriculture & Technology, Pantnagar are advised to indicate at Sl. No. 6 in the online application that they are wards of regular Employee of the University.

(ii) Masters' Programme

Category	Abbreviation	Code Number		
		Without Weightage	With NCC weightage	With Sports Weightage
Uttarakhand General	UKG	1100	1101	1102
Uttarakhand Backward Classes	UKBC	1200	1201	1202
Uttarakhand Scheduled Castes	UKSC	1300	1301	1302
Uttarakhand Scheduled Tribes	UKST	1400	1401	1402

(iii) M.C.A., M.Tech. and Ph.D. Programme

Category	Abbreviation	Code Number
Uttarakhand General	UKG	1100
Uttarakhand Backward Classes	UKBC	1200
Uttarakhand Scheduled Castes	UKSC	1300
Uttarakhand Scheduled Tribes	UKST	1400
Other States	OS	3000

(b) (I) Rural Weightage {For U.G. (except B.Tech.) Programmes Only}

A weightage of 2 percent of the marks obtained in the Entrance Examination in determining the merit shall be allowed to the candidates belonging to rural areas of Uttarakhand. The rural area weightage will be allowed for determining the Inter-se-merit of the candidate only and not for acquiring eligibility. A candidate who has passed the qualifying examination from an Intermediate College situated in a rural area of Uttarakhand shall be deemed to be a candidate belonging to a rural area. A certificate to this effect shall have to be submitted in original alongwith application form by the candidate from the Principal of the College concerned duly countersigned by District Inspector of Schools or the District

Magistrate of the District on the prescribed Certificate available in this Prospectus (**Appendix-VII**). In case of a student passing out from Inter College/Campus School/G.G.I.C., Pantnagar, Certificate for Rural Area weightage may be given by the respective Principal only.

(b) (II) Agriculturists Weightage {For U.G. (except B.Tech.) Programmes Only}

A weightage of 2 percent of the marks obtained in the Entrance Examination shall be given to the qualified candidate who is a farmer's Son/Daughter/Brother/ Sister/Grand Son/Grand Daughter subject to production of certificate (**Appendix-VII**) from competent authority for having land in Uttarakhand under cultivation by himself/herself, his/her brother, his/her father, his/her mother, his/her grand father (paternal), his/her grand mother (paternal).

(b) (III) Sports Weightage {For U.G. (except B.Tech.) and Masters' Programmes Only}

A weightage of 2 percent of the marks obtained in the Entrance Examination shall be given to the sports men/women candidates. This weightage shall, however be given only to those sports men/women candidates who have played at the Inter-varsity/ State level (Junior /Senior level) as the case may be or above these levels, as evidenced by the certificate (**Appendix –VII**) issued by these bodies.

(c) NCC Weightage to 'B' Certificate Holder (For Masters' Degree Programmes Only)

A weightage of 2 percent of the marks obtained in the Entrance Examination shall be given to the qualified candidates who have NCC 'B' certificate.

Note:1. A candidate seeking admission in U.G. Programme can claim only one weightage either Rural, Sports or Agriculturists.

2. A candidate seeking admission to Masters' Programmes can claim only one weightage either Sports or NCC.

22. Subject Groups for Master's Programme

For admission to Masters' programme of the University, the candidate shall have to specify the group of paper in the application form based on qualifying examination mentioned against the programme. The groups with their code number are given below:

Sl. No.	If you Posses a Degree of	Subject Group & Group Code for Entrance Examination	
1.	B.Sc.Ag./B.Sc.Ag. & A.H.	Agriculture	01
2.	B.Sc. (Horticulture)	Horticulture	03
3.	B.Sc. (Forestry)	Forestry	04
4.	B.F.Sc.	Fisheries	05
5.	(i) B.Sc. in Home Science (ii) B.Sc. in Home Economics (iii) B.Sc. in Family & Community Sciences	Home Science	06
6.	B.V.Sc. & A.H./B.V.Sc.	Vety. Sciences	07
7.	(i) B.Sc. (Dairy Technology) (ii) B.Sc. (Food Technology) (iii) B.Tech. (Dairy Tech.) (iv) B.Tech. (Food Tech. /Food Sc.) (v) B.Tech.(Food Engg.)	Food Science and Dairy Technology	08
8.	(i) B.Sc. (Biochemistry) (ii) B.Sc. (Microbiology) (iii) B.Sc. with Chemistry as one of the major subjects. (iv) B.Sc. (Microbiology with Chemistry) (v) B.Sc. (Zoology, Botany and Chemistry) (vi) B.Sc. Biology (Zoology and Botany with any other subject) (vii) B.Sc. with Environmental Science/Environmental Biology as one of the major subjects. (viii) B.Sc. Botany as one of the major subjects. (ix) B.Sc. Biotechnology. (x) B.Sc. Chemistry, Botany & Food Science & Quality Control.	Life Sciences	09

9.	(i) B.Sc. (Physics, Chemistry and Mathematics) (ii) B.Sc. with Statistics as one of the major subjects (iii) B.Sc. with Physics as one of the major subjects (iv) B.Sc. with Mathematics as one of the major subjects	Physical Sciences	10
10.	(i) BCA (ii) B.Sc. with Mathematics as one of the major subjects. (iii) B.Sc. (Information Technology). (iv) B.Sc. Computer Science.	MCA	11

23. Syllabus

The syllabus for undergraduate programmes is given in **Appendix VIII**. For postgraduate programmes this will be at par with the standard course content of the subject approved by the UGC/ICAR for Indian Universities. However, the syllabus for Life Sciences & Physical Sciences is given at **Appendix-IX** and MCA is given at **Appendix X**.

24. Registration of fresh students

Registration for the first semester of the year of a degree programme is a part of admission procedure and shall be governed by the admission rules. Admission of new students admitted through Entrance Examination failing to register in the prescribed manner within seven days from the initial date of Registration will be cancelled.

25. Normal and Maximum Duration of the Programmes

The normal and maximum duration of various degree programmes is as per details given below. A student is required to complete all his/her degree requirements within the specified period, failing which he/she may be rendered ineligible for award of the degree.

S. No.	Degree	Normal Duration	Maximum Duration
1.	B.Sc. Agriculture	8 Semesters	12 Semesters
2.	B.V.Sc. & A.H.	5 ½ year (including a compulsory internship of "One year" duration)	9 academic years (including Internship)
3.	B.Sc. (Hons.) Community Science	8 Semesters	12 Semesters
4.	B.F.Sc.	8 Semesters	12 Semesters
5.	B.Sc. (Forestry)	8 Semesters	12 Semesters
6.	B.Sc. Horticulture	8 Semesters	12 Semesters
7.	B.Sc. Food Technology	8 Semesters	12 Semesters
8.	B.Tech.	8 Semesters	12 Semesters
9.	B.Tech. For Diploma holders and B.Sc. (Maths) degree holders to be admitted to 2 nd year level.	6 Semesters	9 Semesters
10.	Master's degree in various majors except MCA	4 Semesters	8 Semesters
11.	MCA	6 Semesters	9 Semesters
12.	Ph.D. degree in various majors	6 Semesters	12 Semesters

26. Fee and Refund of fee at the time of Counselling /Admissions

Information regarding each component of the fee, deposits and other charges payable by the students admitted to the University for pursuing a course/programme of study is given in **Appendix - XI**

All the candidates who are called for counselling for admission to various degree programmes shall have to deposit an Advance fee of Rs. 5000/- and a counselling fee of Rs.500/- (except MCA programme) in advance. The Counselling fee of Rs.500/- (non-refundable) will be deposited in cash whereas an advance fee shall be deposited through bank draft to be drawn in favour of the Comptroller, G. B. Pant University of Agriculture & Technology, Pantnagar payable at the State Bank of India (Code No. 1133) or U.Co. Bank (Code No. 678) or Punjab National Bank (Code No. 4446) Pantnagar. In case the candidate is granted admission to any of the programmes an Advance fee will be adjusted against the University fee of the

programme. If the candidate fails to register within the stipulated period, his/her admission will stand cancelled automatically and **the fee deposited by the candidate will be refunded as per University rules as given below:**

कार्यालय कुल सचिव
गो0ब0 पंत कृषि एवं प्रौद्योगिक विश्वविद्यालय पन्तनगर (जिला-ऊधमसिंह नगर)

पत्रांक 3.5.1/2016/1267 दिनांक: फरवरी 6, 2016

कार्यालय आदेश

विश्वविद्यालय के विभिन्न पाठ्यक्रमों के अन्तर्गत शैक्षणिक सत्र 2016-17 में प्रवेश प्रक्रिया में भाग लेने वाले छात्र/छात्राओं को उनके द्वारा सीट छोड़ने पर, उनके द्वारा जमा कराये गये शुल्क की वापसी, विश्वविद्यालय नियमानुसार निम्न प्रकार की जायेगी :-

I- संबंधित छात्र/छात्रा द्वारा प्रवेश हेतु काउन्सिलिंग में भाग लेने के पश्चात् यदि उसे पाठ्यक्रम आवंटित नहीं होता है तो उसे उसके द्वारा विश्वविद्यालय में जमा अग्रिम शुल्क रू 5000/- वापस कर दिया जायेगा।

II- (अ) यदि छात्र/छात्रा द्वारा प्रवेश हेतु उसके द्वारा काउन्सिलिंग में भाग लेने के पश्चात् उसे पाठ्यक्रम आवंटित हो जाता है और उसके द्वारा विश्वविद्यालय में सम्पूर्ण शुल्क जमा कर दिया जाता है तथा आई0डी0 नं0 (परिचयाक) दे दिया जाता है, तदुपरान्त यदि उसके द्वारा द्वितीय काउन्सिलिंग तक अपना पंजीकरण नहीं कराया जाता है, ऐसी दशा में उसके द्वारा विश्वविद्यालय में जमा अग्रिम शुल्क रू0 1000/- की कटौती करते हुए शेष शुल्क उसे वापस कर दिया जायेगा।
(ब) इसके अतिरिक्त स्ववित्त पोषित पाठ्यक्रमों यथा Food Tech. स्नातक स्तर, M.B.A/M.C.A. स्नातकोत्तर स्तर के लिए छात्र/छात्रा द्वारा विश्वविद्यालय में जमा प्रोग्राम शुल्क में से पृथक से रू0 1,000/- मात्र की कटौती कर शेष धनराशि वापस कर दी जायेगी।

III- यदि छात्र/छात्रा द्वारा प्रवेश हेतु काउन्सिलिंग में भाग लेने के उपरान्त उसे पाठ्यक्रम आवंटित कर दिया जाता है तथा उसके द्वारा पंजीकरण कराने के पश्चात् सीट छोड़ दी जाती है। तब ऐसी दशा में निम्नानुसार शुल्क वापसी की जायेगी:-

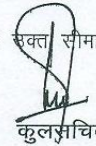
(i) काशन मनी (सुरक्षा धनराशि) की सम्पूर्ण वापसी।
(ii) शिक्षण शुल्क तथा छात्रावास शुल्क की वापसी उसके द्वारा विश्वविद्यालय में अध्ययन अवधि के आधार पर आनुपातिक रूप से की जायेगी। अवधि निर्धारण हेतु माह के किरसी भाग को पूर्ण माह माना जायेगा।
(iii) खाद्य अग्रिम की धनराशि में से खाद्य बिल की कटौती करते हुए शेष धनराशि वापस की जायेगी।
(iv) उक्त के अतिरिक्त विश्वविद्यालय का पाठ्यक्रम बीच में छोड़ने पर रू0 1000/- प्रोसेसिंग शुल्क की अतिरिक्त कटौती की जायेगी।
(v) स्ववित्त पोषित पाठ्यक्रमों हेतु भी उपरोक्त व्यवस्था लागू होगी तथा प्रोग्राम फीस में से रू0 1000/- की अतिरिक्त कटौती कर शेष वापस कर दी जायेगी।

IV- यदि छात्र/छात्रा द्वारा द्वितीय काउन्सिलिंग में पंजीकरण के उपरान्त सीट खाली की जाती है तब छात्र/छात्रा को केवल खाद्य अग्रिम, काशन मनी की धनराशि आवश्यक कटौती उपरान्त वापस की जायेगी। इसके लिए पंजीकृत छात्र/छात्रा को अदेयता प्रमाण पत्र प्रस्तुत करना होगा।

नोट:

(i) रिक्त सीट को प्रतीक्षारत छात्रों से भर लिये जाने/नहीं भरे जाने, जैसी भी स्थिति हो, संयोजक प्रवेश द्वारा प्रमाणित किये जाने के पश्चात् ही शुल्क वापस किया जायेगा।
(ii) आनुपातिक शुल्क वापसी के अन्तर्गत - प्रवेश शुल्क, परीक्षण शुल्क, समायोजनार्थ शुल्क, मेडिकल इन्श्योरेंस प्रीमियम तथा टूर मनी की सम्पूर्ण धनराशि वापस नहीं होगी।
(iii) यह व्यवस्था शैक्षणिक सत्र 2016-17 से प्रभावी होगी तथा पूर्व में निर्गत आदेशों को संशोधित समझा जाए।

प्रतिलिपि : सभी अधिष्ठाता
: वित्त नियंत्रक
: सभी छात्रावास अभिरक्षक
: उपकुलसचिव/सहा0 कुलसचिव/कुलसचिव कार्यालय के समस्त सम्बन्धित कर्मियों
: कुलपति के विशेष कार्याधिकारी को कुलपति महोदय के सूचनार्थ
: समन्वयक (प्रवेश)


कुलसचिव

The total amount of University fee shall be paid by a candidate before issuing the ID number. The amount of University fee to be deposited at time of counselling may be seen from the University website. In respect of MCA programme (self-financing) a non-refundable counselling fee of Rs. 2000.00 in cash shall have to be deposited by the candidate in advance.

Appendix-I A

ADMISSION CRITERIA FOR CANDIDATES ADMITTED THROUGH ALL INDIA ENTRANCE EXAMINATION CONDUCTED BY ICAR/VCI

The minimum eligibility qualification, Group of papers, Scheme for conduct of examination and minimum age for the candidates admitted through ICAR/VCI will be same as approved by these bodies and published in their Prospectus.

Appendix-I B

MINIMUM ELIGIBILITY QUALIFICATIONS FOR CANDIDATES SPONSORED/ NOMINATED BY THE GOVT. OF INDIA/STATE GOVT. OF UTTARAKHAND AT UNDERGRADUATE LEVEL AND STAFF CANDIDATES OF GBPUA&T, PANTNAGAR/DEVELOPMENT DEPARTMENTS OF STATE GOVT./G.O.I. AT POST-GRADUATE LEVEL AND CANDIDATES COMING THROUGH GATE AND ALL INDIA TEST CONDUCTED BY THE CENTRAL AGENCIES.

A. Undergraduate Programmes

I. Bachelor of Science Agriculture

- (i) Intermediate Agriculture/Science with Mathematics or Biology or equivalent examination with First class followed by First Class in High School or equivalent examination.

OR

- (ii) Intermediate Agriculture/Science with Mathematics or Biology or equivalent examination with atleast 65% marks and 55% marks in High School or equivalent examination.

(iii) For Village Development Officer nominated by Uttarakhand Government.

1. 55% marks in Intermediate Science/Agriculture & High School or equivalent examinations.
2. A pass in two years Village Level Worker Diploma course.
3. Five years field experience as Village Development Officer or equivalent or in a higher capacity.

II. Bachelor of Veterinary Science and Animal Husbandry

- (i) The minimum eligibility qualifications will be the same as prescribed for other candidates seeking admission through the Entrance Examination. The candidates have to appear in the Entrance Examination with PCB- paper code-1 and shall have to qualify the written test as given in **Para 12 C**.

(ii) For Candidates educated abroad

The students who are educated abroad seeking admission in Veterinary colleges in India should have passed the subject of Physics, Chemistry, Biology or Biotechnology and English up to the 12th Standard level with 50% marks in aggregate of these subjects.

III. Bachelor of Fisheries Science

- (i) Intermediate Science with Biology or equivalent examination with First Division followed by First Division in High School or equivalent examination.

OR

- (ii) Intermediate Science with Biology or equivalent examination with atleast 65% marks and 55% marks in High School or equivalent examination.

(iii) For In-service candidates nominated by Fisheries Department of Uttarakhand Govt.

Intermediate Science or equivalent Examination with Biology with atleast 55% marks in High School and Intermediate examination both.

IV. Bachelor of Science (Community Science)

- (i) Intermediate Science/Agriculture or equivalent examination with First class followed by First Class in High School or equivalent examination.

OR

- (ii) Intermediate Science/Agriculture or equivalent examination with at least 65% marks followed by 55% marks in High School or equivalent examination.

V. Bachelor of Technology Programmes

(A) Sponsored and nominee candidate of State Govt./Govt. of India

60% marks in aggregate in any one of the following examination with atleast 45% marks in High School or equivalent examination.

(i) Intermediate Science (10+2) with Physics and Mathematics with any one optional subject i.e. Chemistry, Biotechnology, Computer Science and Biology.

OR

(ii) Pre-professional with Physics, Chemistry and Mathematics.

OR

(iii) First year of the three years degree course with Physics, Chemistry and Mathematics provided it is a University examination.

(B) Diploma holders for admission to 2nd year of B.Tech. degree programmes:

Admissions to 2nd year of B.Tech. degree programmes for the Diploma Holders shall be made on the basis of the merit list of the entrance examination to be conducted as per the Uttarakhand Government policy (as per G.O.No. 187/XXIV(8)/2005-37/2004).

Eligibility criteria for such category of candidates are as under:

Diploma in any branch of engineering with a minimum of 60% aggregate marks and minimum three years of institutional study after High School or equivalent. Diploma holders in Agricultural Engineering are entitled to admission in B.Tech. Agricultural Engineering only.

(C) B.Sc. (Maths) degree holders seeking admission to 2nd year B.Tech. degree programmes:

Admissions to 2nd year of B.Tech. degree programmes for B.Sc. (Maths) degree holder shall be made on the basis of the merit list of the entrance examination to be conducted as per the Uttarakhand Government policy.

Eligibility criteria for such category of candidates are as under:

B.Sc. (Maths) degree with a minimum of 60% marks (aggregate) and minimum of three years of institutional study after Intermediate/equivalent.

(D) Kashmiri Migrant and Reserved Seats for residents of J&K and North East States.

Admission against reserved seats for Kashmiri Migrant for I year of B.Tech. programme, shall be made by SCBUK/UTU, Dehradun or as per the latest Uttarakhand Government Policy.

Candidates seeking admission against reserved seats for residents of J&K and North East States for 1st year of B.Tech. programme, should contact the Director, Technical Education, House No.-143, Vasant Vihar, Dehradun (Uttarakhand).

B. Postgraduate Programmes

I. Masters' Programmes

The eligibility for sponsored candidates will be the same as prescribed for other candidates seeking admission through the Entrance Examination. Candidates should have two years field/teaching/research experience in the related field on the last date of submission of completed application form. The candidate should have secured at least 50% marks in aggregate or an OGPA of 6.000/10.000 or 3.000/5.000 at Bachelor's level. Further, a relaxation of 0.5% mark per year but not more than 2% marks under any circumstance, for every one-year extra applaudable service after two years of service in the University/Institution shall also be given.

II. Ph.D. Programmes

The eligibility for sponsored candidates will be the same as prescribed for other candidates seeking admission through the Entrance Examination. Candidates should have two years field/teaching/research experience in the related field on the last date of submission of completed application form. The candidate should have secured at least 50% marks in aggregate or an OGPA of 6.000/10.000 or 3.000/5.000 at Bachelor's level and 55% marks in aggregate or 6.500/10.000 or 4.000/5.000 at Master's level. Further, a relaxation of 0.5% mark per year but not more than 2% marks under any circumstance, for every one-year extra applaudable service after two years of service in the University/Institution shall also be given.

FORMAT FOR MEDICAL CERTIFICATE**(TO BE OBTAINED ONLY FROM A CHIEF MEDICAL OFFICER OF A DISTRICT
or CHIEF MEDICAL SUPERINTENDENT OF GOVT. BASE HOSPITAL)**

Name Candidate:	of		Age:		Sex:	
Roll No.:		Category:		Subcategory:		
Merit Position:		Father's Name:				
(To be filled in by the candidate)						

L.T.			M.I.	V I S I O N	Colour Vision
Height	Weight	Chest	Abdomen		Without glass
					With glass

History	Operation Seizures	Kock's Asthma	Colic's Piles	BP Diabetes
E	Pulse	Tonsil	DNS	Hernia
X				
A				
M	Pallor	L Nodes	CSOM	Hydrocele
I				
N				
A	Cardiovascular		CNS	
T				
I	Respiratory		GIT	
O				
N	Genitourinary		Others	
S				
Is the candidate physically handicapped : Yes/ No				
If yes. Type and extent of handicap (Please write) : Type -I: One leg or hand defective				
Type _____ : Type -II: One leg missing				
Extent _____ % : Type - III One hand missing				
Any other type of handicap (Please specify) :				
Any other finding:				
Final result. (Fit/Unfit)based on the medical standards given in Appendix III of the Prospectus (overleaf) for the purpose of Admission.				

Signature of Candidate

Signature of Chief Medical Officer/
Chief Medical Supdt. of Govt. Base Hospital (with official stamp)
Date:

MEDICAL STANDARDS

1. General Requirement

The candidate should possess good general physique and should be free from any infectious or contagious disease. He/She should be free from any physical or mental illness or defect likely to interfere with the training in the University.

2. **Heart and lungs:** No significant abnormality should be present.
3. **Hernia, Hydrocele:** There should be no hernia or hydrocele. If present corrected before admission.
4. **Vision:**
 - (a) Normal without glasses. Where defective, it must be corrected to 6/9 in better eye and 6/12 in the other eye.
 - (b) There should be no colour blindness for major colours.
5. **Hearing:** Normal in the both ears. Where defective, it must be corrected before hand.
6. **Speech:** There should be no major speech defects.
7. Following categories of physically handicapped candidates (having disability 40% or above) shall be eligible for admission to the various courses as shown against each **under the Physically Handicapped category**.
 - (1) **One leg or hand defective:** B.Sc.Ag./M.Sc.Ag./M.Sc. Agricultural Extension & Communication and Food Technology.
 - (2) **One leg (defective or missing):** Mechanical/Electrical/Electronics & Communication/ Computer/ Production Engineering/Food Technology/B.Sc. (Home Science), M.Tech. Design and Production Engineering, Thermal Science/Electrical Energy System and M.Sc. in Home Science.
 - (3) **One hand (defective or missing):** Civil/Mechanical/Production Engineering and B.Sc. Home Science, M.Tech. in Hydraulic Engineering/Soil Mechanics & Foundation Engineering/Structural Engineering/ Design and Production Engineering/Thermal Science and M.Sc. Home Science.

The candidate claiming for above benefit should submit alongwith application form a certificate from Chief Medical Officer of the District certifying the extent of Physical Handicap.

Note

1. The candidates are well advised to set themselves checked up for any defect and get the same rectified before taking admission to avoid rejection.

SOLEMN VOLUNTARY DECLARATION

(All Freshmen shall be required to sign this solemn voluntary declaration prescribed as under by the University)

IRoll No.....admitted to..... degree programme of the G.B. Pant University of Agriculture & Technology, Pantnagar hereby affirm:

1. That I firmly believe in the basic philosophy outlined in paragraph 11.75 of the Second Education Commission, particularly that quoted below:
 “A University or a College is an academic fellowship of equals where things can be discussed and decided reasonably by the joint committees of teachers and students which we have recommended have this purpose specifically in view. These should be fully utilized to ascertain and redress the genuine difficulties of student. What binds together students and teachers is the deep and creative partnership in the sharing of common interest, mutual regard & sense of values and working together for their main purpose, which is the pursuit of knowledge and discovery. Any one who is not committed to this philosophy or prepared to honour it has really no place in an institution of higher education”.
2. That in any consequence, I believe that all grievances, disputes and problems of the students should be settled by constitutional means, such as approach to the Advisor, Warden, Chief Warden, Dean, Vice-Chancellor or other individuals concerned or by raising them in the relevant committees, such as Central Food Advisory Committee, Professional Societies, Cultural Societies, etc. or by reference to the Board of Management, Chancellor or the State Govt. or if all other means fail by having recourse to Court of justice.
3. That I, further believe that under no circumstances, there is need or justification for any defiance of the Rules and Regulations of the University, show of force, unruly demonstration, coercion, violence or any other means forming part of the so called direct action. I promise that I shall never have recourse to and unconstitutional means.
4. That I, further believe that under no circumstances, there is justification for any student approaching any outsider, may be the agitators from the Universities, politicians or disgruntled individuals not concerned with the affairs of the University. All matters should be settled by those concerned with the affairs of the University such as the students and staff of the University, guardians of the students, members of the Board of Management, the State Government, Chancellor, etc. I shall accordingly refrain from approaching any outside element not concerned with affairs of the University.
5. That, I shall attend my classes and participate in other activities of the University according to the programme, irrespective of the fact whether my other colleagues do so or not and that I shall do so even in the face of intimidation by any of them.
6. That, I further declare that any activity/travelling connected with studies/courses/project etc. will be entirely on my risk and responsibility and in case of accident or mishap the University or any of the functionary will not be responsible for that.
7. I also affirm that I shall abide by the word and spirit of the above declaration and further undertake that if, at any time I am found indulging in any such activity I may be dismissed from the University.

Guardian’s Signature

Student’s Signature

Name in Block Letters.....

Name in Block Letters

Place

Place

Date.....

Date

AFFIDAVIT BY THE STUDENT FOR NON PARTICIPATION IN RAGGING

I. (full name of student with admission/registration/enrolment number) s/o d/o of Mr./Mrs./Ms. _____ having been admitted to (name of the institution) _____, have received a copy of the UGC Regulations on Curbing the Menace of Ragging in Higher Educational Institutions, 2009, (hereinafter called the "Regulations") carefully read and fully understood the provisions contained in the said Regulations.

2. I have, in particular, perused clause 3 of the Regulations and am aware as to what constitutes ragging.

3. I have also, in particular, perused clause 7 and clause 9.1 of the Regulations and am fully aware of the penal and administrative action that is liable to be taken against me in case I am found guilty of or abetting ragging, actively or passively, or being part of a conspiracy to promote ragging.

1. I hereby solemnly aver and undertake that:

(a) I will not indulge in any behaviour or act that may be constituted as ragging under clause 3 of the Regulations.

(b) I will not participate in or abet or propagate through any act of commission or omission that may be constituted as ragging under clause 3 of the Regulations.

2. I hereby affirm that, if found guilty of ragging, I am liable for punishment according to clause 9.1 of the Regulations, without prejudice to any other criminal action that may be taken against me under any penal law or any law for the time being in force.

3. I hereby declare that I have not been expelled or debarred from admission in any institution in the country on account of being found guilty of, abetting or being part of a conspiracy to promote, ragging; and further affirm that, in case the declaration is found to be untrue, I am aware that my admission is liable to be cancelled.

Declared this _____ day of _____ month of _____ year.

Signature of Deponent

Name

VERIFICATION

Verify that the contents of this affidavit are true to the best of my knowledge and no part of the affidavit is false and nothing has been concealed or misstated therein.

Verified at (place) on this the (day) of (month), (year)

Signature of Deponent

Solemnly affirmed and signed in my presence on this the (day) of (month), (year) after reading the contents of this affidavit.

OATH COMMISSIONER

AFFIDAVIT BY PARENT/GUARDIAN

1. Mr./Mrs./Ms. _____ (*full name of parent/guardian*) father/mother/guardian of, (*full name of student with admission/registration/enrolment number*) having been admitted to (*name of the institution*), have received a copy of the UGC Regulations on Curbing the Menace of Ragging in Higher Educational Institutions, 2009, (hereinafter called the "Regulations") carefully read and fully understood the provisions contained in the said Regulations.

2. I have, in particular, perused clause 3 of the Regulations and am aware as to what constitutes ragging.

3. I have also, in particular, perused clause 7 and clause 9.1 of the Regulations and am fully aware of the penal and administrative action that is liable to be taken against ward in case he/she is found guilty of or abetting ragging, actively or passively, or being part of a conspiracy to promote ragging.

4. I hereby solemnly aver and undertake that:

(a) My ward will not indulge in any behaviour or act that may be constituted as ragging under clause 3 of the Regulations.

(b) My ward will not participate in or abet or propagate through any act of commission or omission that may be constituted as ragging under clause 3 of the Regulations.

5. I hereby affirm that, if found guilty of ragging, my ward is liable for punishment according to clause 9.1 of the Regulations, without prejudice to any other criminal action that may be taken against my ward under any penal law or any law for the time being in force.

6. I hereby declare that my ward has not been expelled or debarred from admission in any institution in the country on account of being found guilty of, abetting or being part of a conspiracy to promote, ragging; and further affirm that, in case the declaration is found to be untrue, the admission of my ward is liable to be cancelled.

Declared this _____ day of _____ month of _____ year.

Signature of Deponent

Name

Address.....

Telephone/Mobile No.

VERIFICATION

Verify that the contents of this affidavit are true to the best of my knowledge and no part of the affidavit is false and nothing has been concealed or misstated therein.

Verified at _____ (place) on this the _____ (day) of _____ (month), _____ (year)

Signature of Deponent

Solemnly affirmed and signed in my presence on this the _____ (day) of _____ (month), _____ (year) after reading the contents of this affidavit.

OATH COMMISSIONER

Appendix-VII
CERTIFICATE-I

उत्तराखण्ड के अन्य पिछड़े वर्ग के लिए जाति प्रमाण-पत्र का प्रपत्र (UKBC)

प्रमाणित किया जाता है कि श्री/श्रीमती/कुमारीसुपुत्र/सुपुत्री श्री
निवासी ग्रामतहसील.....नगर.....जिला

उत्तराखण्ड राज्य कीपिछड़ी जाति के व्यक्ति हैं। यह जाति उत्तराखण्ड लोक सेवा (अनुसूचित जातियों/अनुसूचित जनजातियों तथा अन्य पिछड़े वर्गों के लिए आरक्षण) अधिनियम की अनुसूचीके अन्तर्गत मान्यता प्राप्त है।

यह भी प्रमाणित किया जाता है कि श्री/श्रीमती/कुमारीउक्त अधिनियमद्वारा निर्धारित क्रीमिलियर से आच्छादित नहीं है।

श्री/श्रीमती/कुमारीतथा अथवा उनका परिवार उत्तराखण्ड के ग्राम.....
तहसीलनगर.....जिलामें सामान्यता रहता है।

अभ्यर्थी के हस्ताक्षर :
दिनांक :
स्थान :

हस्ताक्षर
पूरा नाम :
मोहर
जिला अधिकारी/अतिरिक्त जिला अधिकारी/सिटीमजिस्ट्रेट/
परगना मजिस्ट्रेट/तहसीलदार

टिप्पणी : यह प्रमाण-पत्र तभी मान्य होगा जबकि यह मार्च 31, 2018 के बाद निर्गत किया गया हो।

CERTIFICATE-2

अनुसूचित जाति/जनजाति (UKSC/UKST)

(अभ्यर्थी के जन्म जिले के जिला मजिस्ट्रेट/प्रथम क्लास मजिस्ट्रेट द्वारा प्रमाणित)

प्रमाणित किया जाता है कि श्री/श्रीमती/कुमारीसुपुत्र/सुपुत्री श्री
निवासी गांव/शहरतहसील.....जिला.....प्रदेश.....का जन्म.....
जाति में हुआ था यह जाति अनुसूचित जाति/जनजातियों आदेश (संशोधन) एक्ट 1956 के अन्तर्गत भारत सरकार/उत्तराखण्ड शासन/.....सरकार द्वारा मान्य अनुसूचित जाति/जनजाति है।

अभ्यर्थी के हस्ताक्षर :
दिनांक :
स्थान :

हस्ताक्षर
पूरा नाम :
मोहर
जिला अधिकारी/अतिरिक्त जिला अधिकारी/सिटीमजिस्ट्रेट/
परगना मजिस्ट्रेट/तहसीलदार

CERTIFICATE-3

स्थायी निवास प्रमाण-पत्र

(शासनादेश संख्या 2588/एक-4/सा0प्र0/2001)

प्रमाणित किया जाता है कि श्री/कु0/श्रीमती.....
पुत्र/पुत्री/पत्नी श्री.....निवासी ग्राम/मोह./वार्ड.....
तहसील.....जिला.....उत्तराखण्ड के स्थायी निवासी है।

यह भी प्रमाणित किया जाता है कि उक्त प्रमाण पत्र निर्गत करने से पूर्व निर्धारित समस्त मानदण्डों की भली भांति जांच कर ली गई है, और मै जांच से पूर्णतया सन्तुष्ट हूँ।

हस्ताक्षर जिला मजिस्ट्रेट
नाम :
मोहर

CERTIFICATE-4

उत्तराखण्ड के स्वतंत्रता सेनानी (Sub Category Children of Freedom Fighters)

(उस जिले के जिलाधिकारी द्वारा प्रमाणित जिसका अभ्यर्थी निवासी है)

प्रमाणित किया जाता है कि श्री/कुमारी.....श्री/श्रीमती.....
निवासी के पुत्र/पुत्री/पुत्र के पुत्र/पुत्र की पुत्री (अविवाहित) है।
श्री/श्रीमतीने स्वतंत्रता संग्राम में भाग लेने के कारण—(जो लागू न हो उसे
काटने का कष्ट करें)

1. कम से कम दो माह की वास्तविक अवधि के लिए कारावास का दण्ड भोगा हो, या
2. नजरबंदी या अण्डर ट्रायल कैदी के रूप में जेल में कम से कम तीन मास रहे हों, या
3. कम से कम 10 बेंतों की सजा पायी हो, या
4. फरार घोषित हुआ हो, या
5. गोली से घायल हुआ हो, या
6. वीरगति प्राप्त की हो, या
7. ऐसे व्यक्ति भी जो पेशावर काण्ड के रहें हों, या
8. भूतपूर्व आजाद हिन्द फौज के प्रमाणित सैनिक हो या
9. भूतपूर्व इंडिया इंडिपेंडेस लीग के प्रमाणित सदस्य हो।

टिप्पणी : ऐसे व्यक्ति जिन्होंने माफी मांगी हो ,उक्त परिभाषा में सम्मिलित नहीं माने जायेंगे।

यह भी प्रमाणित किया जाता है कि श्री/कुमारी.....उपरोक्त स्वतंत्रता संग्राम
सेनानी श्री/श्रीमतीके पुत्र/पुत्री हैं अथवा उनके पौत्र/पौत्री हैं तथा वह
उन पर वास्तव में आश्रित हैं।

अभ्यर्थी के हस्ताक्षर

दिनांक :

स्थान :

हस्ताक्षर जिला मजिस्ट्रेट

नाम :

मोहर

CERTIFICATE-5

उत्तराखण्ड सेना दल (Sub Category Defence Personnel Wards)

(अन्तिम यूनिट के आफिसर कमान्डिंग द्वारा प्रमाणित)

यह प्रमाणित किया जाता है कि श्रीपुत्र/पुत्री
निवासी गाँव/शहर.....तहसील.....जिला..... उत्तराखण्ड
दिनांकको सेवा निवृत्त (**Superannuated**)/युद्ध में मारे गये/अपंग हो गये। वे उस समय भारतीय
थल सेना, जलसेना/वायु सेना स्थानमेंके पद पर कार्यरत थे।

दिनांक :

स्थान :

यूनिट कमान्डिंग आफिसर के हस्ताक्षर

नाम :

मोहर

(जिला मजिस्ट्रेट द्वारा प्रमाणित)

यह प्रमाणित किया जाता है कि श्री/कु0निवासी गाँव/शहर.....
तहसील.....जिला.....उपरोक्त सेना दल के सेवा निवृत्त (**Superannuated**) /युद्ध में
मारे गये/अपंग हो गये कर्मचारी जो उत्तराखण्ड के स्थायी निवासी हैं/थें, के पुत्र/पुत्री हैं।

दिनांक :

स्थान :

हस्ताक्षर जिला मजिस्ट्रेट

नाम

मोहर

CERTIFICATE-6

उत्तराखण्ड के ग्रामीण क्षेत्र के लिये अधिमान (कालेज के प्रधानाचार्य द्वारा प्रमाणित)

प्रमाणित किया जाता है कि श्री/कु0ने कालेज से इण्टरमीडिएट की शिक्षा प्राप्त की है। यह कालेज तहसीलजिला..... उत्तराखण्ड के ग्रामीण क्षेत्र में स्थित है तथा नगर महापालिका , नगर पालिका, छावनी बोर्ड, सूचित क्षेत्र या शहरी क्षेत्र के अधिकृत सीमा से बाहर है।

दिनांक : हस्ताक्षर :
स्थान : नाम:
मोहर

(जिला विद्यालय निरीक्षक अथवा जिला मजिस्ट्रेट द्वारा प्रमाणित)

प्रधानाचार्य द्वारा दिया गया कालेज की स्थिति से संबंध उपरोक्त वक्तव्य प्रमाणित किया जाता है।

दिनांक : हस्ताक्षर जिला विद्यालय निरीक्षक/जिला मजिस्ट्रेट/अतिरिक्त जिला मजिस्ट्रेट
स्थान : नाम :
मोहर

CERTIFICATE-7

शारीरिक विकलांग के अधिमान के लिए प्रमाण-पत्र. Physically Handicapped (मुख्य चिकित्सा अधिकारी द्वारा प्रमाणित)

प्रमाणित किया जाता है कि श्री/कु0पुत्र/पुत्री, श्री/श्रीमती..... निवासी गाँव/शहर..... तहसील.....जिला..... उत्तराखण्ड, जांच के अनुसार नीचे लिखे कारणों से शारीरिक रूप से विकलांग है।

(केवल मुख्य चिकित्सा अधिकारी ही कारण लिखें)

यह भी प्रमाणित किया जाता है कि उपरोक्त विकलांग स्थिति अभ्यर्थी के शिक्षा प्राप्त करने में बाधक नहीं होगी।

दिनांक : हस्ताक्षर मुख्य चिकित्सा अधिकारी
स्थान : नाम
मोहर

CERTIFICATE REGARDING WEIGHTAGE FOR SPORTS

For Under-graduate Candidates:

Note: This Certificate must be furnished in original duly signed by the Principal of an Institute from where the candidate has appeared/passed in the qualifying examination and countersigned by the D.I.O.S. of the Distt. concerned. Incomplete certificate or without a copy of participation certificate shall not be accepted.

I _____ certify that Sri/Km. _____ son/daughter of _____
Distt. _____ State _____ is/was a bonafide student of this Institution and
participated in the (name of game) _____ organised by the State Council of sports
during the period from _____ to _____ at (name of place) _____ and was
awarded a certificate of merit by the State Council of Sports, a copy of which is enclosed.

Date _____ 2018

(Signature of Principal)
Office Seal

COUNTERSIGNED

Date _____ 2018

(Signature of D.I.O.S. of Distt.)
Office Seal

For Post-graduate Candidates:

Note: The Certificate must be furnished in original duly signed by either the Dean Student Welfare or Director of Physical Education or Sports Officer of the Institution from where the candidate has appeared/passed in the qualifying examination and countersigned by the Principal/Dean of the College concerned. Incomplete certificate or without a copy of participation certificate shall not be accepted.

I _____ certify that Sri/Km. _____ son/daughter of _____
Distt. _____ State _____ is/was a bonafide student of this Institution and
participated in the (name of game) _____ organised by the Inter-University Board
during the period from _____ to _____ at (name of place) _____ and was
awarded a certificate of merit by the Inter-University Board, a copy of which is enclosed.

Date _____ 2018

(Signature of D.S.W./Director of Physical Education/Sports Officer)
Office Seal

COUNTERSIGNED

Date _____ 2018

(Signature of Principal/Dean)
Name _____
College Seal _____
Address _____

CERTIFICATE –9

CERTIFICATE REGARDING WEIGHTAGE FOR AGRICULTURIST

(To be signed by an officer not below the rank of Tehasildar)

(For the year 2018-19)

This is to certify that Shri/Smt/Km. (Name of landholder)
Father/mother, Grand Father/Grand Mother (Paternal side) of Shri/Miss (Name of candidate)
..... of village.....
Tehsil.....District holds hectare of land in capacity as owner.

Further certified that his/her main source of income is derived from personal cultivation of land held by him/her.

Place

Signature.....

SEAL

Name

Date.....

Designation.....

CERTIFICATE –10

CERTIFICATE IN RESPECT OF SON/DAUGHTER/SPOUSE OF THE REGULAR EMPLOYEE/DAILY WAGE WORKERS (240 DAYS) OF G.B. PANT UNIVERSITY OF AGRIC. & TECH., PANTNAGAR

I.....hereby certify that Sri/Smt.....
father/mother/husband of Sri/Km./Smt.who has applied for the admission to
an Undergraduate Programme through Entrance Examination 2018 holds the post of
..... under me as a regular employee of the G. B. Pant University of
Agriculture & Technology, Pantnagar.

(Signature of Father/Mother/Husband)

(Signature of Sectional Head)

Date.....2018

(Designation Stamp)

SYLLABUS FOR ENTRANCE EXAMINATION OF UNDERGRADUATE PROGRAMME**MENTAL AGILITY**

No Syllabus is prescribed.

MATHEMATICS

1. **ALGEBRA:** Elements of set theory, Relations and Functions, Mathematical induction, Number System, Arithmetic, Geometric and Harmonic progressions, quadratic equations, partial fractions, permutations and combinations, Binomial Theorem, Exponential and logarithmic series, Matrices and determinants, solution of simultaneous algebraic equations.
2. **PROBABILITY:** Definition, dependent and independent events, problems based on addition and multiplication theorems of probability.
3. **TRIGONOMETRY:** Trigonometry functions, Periodic functions, identities, Trigonometric equation, solution of triangles, height and distance, inverse trigonometric functions, complex number, De-Moivre's Theorem.
4. **COORDINATE GEOMETRY:** Elementary Coordinate Geometry, Straight lines, Family of straight lines, circles, sections of a cone, Equations of Conic sections-parabola, ellipse and hyperbola in standard form.
5. **CALCULUS:** Functions, limits and continuity, differentiation, simple cases, functions of a function, tangents and normals, simple maxima and minima. Integration of simple functions by parts, by substitution and by partial fraction, definite integrals, differential equations.
6. **VECTOR:** Position vectors, addition and subtraction of vectors, scalar and vector products of two and three vectors.
7. **DYNAMICS:** Velocity, acceleration, composition and resolution of velocity and acceleration, laws of motion, work, power and energy, motion under gravity and projectiles, principles of conservation of momentum and energy. Direct impact on smooth bodies.
8. **STATICS:** Composition and Resolution of coplanar and parallel forces, moments and couples, resultant of set of co-planar forces and conditions of equilibrium, determination of centroids in simple cases and frictions.

PHYSICS

Physical measurements, System of units, Dimensions, Errors in measurement, Motion in one, two and three dimensions, Laws of motion, Work, Energy and power, Center of mass, Rigid bodies, Rotational motion, Gravitation, Acceleration due to gravity, Gravitational potential energy, Geostationary satellites.

Brownian motion, Avogadro's hypothesis and Avogadro's number, Inter-atomic and intermolecular forces, States of matter, Crystalline and glassy solids, Elasticity, Pressure, Archimede's principle, Viscosity, Fluid flow, Surface tension.

Kinetic theory of gases, Temperature, Thermal expansion, Heat, Specific heat, Heat capacity, First and second laws of thermodynamics, Heat engines, Transfer of heat.

Periodic motion, Time period and frequency, Simple harmonic motion, Springs, Kinetic and potential energy in SHM, Simple pendulum, Forced oscillations, Resonance, Free and damped oscillations, Superposition principle of waves, Harmonic waves, Reflection of waves, Standing and traveling waves, Beats, Doppler effect.

Properties of electric charge, Coulomb's law, Lines of force, Electric dipole, Electric flux, Electric field, Gauss's theorem, Electrostatic potential, Potential energy, Capacitors and capacitance, Current, Voltage, Resistance, Ohm's law, Kirchhoff's laws, Ammeter, Voltmeter, Chemical and thermal effects of currents, Thermoelectricity.

Magnetic field due to a current, Biot-Savart law, Lorentz force, Amperes law, Magnetic dipole moment, Torque, Galvanometer, Moving charges in magnetic and electric fields, Field of a bar magnet, Magnetic field lines, Magnetic flux, Magnetic field of earth, Tangent galvanometer.

Faraday's law of induction, Lorenz's law, Lorentz force, Inductance, RC, LR and LCR circuits, Power flow in AC circuits, Resonance and oscillations, Electromagnetic waves, em-wave equations, Spectrum of e.m. waves and light.

Light rays, Wavefronts, Coherent and incoherent sources, Interference, Diffraction and Polarization of light, Luminosity, Velocity of light, Reflection from spherical surfaces, Refraction at spherical surfaces, Lenses, Dispersion and spectrometers, Optical defects in mirrors and lenses, Optical instruments, Microscope, Telescope, Cathode rays, e/m of electrons, Photoelectric effect, Photocell, Wave nature of matter.

Atomic masses, Binding energy, Size of the nucleus, Radioactivity, Nuclear energy, Fission and fusion reactions.

Molecules, Molecular energies, Rotational and vibrational spectra, Solids and their structures, Semiconductors, Semiconductor diodes, Transistors.

BIOLOGY

BOTANY

1. Morphology of root, stem and leaf and their modifications.
2. Flower, inflorescence, seed and fruits.
3. Development of male and female gametophytes, pollination, fertilization and development of embryo.
4. Germination, growth and development.
5. Cell and cellular functions, tissues, anatomy of root, stem and leaf of both monocot and dicots, secondary growth.
6. Elementary study of Plant Physiology.
 - (a) Structure of root hair, uptake of water and minerals root pressure and transpiration.
 - (b) Structure of stomata, function, factors, and carbon assimilation.
 - (c) Translocation and storage of food materials.
 - (d) Respiration
 - (e) Mineral nutrition and metabolism
 - (f) Plant hormones and vitamins.
7. Plant taxonomy and elementary study of the following families:
 - (a) Brassicaceae (b) Leguminosae (c) Malvaceae (d) Solanaceae (e) Cucurbitaceae (f) Asteraceae (g) Poaceae (Gramineae)
8. Classification of plant kingdom. A brief study of the following groups/plants:
 - (a) Viruses (b) Bacteria (c) Spirogyra (d) Mucor/Rhizopus (e) Moss (f) Fern (g) Cycas
9. Natural resources and their conservation; environment and pollution-air, water and soil community, ecosystem, pyramids, energy flow, mineral cycles, and succession.
10. Plant tissue culture, biotechnology and its applications.

ZOOLOGY

1. A brief account of classification of animal kingdom with reference to animal biodiversity including both invertebrates and vertebrates.
2. Physiology of animals with emphasis on Human. Homeostasis, nutrition and digestion, circulation, respiration, reproduction, excretion, co-ordination and endocrine.
3. Embryology of human
4. A brief account of animal biotechnology. Immune system and human health, DNA, Gene and genetic engineering.
5. Cell and cell division.
6. Mendelism, sex determination, sex linked inheritance, genetic disorders and polyploidy.
7. Biological molecules including carbohydrates, lipids, proteins and nucleic acids.

CHEMISTRY

ATOMS AND ATOMIC STRUCTURE

Measurements in Chemistry (Significant figures, S.I. Units), Mole concept, Nature of light and electromagnetic waves, atomic spectra, Bohr model, line spectra (a brief idea). Inadequacy of Bohr's Model, concept of an atomic orbital, quantum numbers and its application to electronic structures of atoms). Pauli's exclusion principle. Aufbau principle, Stability of filled & half-filled orbital Configuration of transition elements in 3d series. Dual nature of particle and radiation (photoelectric effect etc.) de-Broglie equation, uncertainty principle (simple numerical problems), Hund's rule.

PERIODIC PROPERTIES OF ELEMENTS

Periodic law, long form of periodic table, Periodicity in properties like atomic radii and volume, ionic radii, ionization energy, electron affinity. Division of elements into s, p, d and f blocks.

CHEMICAL BONDING AND MOLECULAR STRUCTURE

Concept of orbital overlap in bond formation, sigma and pi bonds shapes. of molecules (VSEPR) Theory, hybridization (sp , sp^2 , sp^3 , dsp^2 , sp^3d , sp^3d^2), properties of covalent compounds, shapes of simple molecules like H_2O , NH_3 , CH_4 , PF_5 , SF_6 , C_2H_4 and C_2H_2 . Coordinate bond formation with a few examples, Ionic bonds; definition, factors influencing the formation of ionic compounds. An elementary treatment of metallic and hydrogen bonds. Idea of molecular orbital, bonding and anti bonding, molecular orbital picture in hydrogen and oxygen molecules only.

CHEMISTRY OF REPRESENTATIVE ELEMENTS

The chemistry of s and p block elements with reference to general trends in physical and chemical properties, anomalous behavior of first member of each group, diagonal relationship.

Group 1 Elements: Alkali metals; Group 2 Elements: Alkali earth metals; Group 13 Elements: Boron family; Group 14 Elements: Carbon and silicon family; Group 15 Elements: Nitrogen family;

Group 16 Elements: Oxygen family; Group 17 Elements: Halogen family; hydrogen; Group 18 Elements: Noble gases;

Preparation and properties of a few important compounds of representative elements (like halides, oxides and oxy acids etc.)

COORDINATION CHEMISTRY AND ORGANOMETALLICS

Coordination Compounds nomenclature; Isomerism in Coordination compounds; Bonding in Coordination compounds; Valence Bond Theory Application of Coordination Compounds; Compounds containing metal carbon bonds; Application of organometallics.

CHEMICAL THERMODYNAMICS

Energy changes during a chemical reaction. First law of thermodynamics. Concepts of internal energy and enthalpy. Application of first law of thermodynamics. Hess's law of constant heat summation, Heat of reaction, Heat of neutralization, heat of combustion, heat of fusion and vaporization. Numericals based on the above concepts.

Second law of Thermodynamics: Entropy, free energy, spontaneity of a chemical reaction, free energy and chemical equilibrium, free energy available for useful work. Third law of Thermodynamics (concept of zero entropy only).

CHEMICAL EQUILIBRIUM & PHASE EQUILIBRIUM

Law of mass action and its application to chemical equilibrium.

Effect of changing the conditions of system at equilibrium-Le-Chatelier's principle.

IONIC EQUILIBRIUM IN SOLUTION

Equilibrium involving ions, various concepts of acids and bases-Arrhenius, Bronsted, Lowery and Lewis, dissociation of acids and bases, acid-base equilibria, ionization of water, pH scale, hydrolysis of salts, pH calculation of solutions, acid base titration using indicators. Solubility equilibria-solubility of sparingly soluble salts, solubility equilibria and solubility products, common ions effect, buffer solution and buffer action.

REDOX REACTIONS

Oxidation and reduction-electron transfer concept, redox reactions in aqueous solution, oxidation number, balancing of chemical equations in redox reactions by oxidation number method and ion-electron method or half equation method.

CHEMICAL KINETICS

Rate of reaction-symbolic expression, rate expression. Units of rates and specific rate constants. Order of reaction, molecularity. Determination of order of reaction and concentration (first order reactions only). Temperature dependence of rate constant. Activation energy, Photochemical reactions.

STATES OF MATTER

Gaseous state: Properties of a gas, gas laws, kinetic molecular theory of gases, Solid state. Classification of solids, X-ray studies of crystal lattices & unit cell. Liquid state, Properties of Liquids like vapour pressure, surface tension, viscosity.

NUCLEAR & RADIOCHEMISTRY

Nature of radiation from radioactive substances; nuclear structure and nuclear properties, Nuclear reaction, radioactive disintegration series, artificial transmutation of elements. Isotopes and their uses. Radio carbon dating. Synthetic elements.

SOLUTIONS

Types of solutions, Vapour pressure of solutions and Raoult's law. Colligative properties of solutions. Calculation of molecular masses. Electrolyte solutions, distribution law.

COLLOIDS AND MACROMOLECULES

Colloidal solutions, electrokinetic and optical of colloidal Solutions, properties, applications, concept of gold number, protective colloids, Macromolecules, molecular weight of macromolecules, methods of determining molecular weight of macromolecules.

SURFACE AND CATALYSIS

Absorption and adsorption, emulsions, micelles, modern developments, Interfaces, Homogeneous and heterogeneous catalysis, structure of a catalyst.

CARBON AND ITS COMPOUNDS INTRODUCTION TO CARBON COMPOUNDS

Elemental Carbon. Inorganic compounds of carbon (oxides and carbides)

HYDROCARBONS

Alkanes: sp^3 -hybridization, sigma bond, chain isomerism; Alkenes sp^2 hybridization, carbon-carbon double bond, sigma and pi-bonds. Planar molecular of ethylene cis-trans isomerism; Alkynes: sp -hybridization C (C, linear molecule of acetylene); Arenes: Delocalisation of electronics in benzene, Resonance structure of benzene: o.m.p. -isomers ; Systematic nomenclature of organic compounds.

PREPARATION AND PROPERTIES OF HYDROCARBONS

Source of hydrocarbons (composition of coal and petroleum, hydrocarbons from coal and petroleum, cracking and reforming, quality of gasoline-octane number, gasoline additives).

Laboratory preparation of alkanes (preparation from unsaturated hydrocarbons, alkyl halides and carboxylic acids) ; Laboratory preparation of alkynes (Preparation from alcohol and alkyl halides); Laboratory preparation of alkenes (Preparation from calcium carbide and acetylene) ; Physical properties of alkanes (boiling and melting points, solubility and density)

Reactions of hydrocarbons, (oxidation, additions, substitutions and miscellaneous reactions).

PURIFICATION AND CHARACTERIZATION OF ORGANIC COMPOUNDS

Purification (crystallization, sublimation, distillation, differential extraction and chromatography), Qualitative analysis of elements. Quantitative analysis (estimation of carbon, hydrogen, nitrogen, halogen). Determination of molecular mass (Victor Meyer's Method). Calculation of empirical and molecular formulae from weight percentage data of elements and molecular weight.

ORGANIC CHEMISTRY BASED ON FUNCTIONAL GROUPS

HALIDES AND HYDROXY COMPOUNDS

Nomenclature of compounds containing halogen atoms and hydroxyl group; haloarenes, alcohols and phenols, correlation of physical properties and uses. A few important polyhalogen compounds-chloroforms, carbon tetrachloride, DDT, benzene hexachloride. Polyhydric compounds, ethane 1,2-diol. Propane 1,2,3, triol.

ORGANIC CHEMISTRY BASED ON FUNCTIONAL GROUPS-I

Ethers, aldehydes ketones, carboxylic acids and their derivatives. Nomenclature of ethers, aldehydes ketones, carboxylic acids and their derivative. Acylhalides, acid anhydride, amides and esters, methods of preparation, correlation of physical properties with their structures, chemical properties & uses.

ORGANIC CHEMISTRY BASED ON FUNCTION GROUPS-II

Nitrogen compounds. A brief description of the chemistry of the carbon compounds containing nitrogen (cyanides, isocyanides, nitro-compounds and amines) and their methods of preparation; correlation of physical properties with structure, chemical reaction, uses.

SYNTHETIC AND NATURAL POLYMERS

Classification of polymers, some important natural and synthetic polymers (with stress on their general methods of preparation); some common examples and their important uses.

BIO CHEMISTRY: (Structures of complicated molecules excluded)

CARBOHYDRATES: Monosaccharides, Disaccharides, Polysaccharides.

AMINO ACIDS AND PEPTIDES: Structure and classification, properties of amino acids and peptides, biologically important peptides.

PROTEINS AND ENZYMES: Structure of proteins, some important proteins, enzymes.

NUCLEIC ACIDS: Chemical properties of nucleic acids, Biological functions of nucleic acids, protein synthesis.

LIPIDS: Classification, structure and function.

AGRICULTURE

AGRONOMY

Cultivation of common crops-wheat, paddy, cotton, jowar, bajra, maize, soybean, arhar, mustard, sunflower, pea, groundnut, gram, tobacco, barseem, potato and sugarcane under the following heads:

Recommended varieties and their main characteristics, suitable areas, seed rate, time and method of sowing, irrigation, fertilizer use, control of weeds, insect-pests and diseases, harvesting, processing and yield.

Soils-origin and classification loam, silt, clay, sandy loam, etc.; physical and chemical properties; soil conservation. Use of fertilizers, essential nutrients- nitrogen, phosphorus and potassium uptake by different crops, organic and inorganic fertilizers and their effects on crops and soil, methods of using fertilizers, farmyard manure, composting, green manuring, study of organic and inorganic fertilizers/ manures. Pollution of soil, water and air in modern agriculture and remedial measures.

Irrigation and Drainage – water requirement of crops, measurement of water discharge, prevention of loss of water; quality of water; different methods of irrigation – flooding, basin method, border /strip method, sprinkler and drip irrigation – their advantages and limitations. Necessity for drainage, damage to soil and crops due to excess moisture, prevention of formation of acidic and alkaline soils and their management; natural calamities- floods and drought and their management.

HORTICULTURE

Study of following horticultural crops including recommended varieties and their main features, suitability for different regions, time and method of sowing, fertilizer use, irrigation, diseases and pests and their control.

Crops- cabbage, cauliflower, onion, garlic, cucurbits, bittergourd, bottlegourd, muskmelon, squash, ridgegourd; root crops-carrot, radish sweet potato, turnip; peas, tomato, bringal, lady's finger, spices; fruit crops such as banana, apple, mango, litchi, citrus, guava, papaya, peach etc.

AGRICULTURAL ENGINEERING

Type of iron and steel, wood, plastic and tin used in agricultural implements and their forms & properties. Study of different types of ploughs-their merits and demerits; mechanical devices such as cultivator, harrow, sprayer, seed drill, threshers etc. their management & cost, selection of prime movers, water lifting devices; discharge, command area, cost of different system; soil preparation, methods of ploughing, need for tillage, kinds of tillage, interculture, equipment for interculture.

Power transmission through belts, pulleys and gears, questions relating to number of teeth in gears according to speed and size of pulleys, hand operated chaff cutters, cane crusher etc., draught and its measurement.

AGRICULTURAL ECONOMICS

Introductory agricultural economics-meaning and scope, significance of agricultural economics in national planning. Production – meaning, factors of production such as land, labour, capital and management, properties of factor of production; law of returns; intensive and extensive agriculture; Exchange - meaning, types, advantages; types of markets, general price determination; money and credit; banks and their functions; principle of international trade, Distribution-meaning, rent, wages, interest and profit; Consumption -meaning, wants and their properties, law of diminishing marginal utility, law of demand, relative prices and standard of living; Cooperation - meaning, principles of cooperation, types of cooperative societies in agriculture, single purpose and multi-purpose cooperative societies, land development banks: Agriculture-place in Five Year Plans; statistics of agricultural production in the State; Major programmes of agricultural development.

ANIMAL HUSBANDRY AND VETERINARY SCIENCE

Study of major breeds of cows, buffaloes, goat, sheep and poultry; elementary physiology and anatomy of cows and bullocks; estimate of their age; characteristics of good milch cows and buffaloes, bulls and bullocks.

Care and management of pregnant cow, during calving, newborn calves, young calves, mulch cows; poultry management.

Principles of feeding of various classes of livestock and poultry. Economic feeds for various classes of livestock and poultry. Clean milk production and maintenance of hygiene.

Common medicines and vaccines used in treatment/prevention of animal diseases; handling of animals for treatment; castration. Operation flood, Milk and Milk products, Identification of Adult rated milk.

Note: Questions from similar topics can also be included.

SYLLABUS FOR ENTRANCE EXAMINATION OF MASTER'S PROGRAMME

The syllabus for Postgraduate programmes will be at par with the standard course content of the subject approved by the UGC/ICAR for Indian Universities. The syllabus for Life Sciences & Physical Sciences groups are given below:

LIFE SCIENCES**UNIT-I**

Morphology and anatomy of land plants, Cell cycle, cell division, senescence, life cycle of an angiosperm, pollination, fertilization, embryogenesis, seed formation, seed storage proteins, seed dormancy and germination. Concept of cellular totipotency, organogenesis and somatic embryogenesis, Principles of Mendelian inheritance, linkage, recombination and genetic mapping; extrachromosomal inheritance; gene mutation, chromosome aberrations (numerical and structural), transposons. Introduction to Plant Breeding. Pteridophytes and Bryophytes, Taxonomy and Plant Geography

UNIT-II

Diversity, distribution, systematics and phylogeny of animals, Origin of life, history of life on earth, evolutionary theories, natural selection, adaptation, speciation. Principles of inheritance, molecular basis of heredity, the genetic material, transmission of genetic material, Structure of cell, cellular organelles and their structure and function, cell cycle, cell division, Comparative physiology of different systems, Parasitic organisms and host-parasite relationship, Immune response, cellular and humoral immunity, evolution of the immune system: Embryonic development, cellular differentiation, organogenesis, metamorphosis, genetic basis of development. The ecosystem, habitats, species diversity, zoogeography and Animal behavior.

UNIT-III

Structure of atoms, molecules and chemical bonds, Isomerism, hydrogen bond and hydrophobic interaction in biomolecules; Chemistry of biomolecules-carbohydrates, amino acids, proteins, lipids and nucleic acids, Enzymes and their kinetics, factors affecting enzyme activity, Competitive and non-competitive inhibitions. Coenzymes and cofactors, Metabolism of carbohydrates, fatty acids and proteins. Eukaryotic genome organization (chromatin structure), Genetic code, replication, transcription and translation. Regulation of gene expression, Plant pigments, Secondary metabolites, Vitamins, Hormones and metabolic regulation.

UNIT-IV

Spontaneous generation theory-Germ theory-Discovery of antibiotics-Types of microscopes-Principles and equipment of different kinds of sterilisation-staining Techniques-Nutritional types of bacteria-Growth curve-Factors influencing bacterial growth-Fermentation and other Metabolic pathways: Principle and Application-Classification of Bacteria-Gene transfer methods in microorganisms Antigen and antibody reaction. Role of microbes in carbon and nitrogen cycles-Influence of Rhizosphere on soil microorganism. Microbes in Industry and health

UNIT-V

Plant physiology and its significance in agriculture; physical properties and chemical constitution of protoplasm; plant cell water relation-imbibition, surface tension, diffusion, osmosis; absorption and translocation of water and nutrients; transpiration, guttation, mineral deficiencies and their symptoms; physiological disorders, correction, hydroponics, foliar nutrition aerobic and anaerobic respiration; Photorespiration Factors affecting respiration and Photorespiration. Photosynthesis- modern concept and the factors affecting photosynthesis, nitrogen fixation growth development and differentiation; growth hormones, growth retardants, growth inhibitors and their use in agriculture; tropism in plants photoperiodism and vernalization; seed dormancy, germination; fruit ripening process and its control.

UNIT-VI

Concepts and scope of biotechnology, Tissue culture and its applications, Micropropagation, Meristem culture and production of virus free plants. Anther and microspore culture. Embryo and ovary culture. Protoplast isolation, fusion, and somatic hybridization, cybrids, somaclones, synthetic seeds, In vitro germ conservation, Cryopreservation, Organellar DNA, satellite and repetitive DNA, DNA repair, Recombinant

DNA technology, Cloning vector, Restriction enzymes, Gene cloning. Methods of gene transfer in plants, Achievements and recent developments of genetic engineering in agriculture.

UNIT-VII

Ecology and its relevance to life, natural resources-their management and conservation, Climatic elements as factors of crop growth, Impact of change in environment on cropping patterns, Change in environment due to agricultural environmental pollution and associated hazards to crops and animals, Human liquid and solid waste disposal, Pollution prevention and remediation, Concepts and dynamics of ecosystem component, Food chain and energy flow, Productivity and biogeochemical cycle, Types of ecosystem, Population ecology and biological control, Community structure and organization, Sustainable development, Economic importance of microbes, plants and animals.

UNIT VIII

Electronic configuration of elements, periodic classification of elements, atomic number, atomic and ionic radii, ionization potential, electron affinity and electro negativity, electronic theory of valency, sigma and pi-bonds, hybridization and directional nature of covalent bonds, metallic bonds, VSEPR theory, V.B. and MO theory, ionic solids and weak interactions, Lewis and Bronsted theories of acids and bases, hard soft acid and bases (HSAB), oxidation states and oxidation number, common oxidizing and reducing agents, Ionic equations. Natural and artificial radioactivity, radioactive decay, nuclear fission and fusion. Chemistry of the common elements and their compounds. Principles of extraction isolation (and metallurgy) of important elements. Chemistry of transitional elements, lanthanides and actinides. Structures of hydrogen peroxide, diborane, aluminium chloride and the important oxyacids of nitrogen, phosphorus, chlorine and sulphur. Interhalogen compounds.

Outlines of the manufactures of: sodium carbonate, sodium hydroxide, ammonia, nitric acid, sulphuric acid, cement, glass, ceramics and artificial fertilizers.

Inert gases: Isolation and Chemistry, structure of inert gas compounds.

Werner's theory of coordination compounds, V.B. and M.O. theory of bonding in metal complexes, electronic spectrum, magnetic and spectral properties of metal complexes. Organo metallic compounds. Bioinorganic chemistry, biological role of alkaline earth metal ions, metalloporphyrins.

Analytical chemistry: Principles and methods of chemical analysis, principles involved in separation techniques, chromatography.

UNIT IX

Modern concepts of covalent bonding, bond lengths, energy and bond angles, electron displacements, inductive, electromeric, mesomeric and hyper conjugative effects, resonance and its applications to organic chemistry, tautomerism, effects of structure on chemical reactions, dissociation constants.

Mechanism of organic reactions: Types of reagents and organic reactions, reaction intermediates, product analysis, isotope effects, kinetic and stereo chemical studies.

Stereochemistry: Optical and geometrical isomerism, chirality, enantiomers, stereogenic centers, diastereomers, resolution and racemization, relative and absolute configuration, sequence rules, E&Z and R&S nomenclature, concept of conformation and conformational analysis of ethane, butane and cyclohexane and sugars.

Chemistry and reactions of derivative of aliphatic and aromatic compounds including: Alkanes, alkynes and alkenes. arenes and aromaticity, benzene and polynuclear hydrocarbons, alkyl and aryl halides, S_N1 , S_N2 and S_Ni reactions, nuclear and side chain reactions, aromatic substitutions reactions, elimination reactions. Aliphatic and aromatic alcohols and phenols, ethers and epoxides, aliphatic and aromatic aldehydes and ketones, aliphatic and aromatic carboxylic acids and their derivatives, aliphatic and aromatic amines and amides, synthetic applications of diazonium salts. Amino-acids.

Reactions and applications of organometallic compounds, Acetoacetic and malonic esters, Organic synthesis via enolates.

Heterocyclic compounds, pyridine, quinoline, thiophene, furan and pyrrole.

Important organic name reactions and rearrangements of synthetic importance.

Carbohydrates, classification and general reactions, glucose, fructose and amino acids and proteins, terpenoids and alkaloids. Polymers, dyes and pigment.

Theory and application of spectral techniques, UV, IR and NMR in structure elucidation of simple organic molecules.

UNIT X

Elementary quantum mechanics

Gaseous states: Kinetic theory of gases and gas laws, Maxwell's law of distribution of velocities, Van der Waal's equation, Law of corresponding states, Liquification of gases, Ratio of C_p/C_v .

Thermodynamics: The first law of thermodynamics, Isothermal and adiabatic expansion, Enthalpy, heat capacities, Thermo chemistry –heats of reaction, formation, solution and combustion, Calculation of bond energies, Kirchhoff equation, Criteria for spontaneous changes, second law of thermodynamics entropy. Free energy, criteria of thermodynamic equilibrium.

Solutions: osmotic pressure lowering of vapour pressure, depression of freezing point, elevation of boiling point, determination of molecular weights, association and dissociation of solutes.

Chemical equilibrium, law of mass action and its applications to homogeneous and heterogeneous equilibrium, Le Chatelier's principle, Influence of temperature on chemical equilibrium.

Electrochemistry: Faraday's laws of electrolysis, conductivity of an electrolyte: equivalent conductivity and its variation with dilution, solubility of sparingly soluble salts, electrolytic dissociation, Ostwald's dilution law, anomaly of strong electrolytes, solubility product, strength of acids and bases: hydrolysis of salts, hydrogen ion concentration buffer action, theory of indicators.

Electrochemical cells: Reversible cells, standard hydrogen and calomel electrodes and redox-potentials, concentration cells, determination of pH transport number and ionic product of water, Potentiometer titration, chemical kinetics: Molecularity and order of a reaction, First order and second order reactions, Determination of order of a reaction, temperature coefficients and energy of activation, Collision theory of reaction rates, Activated complex theory.

Phase rule: Explanation of the terms involved, Applications to one and two component system, reduced phase rule, distribution law.

Colloids: General nature of colloidal solutions and their classification, general methods of preparation and properties of colloids, coagulation, protective action, gold number, adsorption phenomenon and adsorption isotherms.

Catalysis: Homogeneous and heterogeneous catalysis, catalytic promoters and poisons.

Photochemistry: Law of photochemistry. Simple numerical problems.

PHYSICAL SCIENCES

UNIT I

Gradient, Divergence and Curl of Vector fields, Gauss's, Stoke's and Green's theorems. Newton's laws, Galilean invariance, Non-relativistic motion of charged particles in electric and magnetic field, conservation of linear, angular momenta and energy, Collisions, Centre of mass frame. Inverse square law force, Kepler's laws. Harmonic oscillator. Damped harmonic oscillator, Quality factor. Coulomb's law, field due to a charge distribution, Gauss's theorem and its applications, Line integral of electrical field, electric potential, Force on a surface charge, Energy associated with electric field. Current density, charging and discharging of a condenser through a resistance. Force on a moving charge, Fields due to a Helmholtz coil, Solenoid and a current loop, magnetic flux, Faraday's law in differential form, Self and mutual inductance, RL and RC circuits. Dielectrics, Moments of a charge distribution, Torque and force on a dipole in and electric field, Induced dipole moment, Polarisability, Qualitative idea about dia, para and Ferro magnetism, Magnetic susceptibility, Langevin's theory of paramagnetism, Hysteresis phenomenon, AC circuits.

UNIT II

Rutherford's atomic model, Bohr's model and spectra of hydrogen atom fine structure, Sommerfeld model, spatial quantization and electron spin. Normal Zeeman effect. X-ray spectra, Moseley's law, Luminescence, Principle and working of different kinds of Lasers, Raman effect.

Laws of thermodynamics, Entropy, C_p and C_v of a gas. Macroscopic and microscopic systems, Internal and external energy states of a molecule, Reversible and irreversible processes, production of low temperatures. Maxwell's thermodynamic relationships, Triple point, applications of Maxwell's thermodynamical relations. Introduction to cryogenics and refrigeration. Black body radiation and different radiation laws. Einstein's theory of specific heat and its limitations, Lattice vibrations, phonons-Debye's theory of specific heat of solids, specific heat of diatomic gases and its variation with temperature.

Black body spectrum, photoelectric effect and Compton effect. De Broglie's waves, Group and phase velocities, Uncertainty principle. Schrödinger's equation, Operators, Expectation values. Applications of Schrödinger's equation and its various applications. Michelson Morley experiment, Postulates of special relativity, Lorentz transformations, Relativistic kinematics

UNIT III

Fermat's Principle, Cardinal points, telescopic combinations, Interference and diffraction of light, Rayleigh criterion, resolving power of telescope and microscope, Grating, Resolving power of a grating, Polarization and different kinds of polarized light, Double refraction, optical activity Electromagnetic theory. Kirchoffs Laws, Thevenins & Nortons Theorems, Filters, VTVM, CRO. Semiconductor Devices, diodes and transistors, FET, MOSFETS, UJT, Thermistors, Rectifiers, Power supply. Different types transistor based amplifiers and oscillators, Multivibrators, Logic gates and Boolean Algebra.

UNIT IV

Crystal structure, Unit cell, Bravis lattices, Miller indices, X-ray diffraction, Bragg's law. Lattice vibrations: Free electron theory of metals, Distinction between conductors, semiconductors and insulators, Intrinsic and Extrinsic semiconductors.

Probability, Ensemble and average properties, Equilibrium and fluctuations, constraints, Equilibrium between two systems in thermal contact, the β parameter, Entropy and probability Boltzmann entropy relation, Statistical interpretation of second law of thermodynamics. Maxwellian Distribution of Speeds in an ideal gas.

Bose-Einstein and Fermi-Dirac Statistics, Free electrons in a metal, photons in black body chamber, Fermi level and Fermi energy.

Structure of nucleus; Liquid drop model and semi empirical mass formula, nuclear reactions, nuclear fission and fusion, elementary particles. Artificial nuclear transmutation, Particle accelerators & detectors, α , β , γ . decay.

UNIT V

Real analysis: continuity and discontinuity, Reimann Integral and its applications. Algebra of integral function, convergence and divergence. Different methods in Hydrodynamics in the equation of continuity in different systems. Equation of motion and Bernoulli's equation with different cases. Motion in 2D and its applications. Differential and Integral calculus: successive differentiation, Different form of theorems, Tangents and normal, Maxima and Minima with different cases. Various types of integral form, Beta and gamma functions.

Linear Algebra: Group, ring field, Integral domain and vector space with examples and theorems. Differential equations and Laplace transformation, vector analysis and Analytical Geometry, mechanics and complex analysis.

UNIT VI

General Statistics, Probability Distributions, Test of Significance, Analysis of Variance, Sampling Theory, Design of Experiment, Time series Analysis, Index Numbers, Statistical Quality Control, Vital statistics, Statistical organizations in India.

UNIT VII

Introduction to computers, fundamentals, peripherals of PCs, software and Hardware. Evolution. Operating system. Structural computer Languages: programming in C, UNIX, WINDOWS Operating Systems. Number systems and computer architecture.

Computational methods for Numerical Analysis: Algebraic and Transcendental equations, systems of simultaneous equations. Interpolation and Differentiation, solution of ordinary differential equations with initial value and boundary value problems.

UNIT VIII

Electronic configuration of elements, periodic classification of elements, atomic number, atomic and ionic radii, ionization potential, electron affinity and electro negativity, electronic theory of valency, sigma and pi-bonds, hybridization and directional nature of covalent bonds, metallic bonds, VSEPR theory, V.B. and MO theory, ionic solids and weak interactions, Lewis and Bronsted theories of acids and bases, hard soft acid and bases (HSAB), oxidation states and oxidation number, common oxidizing and reducing agents, Ionic equations.

Natural and artificial radioactivity, radioactive decay, nuclear fission and fusion.

Chemistry of the common elements and their compounds. Principles of extraction isolation (and metallurgy) of important elements. Chemistry of transitional elements, lanthanides and actinides.

Structures of hydrogen peroxide, diborane, aluminium chloride and the important oxyacids of nitrogen, phosphorus, chlorine and sulphur. Interhalogen compounds.

Outlines of the manufactures of :sodium carbonate, sodium hydroxide, ammonia, nitric acid, sulphuric acid, cement, glass, ceramics and artificial fertilizers.

Inert gases: Isolation and Chemistry, structure of inert gas compounds.

Werner's theory of coordination compounds, V.B. and M.O. theory of bonding in metal complexes, electronic spectrum, magnetic and spectral properties of metal complexes. Organo metallic compounds. Bioinorganic chemistry, biological role of alkaline earth metal ions, metalloporphyrins. Analytical chemistry: Principles and methods of chemical analysis, principles involved in separation techniques, chromatography.

UNIT IX

Modern concepts of covalent bonding, bond lengths, energy and bond angles, electron displacements, inductive, electromeric, mesomeric and hyper conjugative effects, resonance and its applications to organic chemistry, tautomerism, effects of structure on chemical reactions, dissociation constants.

Mechanism of organic reactions: Types of reagents and organic reactions, reaction intermediates, product analysis, isotope effects, kinetic and stereo chemical studies.

Stereochemistry: Optical and geometrical isomerism, chirality, enantiomers, stereogenic centers, diastereomers, resolution and racemization, relative and absolute configuration, sequence rules, E&Z and R&S nomenclature, concept of conformation and conformational analysis of ethane, butane and cyclohexane and sugars.

Chemistry and reactions of derivative of aliphatic and aromatic compounds including: Alkanes, alkynes and alkenes. arenes and aromaticity, benzene and polynuclear hydrocarbons, alkyl and aryl halides, S_N1 , S_N2 and S_Ni reactions, nuclear and side chain reactions, aromatic substitutions reactions, elimination reactions. Aliphatic and aromatic alcohols and phenols, ethers and epoxides, aliphatic and aromatic aldehydes and ketones, aliphatic and aromatic carboxylic acids and their derivatives, aliphatic and aromatic amines and amides, synthetic applications of diazonium salts. Amino-acids.

Reactions and applications of organometallic compounds, Acetoacetic and malonic esters, Organic synthesis via enolates. Heterocyclic compounds, pyridine, quinoline, thiophene, furan and pyrrole.

Important organic name reactions and rearrangements of synthetic importance.

Carbohydrates, classification and general reactions, glucose, fructose and amino acids and proteins, terpenoids and alkaloids. Polymers, dyes and pigment.

Theory and application of spectral techniques, UV, IR and NMR in structure elucidation of simple organic molecules.

UNIT X

Elementary quantum mechanics

Gaseous states: Kinetic theory of gases and gas laws, Maxwell's law of distribution of velocities, Van der Waal's equation, Law of corresponding states, Liquefaction of gases, Ratio of C_p/C_v .

Thermodynamics: The first law of thermodynamics, Isothermal and adiabatic expansion, Enthalpy, heat capacities, Thermo chemistry –heats of reaction, formation, solution and combustion, Calculation of bond energies, Kirchhoff equation, Criteria for spontaneous changes, second law of thermodynamics entropy. Free energy, criteria of thermodynamic equilibrium.

Solutions: osmotic pressure lowering of vapour pressure, depression of freezing point, elevation of boiling point, determination of molecular weights, association and dissociation of solutes.

Chemical equilibrium, law of mass action and its applications to homogeneous and heterogeneous equilibrium, Le Chatelier's principle, Influence of temperature on chemical equilibrium.

Electrochemistry: Faraday's laws of electrolysis, conductivity of an electrolyte: equivalent conductivity and its variation with dilution, solubility of sparingly soluble salts, electrolytic dissociation, Ostwald's dilution law, anomaly of strong electrolytes, solubility product, strength of acids and bases: hydrolysis of salts, hydrogen ion concentration buffer action, theory of indicators.

Electrochemical cells: Reversible cells, standard hydrogen and calomel electrodes and redox-potentials, concentration cells, determination of pH transport number and ionic product of water, Potentiometric titration, chemical kinetics: Molecularity and order of a reaction, First order and second order reactions, Determination of order of a reaction, temperature coefficients and energy of activation, collision theory of reaction rates, Activated complex theory.

Phase rule: Explanation of the terms involved, Applications to one and two component system, reduced phase rule, distribution law.

Colloids: General nature of colloidal solutions and their classification, general methods of preparation and properties of colloids, coagulation, protective action, gold number, adsorption phenomenon and adsorption isotherms.

Catalysis: Homogeneous and heterogeneous catalysis, catalytic promoters and poisons.

Photochemistry: Law of photochemistry. Simple numerical problems.

Note: Questions from similar topics can also be included.

SYLLABUS FOR ENTRANCE EXAMINATION OF MCA PROGRAMME**MENTAL APTITUDE: (50 questions)**

The questions in this section will cover logical reasoning and quantitative aptitude. Some of the questions will be on comprehension of a logical situation and questions based on the facts given in the passage.

MATHEMATICS: (90 questions)

Set Theory: Concepts of sets Union Intersection Cardinality Elementary counting theorem permutations and combinations.

Probability and Statistics: Basic concepts of probability theory, Averages, Dependent and independent events, frequency distributions, measures of central tendencies and dispersions.

Algebra: Fundamental operations in Algebra, Expansions, Factorization, simultaneous linear & quadratic equations, indices, logarithms, arithmetic, geometric and harmonic progressions, determinants and matrices.

Coordinate Geometry: Rectangular Cartesian coordinates, distance formulae, equation of lines, intersections of lines, pair of straight lines, equations of a circle, parabola, ellipse and hyperbola.

Calculus: Limit of functions, Continuous function, Differentiation of function, tangents and normal, simple examples of maxima and minima. Integration of functions by parts, by substitution and by partial fraction; Definite integrals, Applications of Definite Integrals to areas.

Vectors: Position vector, addition and subtraction of vectors, scalar and vector products and their applications to simple geometrical problems and mechanics.

Trigonometry: Simple identities, trigonometric equations, properties of triangles, solution of triangles, heights and distances, General solutions of trigonometric equations.

COMPUTER AWARENESS: (30 questions)

Computer Basics: Organization of a Computer, Central Processing Unit (CPU), Structure of instructions in CPU, input/output devices, computer memory, back-up devices.

Data Representation: Representation of characters, integers and fractions, binary and hexadecimal representations, Binary Arithmetic: Addition, subtraction, multiplication, division, simple arithmetic and two's complement arithmetic, floating point representation of numbers, Boolean algebra, truth tables, Venn diagrams.

GENERAL ENGLISH: (30 questions)

Questions in this section will be designed to test the candidates' general understanding of the English language. There will be questions on the following topics:

Comprehension, Vocabulary, Basic English Grammar (like usage of correct forms of verbs, prepositions and articles), Word power, Synonyms and Antonyms, Meanings of words and phrases, Technical writing.

Note: Questions from similar topics could also be included.

DISTRIBUTION OF QUESTIONS IN THE PAPER:

The question paper will contain 200 multiple-choice questions distributed as follows:

1. Mental Aptitude	50 questions
2. Mathematics	90 questions
3. Computer Awareness	30 questions
4. General English	30 questions

Appendix-XI

G. B. PANT UNIVERSITY OF AGRICULTURE & TECHNOLOGY, PANTNAGAR-263145
DETAILS OF FEE TO BE CHARGED FROM 2018-2019 SESSION

Sl. No.	Particulars	U.G. Programme				P.G. Programme				
		B.Sc. Ag., B.F.Sc., B.Sc. (Home Sc.) & B.Sc. (Food Tech.), **B.Sc. Forestry	B.V.Sc. (Annual Fee)	**B.Sc. (Hort.)	***B. Tech.	Master's except M. Tech. & MBA	*** M. Tech/ MCA	MBA	Ph.D.	Ph.D. Mgt.
(A) ANNUAL FEE (Rs.)										
1.	Magazine Fee	100	100	100	100	100	100	100	100	100
2.	Students Aid Fund	100	100	100	100	100	100	100	100	100
3.	Students Society Fee	200	200	200	200	200	200	200	200	200
4.	Student Hostel Maintenance Fund	1000	1000	1000	1000	1000	1000	1000	1000	1000
5.	Book Fee	200	200	200	200	200	200	-	200	200
6.	Placement Fee	250*	250*	250*	250	250*	250*	-	250*	250*
7.	E-mail/Internet fee (CCF)	1000	1000	1000	1000	1000	1000	1000	1000	1000
8.	Computer Charge & Stationery Fee	-	-	-	500	-	-	-	-	-
9.	Med claim	374	374	374	374	374	374	374	374	374
10.	Annual Alumni Meet (PTAA)	-	-	-	200	-	-	-	-	-
(B) ONCE AT ADMISSION (Rs.)										
11.	Journal Fee	-	-	-	-	100	100	100	100	100
12.	Adjustable Advance	30	300	300	300	500	500	500	500	500
13.	Medical Examination Fee	50	300	300	300	100	100	-	100	100
14.	Caution Money (Refundable)	200	200	200	2500	200	200	200	200	200
15.	Identity Card Fee	-	-	-	-	-	-	-	-	-
16.	Admissions Fee	50	50	50	50	50	50	-	50	50
17.	Syllabus Fee	-	-	-	200	-	-	-	-	-
18.	Alumni Fee	500	500	500	500	500	500	500	500	500
(C) SEMESTER FEE (Rs.)										
19.	Tuition Fee	12980	38938	12980	25000	15572	15000	7073	19469	19469
20.	Library Fee	200	400	200	200	200	200	200	200	200
21.	Rental Charges	100#	200#	100#	100#	100#	100#	100#	100#	100#
22.	Medical Fee	50	100	50	50	50	50	50	50	50
23.	Games Fee	150	300	150	150	150	150	150	150	150
24.	Entertainment Fee	10	20	10	10	10	10	10	10	10
25.	Laboratory Fee	250	500	250	250	250	250	250	250	250
26.	Examination Fee	1000	2000	1000	1000	1000	1000	1000	1000	1000
27.	Food Advance	20000	40000	20000	20000	20000	20000	20000	20000	20000
28.	Utensils Fee	25	50	25	25	25	25	25	25	25
29.	Fan Fee	60	120	60	60	60	60	60	60	60
30.	Room Rent	300	600	300	300	300	300	300	300	300
31.	Tour Fee	60	600	300	300	300	300	-	300	300
32.	Electric Charges									
	(i) Single Seated room	1500	3000	1500	1500	1500	1500	1500	1500	1500
	(ii) Double Seated room	1000	2000	1000	1000	1000	1000	1000	1000	1000
	(iii) Triple Seated room	750	1500	750	750	750	750	750	750	750
33.	Water Charges	60	120	60	60	60	60	60	60	60
34.	Extra Curricular Fee	60	120	60	60	60	60	60	60	60
35.	Monthly Food Bill	On Actual Basis								
36.	Management Society Fee	-	-	-	-	-	-	16	-	16
37.	Placement counselling Fee	100*	100*	100*	100*	100*	100*	240	-	240
38.	Computer Software Fee	-	-	-	-	-	-	500	-	500
39.	CABM News Bulletin	-	-	-	-	-	-	213	-	100
	Total Fee (Rs.)	40609	91392	41369	56089	44061	43489	35881	47958	48814

*Only for Final year student. ** These programmes are suspended for the present.

*** Subject to change by Department of Technical Education, Uttarakhand. # Rental Charges not applicable for SC/ST.

Following fee will be deposited by the candidate as programme fee per annum for self financing programme(s) in addition of the above fee:

- | | |
|---|---------------------------------------|
| 1. B.Sc. (Food Technology) - Rs. 50000/- | 2. MBA - Rs. 2, 25,000/- |
| 3. MCA - Rs. 65000/- (Subject to the approval of BOM) | 4. Ph.D. in Management - Rs. 50,000/- |

In addition to above, the Foreign National will pay US\$5000 & US\$2000 per annum as Institutional fee.

FORMAT FOR FORWARDING OF THE APPLICATION FORM

From

.....
.....
.....

No.

Date :

To

**The Coordinator (Admissions),
G. B. Pant University of Agriculture & Technology,
Pantnagar-263145 (Uttarakhand)**

Ref: _____

Sub: Sponsorship of Mr./Ms. _____ for Masters'/Ph.D.
_____ Programme.

Sir,

This has reference to the application form No. _____ of Mr./Ms. _____ admission to _____ Programme in _____ subject at your University as an in-service candidate. The complete application form is enclosed herewith/has already been sent alongwith relevant documents/papers for consideration under sponsored category. In case of his/her selection for admission in the above programme, he/she will be relieved as per rules of this Institution.

Yours faithfully,

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IMPORTANT INFORMATION AT A GLANCE

- 1. Online filling of Application form**
 - (a) Online filing of application form for UG, Masters, MCA and Ph.D. : 16-02-2018 to 31-03-2018
 - (b) Online filing of application form for M.Tech. Programme and sponsored candidates for Masters', M.Tech. and Ph.D. programmes : 16-02-2018 to 30-04-2018
- 2. Last date for receipt of print out of online application form**
 - (a) Undergraduate, Masters', MCA and Ph.D. programmes : 09-04-2018
 - (b) M.Tech. programmes and Sponsored candidates for Masters', M.Tech. and Ph.D. programmes : 09-05-2018
- 3. For downloading of Admit Cards** : 21-05-2018 onwards
- 4. Date of Entrance Examination**
 - (a) For Postgraduate Programmes : 02-06-2018 (Saturday)
 - (b) For Undergraduate Programmes and MCA Programme : 03-06-2018 (Sunday)
- 5. Scheduled Time of Examination**
 - (a) For Postgraduate Programmes : 10.00 AM to 1.00 PM
 - (b) For Undergraduate Programmes and MCA Programme : 10.00 AM to 1.00 PM
- 6. Declaration of Result** : On or before 15-06-2018
- 7. Counselling** : Second/Third week of July 2018
- 8. Date of Registration** : To be announced later on
- 9. Late date for Registration after first counselling** : To be announced later on
- 10. Second Counselling (Counselling fee as given in Chapter II section 24** : To be announced after the First counselling.
(No separate letter will be issued for second counselling). There will be no third counselling in any circumstances.

11. Examination fee details

	Amount (Rs.)
For General/OBC	Rs. 1200.00
For SC/ST/PH	Rs. 600.00

FOR ANY OTHER INFORMATION CONCERNING ADMISSION PLEASE CONTACT:

**THE COORDINATOR (ADMISSIONS)
G. B. PANT UNIVERSITY OF AGRICULTURE & TECHNOLOGY,
PANTNAGAR - 263 145 (U.S. NAGAR) UTTARAKHAND**

PHONE : (05944) 233407
FAX : (05944) 233473
WEBSITE : www.gbpuat.ac.in