

**Prospectus  
For  
The admission**

**In G.B.Pant University of  
Agriculture and Technology  
Pantnagar**

**For Session 2012-13**

# CONTENTS

<b>Particulars</b>	<b>Page</b>
IMPORTANT INSTRUCTIONS FOR CANDIDATES	2-4
Instructions to candidates for filling OMR Application and Application Form	5-9
<b>Chapters</b>	
<b>I</b> The University, Colleges, Department of Student Welfare, Placement & Counselling, University Library, Medical Health Services	10-14
<b>II</b> Admission Criteria and Entrance Examination, Time of Admission, Date and Time of Entrance Examination, Places of Examination, Application procedure, Examination fee and Last Date for submission of Application, Admission of sponsored/nominated candidates, Number of seats & Eligibility Qualifications, Distribution of seats, Reservations, Admission of sponsored candidates, Mode of Admission (Subject and scheme of examination, Basis of selection for Admission, Counselling), Medical Examination, Admit Cards, Age Limit, Refusal of Admission, Category & Rural/Agriculturalist/Sports/NCC weightages, Subject Groups for Masters' Programmes, Syllabus, Refund of fee at the time of Counselling/Admissions, Registration of fresh students and Normal & Maximum duration of the programmes.	15-31
<b>Appendix-I A</b> Admission Criteria for candidates admitted through All India Entrance Examination conducted by ICAR/VCI	32
<b>Appendix-I B</b> Minimum Eligibility Qualifications for Sponsored/Nominated candidates	32-33
<b>Appendix-II</b> Format for Medical Certificate	34
<b>Appendix-III</b> Medical Standards	35
<b>Appendix – IV</b> Solemn Voluntary Declaration Form	36
<b>Appendix –V</b> Affidavit by the student for non participation in ragging	37
<b>Appendix –VI</b> Affidavit by Parent/Guardian	38
<b>Appendix-VII</b> Category formats and Weightage Certificates	39-43
<b>Appendix-VIII</b> Syllabus for Entrance Examination of Undergraduate Programmes	44-48
<b>Appendix-IX</b> Syllabus for Entrance Examination of Masters' Programmes	49-53
<b>Appendix-X</b> Syllabus for Entrance Examination of M.C.A. Programme	54
<b>Appendix -XI</b> Format for forwarding application form for sponsored candidates	55

## **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)/ Sport weightage (Certificate No. 8) or Agriculturalist weightage (Certificate No. 9) or NCC weightage certificate are required to submit attested photocopy of relevant certificate along-with the 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. There should be no cuttings and over-writing on the OMR application. All entries must be made by the candidate himself/herself legibly.
8. The candidates are advised in their own interest to submit their application forms well in time and to avoid despatching close to last date. All applications delivered after **03.4.2012** in the office of the Coordinator (Admissions) shall be accepted only after payment of **Rs. 200.00** as late fee **upto 11-4-2012**. The application delivered either by post or personally after **11.4.2012** shall not be entertained under any circumstances.
9. The candidate should fully ensure before despatching the 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.
10. The candidates are advised to give their complete mailing address in the OMR application, application form and on the envelope.
11. Candidates are advised in their own interest, to send their application form under registered post.
12. It may be carefully noted by the candidate that 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.
13. The records of the Entrance Examination shall be preserved only for a period of one year.
14. In all matters relating to admission, decision of the Admissions Committee of the University shall be final.
15. 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.
16. University has all the right to change the centre of examination.
17. Results of the entrance examination shall be declared within 20 days of the examination.

18. The candidate shall have to deposit the total amount of the fee prescribed by the University before issuing the I.D. number.
19. 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.
20. In no circumstances candidate admitted in Ist year of various degree programmes will be permitted for registration after 7-8-2012.
21. The second counselling shall be held after the one week of the date of the first registration.
22. The candidate admitted after the second counselling shall complete their registration formalities by the last date of the registration decided by the University.
23. The seats remained vacant in the first semester in Ph.D. programmes shall be filled in the II semester 2012-13.
24. 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.
  - (iv) After the admission in the University.
25. No question booklet and Answer key will be supplied to the candidates. Only Answer sheet can be shown to concerned candidate on payment of fee of Rs.200.00.

### 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. पढ़ 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 आवेदन-पत्र के साथ प्रमाण पत्र की सत्यापित छाया प्रति (निर्धारित प्रारूप पर) संलग्न करे।  
पढ़ 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 जायेंगे।
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. ओ.एम.आर. आवेदन में सारी प्रविष्टियां स्वयं अभ्यर्थी द्वारा साफ-साफ भरी जानी चाहिए। किसी प्रकार की कटिंग तथा ओवरराइटिंग नहीं होनी चाहिए।
8. अभ्यर्थियों को सलाह दी जाती है कि वे अपने आवेदन-पत्र समय से भेजें यदि संयोजक (प्रवेश) के कार्यालय में अन्तिम तिथि **03.4.2012** के बाद कोई आवेदन-पत्र प्राप्त होता है तो उस अभ्यर्थी को परीक्षा शुल्क के अतिरिक्त रूपये **200/-** विलम्ब शुल्क का भी भुगतान करना होगा जो कि केवल **11.4.2012** तक ही स्वीकार किया जायेगा। इस तिथि के पश्चात् किसी भी दशा में कोई आवेदन-पत्र स्वीकार नहीं किया जायेगा।

9. 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।
10. अभ्यर्थियों को सलाह दी जाती है कि वे अपना पत्राचार का पता ओ.एम.आर. आवेदन पत्र, आवेदन-पत्र में दिये निश्चित स्थान तथा लिफाफे पर पूर्ण रूप से साफ-साफ अवष्य लिखें।
11. अभ्यर्थियों को सलाह दी जाती है कि वे अपने आवेदन-पत्र पंजीकृत डाक द्वारा ही भेजें।
12. कोई भी अभ्यर्थी जो अपने पूर्व अध्ययन काल में छात्र के रूप में किसी भी प्रकार की अनुषासनहीनता 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।
13. प्रवेश परीक्षा संबंधी अभिलेख प्रवेश अनुभाग में केवल एक वर्ष के लिए ही सुरक्षित रखे जायेंगे।
14. प्रवेश के मामलों में अन्तिम निर्णय का अधिकार विष्वविद्यालय प्रवेश समिति को ही है।
15. 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 विष्वविद्यालय की प्रवेश समिति को अपने विवेकानुसार अभ्यर्थी को कोई अन्य दण्ड देने का भी अधिकार होगा।
16. परीक्षा केन्द्र को बदलने के सभी अधिकार विष्वविद्यालय के होंगे।
17. प्रवेश परीक्षा का परीक्षाफल प्रवेश परीक्षा की तिथि से 20 दिनों के अन्तर्गत निकाल दिया जायेगा।
18. अभ्यर्थी को विष्वविद्यालय का षटमास का पूरा शिक्षण शुल्क नामांकन संख्या प्राप्त करने के पूर्व जमा करना होगा।
19. 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।
20. प्रथम काउन्सिलिंग के बाद प्रवेश पाने वाले अभ्यर्थियों का पंजीकरण किसी भी परिस्थित में दिनांक 7.8.2012 के बाद नहीं होगा।
21. प्रथम पंजीकरण के उपरान्त रिक्त सीटों के लिये द्वितीय काउन्सिलिंग प्रथम काउन्सिलिंग की तिथि से एक सप्ताह के बाद प्रारम्भ की जायेगी।
22. जिन अभ्यर्थियों का प्रवेश द्वितीय काउन्सिलिंग के तहत होगा वे अपनी पंजीकरण प्रक्रिया विष्वविद्यालय द्वार निर्धारित पंजीकरण की तिथि के अनुसार करेंगे।
23. परास्नातकोत्तर पाठ्यक्रम के लिये प्रथम काउन्सिलिंग के उपरान्त रिक्त सीटों की प्रवेश प्रक्रिया द्वितीय षटमास 2012-13 में की जायेगी।
24. प्रवेशार्थियों द्वारा सत्यापन हेतु अंगूठे के निषान निम्न प्रकार लिये जायेंगे।
  - (1) आवेदन पत्र में बाये हाथ के अंगूठे का निषान।
  - (2) प्रवेश परीक्षा देते समय।
  - (3) काउन्सिलिंग के समय।
  - (4) विष्वविद्यालय में प्रवेश के बाद।
25. प्रश्नपत्र पुस्तिका एवं उत्तर कुंजी की प्रति किसी भी छात्र को सुलभ नहीं कराई जायेगी। मात्र उत्तर पत्रक सम्बन्धित छात्र को निर्धारित शुल्क रूपये 200.00 का भुगतान करने पर दिखाई जा सकती है।

## INSTRUCTIONS TO CANDIDATES FOR FILLING O.M.R. APPLICATION

### Please read the following Instructions carefully before filling the O.M.R. Application:

- Write with black ballpoint pen in boxes  using **English capital letters** or **numerals** and darken the corresponding Circles ● below it with **HB pencil** only. Do not use ink.
  - Darken the Circles fully with HB pencil only as shown ●
  - Erase completely to change responses.
  - Do not scribble or make any stray marks on the OMR application.
  - Do not wrinkle or fold or tear or staple the OMR application.
  - First please write the letter and numeral in boxes provided with black ball point pen and then darken Circles corresponding to that letter and numeral with HB pencil taking care that darkened circle is in same column in which the letter and numeral appears.
  - Please ensure that recent (not more than one-month-old, give date of photograph) passport size (3.5 x 4.5 cm) photograph showing portion of body chest upward (front face) is pasted at appropriate place on the OMR application form. Do not staple. The Candidate should take photograph without cap or goggles (sunglasses). The photograph should not be taken with specs, beard or moustaches if the candidate does not normally wear them.
  - Do not fill in places meant for office use.
1. The candidate is required to write his/her name in the same order as entered in his/her qualifying examination Marks-sheet /Certificate in the item no. 2 of the OMR application.
  2. The Date of Birth must be entered in Christian era as recorded in High School Certificate e.g. 22.3.1991 be entered as       in item no. 3 of OMR application form.
  3. If the candidate has not passed but appearing in the qualifying examination it must be indicated in item no. 13 of the OMR application form.
  4. Write the name of Father/Husband in the item no. 7 of the OMR application.
  5. The candidate is required to indicate code numbers of two alternative places in order of preference in the item no. 8 of OMR application form the places of examination given in section 8 chapter-II of the Prospectus. For example, for the choice Almora and Pantnagar the order of preference on the lines provided for the code number for examination place at item 8 of the OMR application form will be indicated as follows:  
First Preference  Second Preference
  6. Please refer to section 16 (a) (iii) chapter-II of the Prospectus for filling subject group code for UG item no. 10 of OMR application, section 22 for Master's and section 12 A for filling Major group code for Ph.D. test in the item no. 11 of the OMR application.
  7. While filling the item no. 13 of the OMR application for eligibility requirements the candidate should refer to chapter-II section 12 A for Ph.D., 12 B for Master's and 12 C for Undergraduate programmes of the Prospectus.
  8. It is emphasized that a candidate shall be considered only for one category as filled in the OMR application. No subsequent request for change of category shall be entertained. The candidate is advised to go through

section 21chapter-II of the prospectus carefully for filling the proper category. For example, if a candidate belongs to UKFF & BC category but does not claim rural/sports weightage and wants to be considered in both the categories he/she should write category code as follows in item no.12 of the OMR application:

UKFFBC Category

1	2	8	0
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- Please write your full correspondence address in item no. 17 with Pin Code in OMR application in English in **Capital** letters with black ball-point pen only.
- Please write your name and OMR application number on the back of the Bank draft. Keep the Bank Draft/Fee Deposit Challan in the envelope of the OMR application. Do not pin/staple the Bank draft.

**Note: The candidates are advised to see the Demo OMR Application printed at the end of the prospectus before filling the OMR application.**

### ओ.एम.आर. आवेदन-पत्र भरने के लिए अभ्यर्थियों को निर्देश :-

कृपया आवेदन-पत्र भरने से पहले निम्नलिखित निर्देशों को सावधानी पूर्वक पढ़ लें।

- अंग्रेजी के बड़े अक्षरों या अंको का प्रयोग करते हुये खानों में  काले बाल पाइन्ट पेन से लिखें और इसके नीचे गोलाकार रचना  को केवल एच. बी. पेंसिल से भरे। स्याही का प्रयोग न करें।
  - गोलाकार रचनाओं को नमूने के अनुसार केवल एच.बी. पेंसिल से ही भरें।
  - प्रविष्टियों को बदलने के लिए गलत प्रविष्टियों को पूरी तरह से मिटा दें।
  - आवेदन-पत्र पर कोई निषान या अवांछित चिन्ह न बनाये।
  - आवेदन-पत्र को न तो मोड़े, न फाड़े, न ही स्टेपल करें।
  - पहले दिये गये स्थान में काले बाल पाइन्ट पेन से अक्षर एवं संख्या में लिखें और उसके बाद अक्षर एवं संख्या के सामने या नीचे दी गई गोलाकार रचना को एच.बी. पेंसिल से काला कर दें और ऐसा करते समय इस बात का ध्यान रखे कि काली की गई गोलाकार रचना उसी कालम में हो जिसमें की अक्षर एवं अंक लिखे गये हैं।
  - कृपया यह सुनिश्चित कर लें कि नवीनतम (एक माह से अधिक पुराना न हो, फोटो की तिथि लिखें) पासपोर्ट आकार (3.5× 4.5 सेमी.) के फोटो जो कि वक्ष स्थल से ऊपर के हिस्से को प्रदर्शित करता हो, ओ.एम.आर. आवेदन पत्र पर दिये गये निश्चित स्थान पर ठीक से चिपका दे, उसे स्टेपल न करें। फोटों बिना टोपी या धूप के चर्भे के होना चाहिए। यदि अभ्यर्थी साधारणतया चष्मा नहीं पहनता है या दाढ़ी या मूछें नहीं रखता है तो फोटो बिना चष्मा पहने या बिना दाढ़ी मूछों के होना चाहिए।
  - कार्यालय उपयोग के लिए निर्धारित स्थानों को न भरें।
- अभ्यर्थी को अपना नाम ओ.एम.आर. आवेदन-पत्र के मद संख्या 2 में उसी क्रम से लिखना चाहिए जिस क्रम में अर्हकारी परीक्षा अंक-पत्र/प्रमाण-पत्र में दिया गया है।
  - जन्मतिथि को क्रिष्चियन इरा में जैसा हाईस्कूल प्रमाण-पत्र में अंकित है, नीचे दिये हुए तरीके से लिखें। उदाहरणार्थ 22.03.1991 को ओ.एम.आर. आवेदन-पत्र के मद संख्या 3 में इस प्रकार लिखें।  

2	2	0	3	9	1
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  - यदि अभ्यर्थी ने अर्हकारी परीक्षा को उत्तीर्ण नहीं किया है, परन्तु उसमें सम्मिलित हो रहा है। इसका उल्लेख ओ.एम.आर. आवेदन-पत्र के मद संख्या 13 में किया जाना चाहिए।
  - ओ.एम.आर. आवेदन-पत्र के मद संख्या 7 में पिता/पति का नाम लिखें।

5. अभ्यर्थी परीक्षा केन्द्रों के लिए ओ.एम.आर. आवेदन-पत्र में मद संख्या 8 में परीक्षा कोडों के दो वैकल्पिक स्थानों के कोड संख्या का प्राथमिकता के क्रम में उल्लेख करें। परीक्षा के कोडों की सूची विवर्णिका के अध्याय-2 के अनुच्छेद 8 पर दी गई है। उदाहरणार्थ अल्मोड़ा और पन्तनगर के कोड संख्या ओ. एम. आर. आवेदन-पत्र के मद संख्या 8 में प्राथमिकता क्रम में इस प्रकार लिखें।

प्रथम वरीयता 

1
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 द्वितीय वरीयता 

3
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6. आवेदन पत्र के मद 10 में स्नातक और मद 11 में मास्टर्स प्रवेश के लिए विषय के समूह कोड को भरने के लिए विवर्णिका के अध्याय-2 क्रमः अनुच्छेद 16ए, पपपद्ध और 22 तथा पीएच.डी. प्रवेश परीक्षा के लिए प्रमुख समूह का कोड भरने के लिए अनुच्छेद 12 ए विवर्णिका अध्याय-2 का अवलोकन करें।
7. आवेदन-पत्र के मद 13 को भरते समय अर्हकारी योग्यताओं के लिए अभ्यर्थी पीएच.डी. पाठ्यक्रमों हेतु विवर्णिका के अध्याय-2 के अनुच्छेद 12 ए, मास्टर्स पाठ्यक्रमों हेतु अनुच्छेद 12 बी और स्नातक पाठ्यक्रमों हेतु अनुच्छेद 12 सी का अवलोकन करें।
8. अभ्यर्थी केवल उसी श्रेणी में माना जायेगा जो उसने ओ.एम.आर. आवेदन-पत्र में भरी है। भविष्य में श्रेणी परिवर्तन की कोई प्रार्थना स्वीकार नहीं की जायेगी। अभ्यर्थी को यह सलाह दी जाती है कि वह ओ0एम0आर0 आवेदन पत्र के मद संख्या 12 में उपयुक्त श्रेणी को भरने के लिए विवर्णिका के अध्याय-2 के अनुच्छेद 21 को सावधानी पूर्वक पढ़ लें। उदाहरणार्थ यदि अभ्यर्थी यू.के.एफ.एफ. तथा बी.सी. श्रेणी का है, परन्तु ग्रामीण/खेल-कूद अधिमान का दावा नहीं करता है और दोनों वर्ग में रहना चाहता है तो उसे ओ.एम.आर. आवेदन पत्र के मद संख्या 12 में श्रेणी कोड निम्न प्रकार लिखना चाहिए।

यूकेएफएफबीसी श्रेणी 

1	2	8	0
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9. ओ.एम.आर. आवेदन-पत्र के मद संख्या 17 में अपना पत्र व्यवहार का पूरा एवं स्पष्ट पता पिन कोड सहित अग्रेजी के बड़े अक्षरों में काले बाल पेन द्वारा लिखें।
10. बैंक डाफ्ट के पीछे अपना नाम एवं ओ.एम.आर. आवेदन पत्र की संख्या अवश्य लिखें। बैंक डाफ्ट/फी डीपोजिट चालन को ओ.एम.आर. आवेदन पत्र के साथ रखें। इसे आलपिन/स्टेपल न करें और न ही आवेदन पत्र में चिपकाएं।

**टिप्पणी :** विवर्णिका के अंत में नमूने के तौर पर संलग्न ओ.एम.आर. आवेदन-पत्र को अभ्यर्थी अपना आवेदन पत्र भरने से पूर्व अवश्य देख लें।



## INSTRUCTIONS TO CANDIDATE FOR FILLING APPLICATION FORM

**Please read the following Instructions carefully before filling the Application Form.**

- ❖ Application Form must be filled in ink in legible manner in applicant's own handwriting in English only.
- ❖ All entries in the boxes made in items 1,2,3,7 (a & b) & 8 must be made in **Capital** letters only.
- ❖ Please ensure that recent (not more than one month old) identical passport size (3.5 x 4.5 cm) photograph showing portion of body chest upward (front face) is pasted at appropriate place on the application form. **The photograph must be got attested from the Head of the Institution last attended or from the Head of the current Institution.** The Candidate should take photograph without cap or goggles (sunglasses). The photograph should not be taken with specs, beard or moustaches if the candidates do not normally wear them.

❖ **Do not fill in places meant for office use**

- ◆ The candidate is required to write his/her name in **Capital Letters** in English in the same order as entered in his/her qualifying examination marks-sheet/certificate, as

P	A	N	K	A	J		P	A	N	T
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- ◆ Write the name of father and mother.
- ◆ Write the name of guardian, if parents are not alive.
- ◆ The Date of Birth must be entered in Christian era as recorded in High School Certificate, e.g. 22.3.1991 be entered as

2	2	0	3	1	9	9	1
Date		Month		Year			

- ◆ Write your age as on 30.6.2012 here if you are born on 22.3.91 as

0	8	0	3	2	1
Days		Months		Years	

- ◆ Please write your full permanent address with PIN CODE.
- ◆ Please write full mailing address with PIN CODE, Telephone No. and E-mail address if any. The address should be entered as:

**VILL. RAMA MANDIR  
P.O. HALDWANI  
DISTT. NAINITAL**

V	I	L	L		R	A	M	A		M	A	N	D	I	R
P	O		H	A	L	D	W	A	N	I					
D	I	S	T	T		N	A	I	N	I	T	A	L		
						P	I	N	2	6	3	1	3	9	

- ◆ It is emphasized that a candidate shall be considered for only one category as filled in the application form. No subsequent request for change of category shall be entertained. The candidate is advised to go through section 21chapter-II of the prospectus carefully for filling proper category.
- ◆ Candidate is advised to be very careful while indicating his/her choice of group of paper. Only one of the group papers is to be indicated.
- ◆ The candidate should refer to Section 10 Chapter-II of the Prospectus regarding fee details. The details of the Bank Draft/Cash receipt/Transaction ID No. should be entered at the appropriate place under item 15 of the Application Form. At the back of the Bank Draft, OMR application number, name and address of the candidate must be written.
- ◆ Candidate should very carefully fill in the particulars of Examination passed/appeared.

### DECLARATION

Please ensure that the declaration is duly signed by the Father or Mother/Guardian (if parents are not alive) and the applicant. **Forged signatures will disqualify the candidature of the candidate.**

### आवेदन पत्र भरने के लिए अभ्यर्थी को निर्देश :-

कृपया आवेदन-पत्र भरने से पहले निम्न निर्देश सावधानीपूर्वक पढ़ें।

- ❖ अभ्यर्थी को स्याही से स्वयं ही अपनी लिखावट में और बिल्कुल साफ तरीके से आवेदन पत्र अंग्रेजी में ही भरना चाहिए।
- ❖ आवेदन-पत्र के मद 1ए2ए3ए7;-इद्ध - 8 में बने वर्ग भरने के लिए अंग्रेजी के बड़े अक्षरों का ही प्रयोग करें।
- ❖ कृपया यह सुनिश्चित कर लें कि नवीनतम (एक माह से अधिक पुराना न हो, फोटो की तिथि लिखें) पासपोर्ट आकार (3.5×4.5 सेमी.) का फोटो जो कि वक्ष स्थल से ऊपर के हिस्से को प्रदर्शित करता हो और जो अंतिम विद्यालय/महाविद्यालय के प्रधानाचार्य द्वारा सत्यपित किया गया हो। आवेदन पत्र पर दिये गये निश्चित स्थान पर ठीक से चिपका दे, स्टेपल न करें। फोटो बिना टोपी या चष्मों का होने चाहिए। यदि अभ्यर्थी साधारणतया चष्मा नहीं पहनता है या दाढ़ी या मूछें नहीं रखता है तो फोटो बिना चष्मा पहने या बिना दाढ़ी मूछों के होने चाहिए।

### कार्यालय के लिए अंकित जगहों पर कुछ नहीं लिखें।

- ◆ अभ्यर्थी को अपना नाम अंग्रेजी के बड़े अक्षरों में उसी क्रम में लिखना चाहिए जिस क्रम में अर्हकारी परीक्षा अंक-पत्र/प्रमाण पत्र में दिया गया है। जैसे:-

P	A	N	K	A	J		P	A	N	T
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- ◆ अपने पिता व माता का नाम लिखें।
- ◆ अभिभावक का नाम लिखें यदि माता-पिता जीवित नहीं है।
- ◆ जन्मतिथि किश्चियन एरा जैसा हाईस्कूल प्रमाण-पत्र में अंकित है नीचे दिये हुए तरीके से लिखें। उदाहरणार्थ 22.03.1991 को इस प्रकार लिखें।

2	2	0	3	1	9	9	1
दिनांक		माह		वर्ष			

- ◆ उपरोक्त के लिए 30.6.2012 को होने वाली आयु इस प्रकार लिखें।

0	8	0	3	2	1
fnu		ekg		o"KZ	

- ◆ अपना पूरा स्थायी पता पिनकोड सहित लिखें।

**VILL. RAMA MANDIR**  
**P.O. HALDWANI**  
**DIST. NAINITAL**

V	I	L	L		R	A	M	A		M	A	N	D	I	R
P	O		H	A	L	D	W	A	N	I					
D	I	S	T	T		N	A	I	N	I	T	A	L		
					P	I	N	2	6	3	1	3	9		

- ◆ पत्राचार के लिए पिनकोड सहित पूरा पता लिखें।
- ◆ अभ्यर्थी केवल उसी श्रेणी में माना जायेगा जो उसने आवेदन पत्र में घोषित की है। भविष्य में श्रेणी परिवर्तन की कोई प्रार्थना स्वीकार नहीं की जायेगी। श्रेणी घोषित करने के पहले अभ्यर्थी को विवरण पुस्तिका का भाग 21 सावधानीपूर्वक पढ़ लेना चाहिए।
- ◆ अभ्यर्थी प्रश्न पत्र समूह का चयन बहुत सावधानीपूर्वक करें। यह चयन अर्हकारी परीक्षा में तथा विषय एवं पाठ्यक्रम जिसमें प्रवेश लेना है, के अनुरूप होना चाहिए। केवल एक प्रश्न पत्र समूह ही इंगित करें।
- ◆ पुल्क विवरण के लिए अभ्यर्थी विवरण पुस्तिका अध्याय-2 के भाग 10 को देखें। बैंक ड्राफ्ट अथवा रसीद/ट्रांजिक्शन आई0डी0नम्बर का विवरण आवेदन पत्र के मद 15 में प्रस्तुत करें। बैंक ड्राफ्ट के पीछे अभ्यर्थी ओ0एम0आर0 आवेदन पत्र संख्या, अपना नाम व पता अवश्य लिख दें।
- ◆ अभ्यर्थी बहुत सावधानीपूर्वक परीक्षा जो पास की है अथवा जिसमें सम्मिलित हुआ है, का विवरण लिखें।

### घोषणा :

यह सुनिश्चित कर लें कि आवेदन पत्र घोषणा पर माता-पिता या अभिभावक (यदि माता-पिता जीवित नहीं हैं) तथा अभ्यर्थी ने हस्ताक्षर कर दिए हैं। हस्ताक्षर जाली होने की स्थिति में अभ्यर्थी को प्रवेश हेतु अयोग्य माना जायेगा।

## 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 and are given below:

### 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 Production Engineering  
Deptt. of Soil & Water Conservation Engineering

#### **COLLEGE OF FISHERIES**

Deptt. of Aquaculture  
Deptt. of Fishery Biology  
Deptt. of Fishery Hydrography  
Deptt. of Fish Processing Technology  
Deptt. of Fishery Ext. Edu. & Social Sciences  
**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 out of which 58 departments are offering Post-Graduate programmes.

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 scope, opportunities and facilities for the overall development of personality and leadership qualities of the students. Special stress, 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 for each college are under the guidance of Staff Counsellor. It coordinates and provides facilities, activities and services as under: -

##### **(A) Extra-Curricular Activities**

Extra-Curricular activities such as literary, cultural, social, film, hobbies and N.C.C. etc. are organized at University level and also college wise through 11 professional societies besides hostel level activities. A good infra-structure including a 900 seated University auditorium, two mini auditoria, college halls, musical instruments, double film projector and audio-visual aids are available for the organisation of various debates, elocutions, arts and crafts, music, dance, folk songs and drama events besides other personality development professional competitions and contests.

##### **(B) Games and Sports**

Games and sports activities are organized through 17 games & sports clubs. There are separate games and sports staff counsellors for boys and girls. The University provides sufficient games and sports material to all the hostels as well as University level teams. Sufficient number of hostel wise and central play grounds in addition to full fledged stadium, adequately equipped gymnasium, physical fitness centre and a swimming pool exists for athletic as well as sports and games events.

##### **(C) Liberal Education**

In the age of specializations, Liberal Education programme coordinated by the department of Student Welfare attempts to provide a holistic and more creative dimension to student's personality development. The Liberal Education, while inculcating amongst students social, cultural, human, spiritual, ethical and aesthetic values, also aims at equipping the young generation with the knowledge relating to the social value systems, environments, habitats, earth and cosmos. The students get opportunity to learn various provincial and international languages, art, cultures, yoga etc. campus inmates, other than students, 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. This is run by the department of Student Welfare in view of holistic human development to articulate in

intellectual and emotional involvement of the generations in promoting culture of peace, tranquility and values in the course of developing a more inhabitable, sane and sustainable world.

**(D) Hostels**

All students are required to live in hostels on sharing basis only. There are 22 hostels including eleven hostels for female students. One for married students with separate arrangements for post-graduate and undergraduate. They have to live in the hostel with the existing conditions/food quality. High expectations by students or parents cannot be met by the University. All students residing in the hostel are to abide by hostel and cafeteria regulations/rules. In case a student indulges in acts of indiscipline he/she will be removed from the hostel and they have to make own arrangements outside the campus at their own risk and cost. The Chief Warden/Dean Student Welfare may exempt student from living in the hostel or taking food in the hostel cafeteria. There is a common room with a colour T.V. with cable facility, music room, indoor games room and a library having selected books, magazines and newspaper etc. besides courts for volleyball, badminton, basketball and table tennis in most of hostels. The hostel cafeteria is equipped with refrigerator, 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 to facilitate annual repairs and white washing etc. Every Hostel has one landline telephone with incoming facility and one unmanned PCO telephone besides PCOs in female hostel. A student's activity van is provided for student's activity and for taking students for medical aid in case of 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 the formal functions, the students are expected to wear white shirts, white pants during the summer and University blazer (Bottle green colour) with tie during winter. During tournaments and sports competitions, the students are expected to be in proper kit.

**(E) Financial Aid/Bursaries/Scholarships**

**(i) Ph.D. Programmes:** Two University fellowships are awarded @3000/- per month on the basis of merit out of 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 students upto 50% of the total sanctioned seats except MCA (self-financing programme) in respect of each Major are awarded fellowship, Graduate Research/Teaching assistantship as per regulations on the subject. However, the value of fellowship will be of Rs. 2000/- per month for the student who stands first in the merit and for the rest the value of 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 sons/daughters/spouses of regular employees of the University in tuition fee to the extent as existing in the year 2003-2004.

**(iv) Under Graduate Programmes:** Following are the details of financial assistance provided by the University to the first-degree students:

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.	Bursary Scholarship	Rs. 600/- per month	Awarded to 6% students of the total number of students admitted to each programme on the basis of merit at the end of I Semester subject to income restrictions. At present it is Rs. One Lac per annum.
3.	Bursary Scholarship for Home Sc. College	Rs. 600/- per month	Awarded to 25% of the students admitted to Home Science College on the basis of merit at the end of I Semester, subject to income restrictions i.e. Rs. One Lac per annum.

4.	Free ship in Tuition fee		Awarded to 25% undergraduate students on rolls of the University on the basis of merit-cum-means.
5.	Sports Scholarship	Rs.800/- per month	Awarded to the best five all round sportsmen and sports women.

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

1. Merit-cum-Means Scholarship (ICAR).
2. Backward Class Scholarship.
3. S.C. and S.T. Scholarship.
4. Scholarship for State 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. Smt. Chandmukhi Memorial Scholarship.
23. Sh. Satguru Dayanand Memorial Scholarship
24. Smt. Uma Gupta Fellowship
25. U.P. Alp Sankhyak Vittiya Avan Vikas Nigam Scholarship.
26. S.K. Mukherjee Scholarship.
27. AICTE Fellowship
28. MNES Fellowship
29. Priyank Pathak Scholarship
30. Bharti Scholarship
31. Amit Gautam Scholarship/Award
32. S.N. Nayar Memorial Scholarship
33. Inspire Fellowship.
34. UGC Scholarship for M.Tech.
35. DOW Agro Sciences Scholarship.

#### (F) Mediclaim Facilities

University has implemented a Mediclaim policy through United India Insurance Company Ltd. for the students of the University from the academic year 2009-2010 under which facilities for reimbursement of treatment bills up to the extent of Rs. 65, 000.00 in a year are available in different hospitals. The provision for insurance of accidental death of student/parents also exists to the extent of Rs. Two Lac.

#### 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

The University Library has magnificent structure with a seating capacity of 500 readers at a time with the collection of 3.7 Lac documents and subscribing 470 current printed journals. Besides developing need-based collections of printed documents, it has developed basic infrastructure, which is prerequisite for implementing e-based library services. It has exclusive 256 kbps Internet connectivity, provide fast access to information in order to meet the information needs of users. Library uses web based integrated library management system for operating in-house activities. It has also developed its own web page (<http://202.141.116.194>), which acts as interface for its e-services. Various electronic and online resources are added such as CD-ROM based bibliographical databases (CABI, AGRIS,

AGRICOLA, BIOSIS, FASTA and COMPENDEX) online journals and standards to cater to the needs of research and academic community. It has also established a D-Space digital repository, in-house databases like Indian Agricultural Index, Theses along with abstracts, Reprints and OPAC/Web OPAC.

## 10. MEDICAL HEALTH SERVICES

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

- |                                     |                            |
|-------------------------------------|----------------------------|
| 1. General Medical Officers         | 2. ENT Surgeon             |
| 3. Dental Surgeon                   | 4. Eye Surgeon             |
| 5. Lady Medical Officer             | 6. Physician (Monday Only) |
| 7. Orthopedic Surgeon (Monday Only) |                            |

(b) **Indoor ward facilities:** The University hospital has indoor facilities of 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) for needful treatment as per University rules. Emergency services are available round the clock.

(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 TEMPORARILY DISMISSED OR PERMANENTLY DROPPED FROM THE UNIVERSITY EITHER ON ACCOUNT OF POOR ACADEMIC PERFORMANCE OR ON ACCOUNT OF ACTS OF INDISCIPLINE OR THOSE WHO HAVE BEEN DEBARRED FROM SEEKING ADMISSION TO ANY PROGRAMME OF THIS UNIVERSITY ARE NOT ENTITLED TO SEEK ADMISSION IN THE UNIVERSITY.**
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 COULD 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 **AIEEE 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 Masters' programmes in **MBA/ MBA (Agribusiness)** shall be made through **CAT** score and Group Discussion and an Interview conducted by the University.
  - (d) In M.Tech. programmes, admission shall be made first based on the qualified **GATE** score. 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.
  - (e) 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.**
  - (f) 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, 2<sup>nd</sup> Floor, August Kranti Bhawan, Bhikaji Cama Place, New Delhi-110 066.
6. **Time of Admission**

Admissions to all Undergraduate and Masters' degree programmes except for Sponsored or Fellowship holders in various postgraduate 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 | 02-6-2012 | 10.00 a.m. to 1.00 p.m. |
| 2. M.C.A. Programme              | 02-6-2012 | 03.00 p.m. to 6.00 p.m. |
| 3. Undergraduate Programmes      | 03-6-2012 | 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	-	-	-
3	Pantnagar	Pantnagar	Pantnagar	Pantnagar
4	Pithoragarh	-	-	-
5	Ranichauri	Ranichauri	-	Ranichauri
6	Srinagar (Garhwal)	-	-	-
7	-	Bharsar (Pauri 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

The application form and Prospectus for admission to a degree programme can be obtained by post from the Coordinator Admissions GBPUA& T, Pantnagar by sending a crossed bank draft of Rs. 200/- drawn in favour of **PEECRF A/C, G.B. Pant University of Agriculture & Technology, Pantnagar** payable at S.B.I./ U.Co. Bank/PNB, Pantnagar alongwith a request accompanied by 30 x 25 cm size self-addressed stamped envelope bearing postage **stamps worth Rs. 19/- by Ordinary Post & Rs. 36/- by Registered Post** or on **cash payment** at the Designated **Post Offices** by depositing Rs. 200/- + Rs. 40/- as handling charges. List of post offices from where the application form & Prospectus can be had are **Almora Postal Division-** Almora H.O., Ranikhet H.O., Bageshwar MDG, Dwarahat S.O., Syalde S.O. **Chamoli Postal Division-**Gopeshwar S.O., Joshimath S.O., Karnprayag S.O., Rudraprayag MDG **Dehradun Postal Division -** Dehradun GPO, Roorkee H.O., Haridwar MDG, Rishikesh S.O. **Nainital Postal Division-** Nainital H.O., Pantnagar S.O., Rudrapur MDG, Kashipur MDG, Ramnagar S.O., Haldwani H.O., Kichha S.O., Khatima S.O. **Pauri Postal Division -** Pauri H.O., Lansdown, Kotdwar H.O., Srinagar Garhwal **Pithoragarh Postal Division-** Pithoragarh H.O., Champawat MDG, Dharchula S.O., Lohaghat S.O., Didihat S.O. **Tehri Postal Division-** Chamba S.O., New Tehri H.O., Narendra Nagar S.O. Uttarkashi MDG, Lucknow GPO and New Delhi GPO. **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. Examination fee & last date for submission of application

(a) The Last date for sale of application form and Prospectus at **Post Offices & by post** from the University is **26.3.2012.**

(b) The last date for submission of completed application forms is **03.4.2012.** Application if delivered after **03.4.2012** and on or before **11.4.2012** a late fee of **Rs.200.00** is payable in addition to prescribed examination fee.

(c) Last date for sale & submission of completed application forms at Admission Cell with a late fee Rs.200.00 in addition to prescribed examination fee is between **04.4.2012 to 11.4.2012.**

(d) The Examination fee is non-refundable.

### Examination Fee

Undergraduate, Masters' including M.C.A. & Ph.D. Programmes Rs. 1000.00

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

(e) The application form duly completed in all respects accompanied with a Fee Deposit challan receipt (enclosed) from State Bank of India. The amount can be deposited in the **State Bank of India Account No. 31602568538** directly in any Branch. However, in case there is no SBI Branch, they can deposit the fee through Account Payee Bank Draft in favour of **“PEECRF A/C G. B. PANT UNIVERSITY OF AGRICULTURE & TECHNOLOGY, PANTNAGAR”** drawn on **United Commercial Bank (Code 678) Pantnagar Branch, or Punjab National Bank, Pantnagar (Code 4446)** or a University cash receipt for the aforesaid amount, alongwith a unstamped self-addressed envelope supplied with the application form must reach the **Coordinator (Admissions), G. B. Pant University of Agriculture & Technology, Pantnagar 263145, Uttarakhand** before the last date as given in (b) and (c) above.

#### 11. Admission of Sponsored/Nominated Candidates

- The candidate(s) sponsored/nominated by the I.C.A.R./ Govt. of India /State Govt./Indian Universities 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)**.
- The last date for the receipt of application of the sponsored candidate(s) and UGC/ICAR/CSIR/DBT fellowship holders shall be one month before the beginning of the Semester/Session in which admission is sought.
- The last date for receipt of application for admission to M.Tech. programmes shall be **25.5.2012**.

#### 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	
<b>Agriculture Majors</b>					
1.	Agricultural Economics	01	04	01	M.Sc.Ag. Agril.Eco./Rural Banking & Agril. Eco. or M.Sc. Dairy Economics/Livestock Economics/ Forest Economics.
*2.	Agronomy	02	08	02	M.Sc.Ag. Agronomy
3.	Agrometeorology	03	04	01	M.Sc. Ag./M.Sc. in Agrometerology/ Soil Science/ 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.
5.	Entomology	05	08	02	M. Sc. Ag. Entomology or M.Sc. Zoology with specialization in Entomology.
6.	Genetics & Plant Breeding	06	08	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)/M.Sc. Horticulture.
*9.	Plant Pathology	09	08	02	M.Sc.Ag. in Plant Pathology/M.Sc. Botany with specialization in Plant Pathology /Mycology.
10.	Seed Science & Technology	10	04	01	M.Sc. Ag. in Seed Science and Technology/Genetics and Plant Breeding /Vegetable Science/ Agronomy/ Horticulture.
11.	Soil Science	11	04	01	M.Sc. Ag. in Soil Science/Agril. Chemistry/ Agril. Physics/Soil Science and Agricultural Chemistry.
12.	Horticulture (Vegetable Science)	12	04	01	M.Sc. Ag. in Vegetable Science/Olericulture or Horticulture.

<b>Engineering Majors</b>					
1.	Electrical Engineering	20	04	01	Master's Degree in Electrical Engineering/Electrical Energy System from a recognized University.
2.	Electronics & Communication Engg.	21	01	Nil	Master's Degree in Electronics & Communication Engineering/Electronics Engineering/Computer Engg. from a recognized University.
3.	Farm Machinery & Power Engineering	22	04	01	Master's Degree in Farm Machinery & Power Engineering /Agricultural Engineering/Mechanical Engineering from a recognized University.
4.	Civil Engineering	23	01	01	Master's Degree in Civil Engineering from a recognized University.
5.	Irrigation & Drainage Engineering	24	04	01	Master's Degree in Irrigation & Drainage Engineering/ Agricultural Engineering/Civil Engineering /Soil & Water Conservation Engineering from a recognized University.
6.	Mechanical Engineering	25	04	01	Master's Degree in Mechanical Engineering with specialization in Thermal Engineering/Machine Design/ Production Engineering/Design & Production Engineering/ Industrial Engineering from a recognized University.
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. from a recognized University.
8.	Production Engineering	27	02	01	Master's Degree in Production Engineering /Mechanical Engineering/Design & Production Engineering/Industrial Engineering/Manufacturing Engineering and Management from a recognized University.
9.	Soil & Water Conservation Engg.	28	04	01	Master's Degree in Agril. Engineering /Soil & Water Conservation Engineering /Irrigation & Drainage Engineering /Civil Engineering / Soil & Water Engineering /Water Resources Engineering from a recognized University.
<b>Home Science Majors</b>					
1.	Human Nutrition	35	02	01	M.Sc. in Foods & Nutrition/Food Science & Tech./ Nutrition/Nutrition & Dietetics/ Food Science & Nutrition.
2.	Clothing & Textiles	36	04	01	M.Sc. Clothing & Textiles/ Textiles & Clothing/ Textile and Apparel Designing.
3.	Family Resource Management	37	04	01	M.Sc. in Family Resource Management / Home Management / Resource Management & Consumer Sciences.
<b>Fisheries Science Major</b>					
1.	Aquaculture***	38	02	01	Master's Degree in Fisheries (Aquaculture).
2.	Fisheries Resource Management	39	04	01	Master's Degree in Fisheries Science.
<b>Science Majors</b>					
1.	Agricultural Chemicals	40	04	01	M.Sc. Ag./M.Sc. in Agricultural Chemicals/ Chemistry.
2.	Biochemistry	41	01	Nil	M.Sc. Ag./M.Sc. in Biochemistry/ Microbiology/ Molecular Biology & Biotech./Chemistry/Agril. Chemicals /Foods & Nutrition/ Biophysics/Biotechnology.
3.	Botany	42	03	01	Master degree in Botany/Plant Sciences/Plant Physiology/ Environmental Sciences.
4.	Environmental Science	43	04	01	M.Sc.Ag./ M.Sc. in Environmental Science/Environmental Biology.
5.	Mathematics	45	03	01	M.Sc. in Mathematics /Applied Mathematics.

6.	Microbiology	46	02	01	M.Sc. Ag. in Microbiology/M.Sc. in Microbiology/ Biochemistry / Food Tech./ Biotechnology/ Environmental Science / Foods & Nutrition/ Molecular Biology and Biotechnology.
7.	Molecular Biology & Biotechnology	47	03	01	M.Sc.Ag./M.Sc./M.V.Sc. in Biochemistry / Microbiology / Biotechnology/Molecular Biology & Biotechnology/ M. Tech. Biotechnology.
8.	Physics	48	01	01	Master's Degree in Physics/Applied Physics/Astro Physics/Bio-Physics/ Engineering/ Material Science / Electronics/ Computer Science.
9.	Plant Physiology	49	02	01	M.Sc./M.Sc.Ag. in Plant Physiology/ Agronomy/ Horticulture/ Botany/ Biochemistry /Microbiology/Bio-Sciences/ Plant Sciences/ Environmental Sc. / Biophysics.
<b>Veterinary Science Majors</b>					
1.	Vety. Gynaecology & Obstetrics	52	04	01	M.V.Sc. Gynaecology & Obstetrics/Animal Reproduction/ Gynaecology & Obstetrics and Animal Reproduction.
2.	Livestock Production & Management	53	04	01	M.V.Sc. in LPM/ Animal Nutrition/Dairy Husbandry /Genetics & Animal Breeding/Animal Production Management. M.Sc. Ag. in LPM/Dairy Husbandry/Animal Husbandry/ Animal Science/Animal Production Management /Animal Breeding/Animal Nutrition.
3.	Vety. Medicine	54	04	01	M.V.Sc. Medicine.
4.	Vety. Pharmacology & Toxicology	57	04	01	M.V.Sc. Vety. Pharmacology/Vety. Pharmacology & Toxicology.
5.	Vety. Physiology	58	04	01	M.V.Sc. Veterinary or Animal Physiology
6.	Poultry Science	59	04	01	M.V.Sc. in Poultry Science/ Animal Breeding/Animal Nutrition. M.Sc.Ag. in Poultry Husbandry/ Poultry Science /Genetics & Animal Breeding/Animal Nutrition /Poultry Breeding / Poultry Nutrition.
7.	Vety. Surgery & Radiology	60	04	01	M.V.Sc. Surgery/Surgery & Radiology.
8.	Vety. Biochemistry	61	02	01	M.V.Sc. in Veterinary Biochemistry/ Molecular Biology & Biotechnology/ Animal Biotechnology/Biotechnology.
9.	Animal Genetics & Breeding	62	04	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.
10.	Animal Nutrition	63	04	01	M.V.Sc. in Animal Nutrition or M.V.Sc. in LPM/Poultry Science/Molecular Biology & Biotechnology/Vety. Physiology/Vety. Biochemistry with thesis research in the area of Nutrition. M.Sc. Ag. (Animal Nutrition)/M.Sc. or M.Sc. Ag. Biochemistry/ Animal Physiology or M.Sc. Agril. Dairy Husbandry/Poultry Husbandry/Animal Husbandry with specialization in Animal Nutrition.
11.	Vety. Anatomy	64	04	01	M.V.Sc. in Vety. Anatomy/Vety. Physiology/Vety. Pathology/ Vety. Surgery & Radiology.
<b>Management Major</b>					
**1.	Management	70	01	Nil	Masters' Degree in Business Administration/ Management or equivalent/Commerce/Agricultural Economics/Dairy Economics/Livestock Economics/Vety. Economics.

\*50% seats subject to meeting the merit requirements shall be filled by the candidates Bonafide Resident of the Uttarakhand State who have obtained their qualifying degree from Institutions/Universities other than Govind Ballabh Pant University of Agriculture & Technology, Pantnagar. If the candidates from other Institutions/Universities of the State are not available, the seats in excess of 50% shall be filled by the candidates Bonafide Resident of Uttarakhand who have obtained their qualifying degree from Govind Ballabh Pant University of Agriculture & Technology, Pantnagar.

**\*\*Self –Financing \*\*\*Subjected to the approved of BOM**

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) At Master’s level, the candidate should have secured an OGPA not less than 6.500/10.000 or 4.000/5.000 or Ist 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.
- (b) Besides a candidate must also possess the eligibility qualifications prescribed for Masters programme of the University in the relevant discipline.

**B. Masters’ Programmes**

<b>Agriculture Majors</b>			
1.	Agricultural Economics	12	B.Sc. in Agriculture/ Fisheries/Forestry/ Horticulture/ Home Sc./ Science / Agril. Marketing.
2.	Agrometeorology	03	B.Sc. in Agri./Forestry or B.Sc. (PCM)
*3.	Agronomy	16	B.Sc. Ag./B.Sc. Ag. & A.H.
4.	Agroforestry	05	B.Sc. in Agriculture /Forestry/ Horticulture/Biology (ZBC).
5.	Agricultural Extension & Communication	08	B.Sc. in Agri./Forestry/ Horticulture/ Home Sc./ Fisheries/ Food Sc. & Technology/Dairy Sc./ B.V.Sc. & A.H./B.V.Sc.
6.	Entomology	12	B.Sc. in Agriculture/ Biology (Zoology and Botany with any other subject)/B.Sc. Forestry/B.Sc. Horticulture.
7.	Genetics & Plant Breeding	16	B.Sc. in Agriculture/B.Sc. Biology (Zoology and Botany with any other subject)/B. Sc. Forestry.
8.	Horticulture	06	B.Sc. in Agri./Horticulture/Forestry/Biology (ZBC)
9.	Horticulture (Floriculture and Landscaping)	04	B.Sc. in Agriculture/Horticulture/Forestry/ Biology (Zoology, Botany & Chemistry).
*10.	Plant Pathology	10	B.Sc. in Agri./Forestry/Biology (Zoology and Botany with any other subject)/ B.Sc. Horticulture.
11.	Soil Science	08	B.Sc. Agriculture/B.Sc. Horticulture/ B.Sc. Forestry/ B.Sc. (Zoology, Botany & Chemistry/Physics, Chemistry & Maths) or B.Sc. with Geology/ Environmental Science as one of the major subject.
12.	Horticulture (Vegetable Science)	06	B.Sc. in Agriculture/Forestry/Horticulture/Biology (Zoology and Botany with any other Subject).
<b>Engineering Majors</b>			
1.	Agril. Engineering (Farm Machinery & Power Engg.)	10	Bachelor’s Degree in Agricultural Engineering/ Mechanical Engineering from a recognized University/Institute.
2.	Agril. Engineering (Food Biotech. Engg.)	05	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)	10	Bachelor’s Degree in Agricultural Engineering / Civil Engineering from a recognized University/ Institute.
4.	Agril. Engineering (Process & Food Engineering)	10	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	12	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	06	Bachelor's Degree in Mechanical Engineering / Production Engineering from a recognized University/Institute.
8.	Electrical Energy System	05	Bachelor's Degree in Electrical Engg. from a recognized University / Institute.
9	Electronics & Communication Engineering	05	Bachelor's Degree in Electronics & Communication Engineering/ Electronics Engineering/Communication Engineering/Tele Communication Engineering from a recognized University/ Institute.
10.	Hydraulic Engineering	05	Bachelor's Degree in Civil Engineering from a recognized University/ Institute.
11.	Information Technology	06	Bachelor's Degree in Information Technology/Computer Engineering/ Computer Science & Engineering/Information Communication Technology/ Electronics & Communication/Electronics & Telecommunication/Electronics Engineering from a recognized University/ Institute.
12.	Manufacturing Engineering and Management	08	B.Tech./B.E./B.Sc. (Engg.) degree in Mechanical Engineering/Production Engineering/Industrial Engineering/Industrial and Production Engineering/ Industrial Engineering/Mechanical Production and Tool Engineering/Production Technology and Manufacturing Engineering/Mechatronics/Manufacturing Process and Automation/ Production and Industrial Engineering/ Manufacturing Technology/Mechanical and Production Engineering/Automation Engineering a from a recognized University/ Institute.
13.	Structural Engineering	05	Bachelor's Degree in Civil Engineering from a recognized University/ Institute.
14.	Soil Mechanics & Foundation Engineering	05	Bachelor's Degree in Civil Engineering from a recognized University/ Institute.
15.	Thermal Engineering	06	Bachelor's Degree in Mechanical Engg. from a recognized University/Institute.
<b>Fisheries Science Majors</b>			
1.	Aquaculture	04	Bachelor's Degree in Fisheries Science
2.	Fishery Biology	04	Bachelor's Degree in Fisheries Science
<b>Home Science Majors</b>			
1.	Clothing & Textiles	06	B.Sc. in Home Science/Home Economics.
2.	Family Resource Management	04	B.Sc. in Home Science/Home Economics/ Family & Community Sciences.
3.	Foods & Nutrition	06	B.Sc. in Home Science/Home Economics/ Agriculture/B.Sc. Food Tech.
4.	Human Development & Family Studies	05	B.Sc. in Home Science/Home Economics
<b>Science Majors</b>			
1.	M.Sc. Ag. Agril. Chemicals	02	B.Sc. with Chemistry as one of the major subjects/B.Sc. Ag.
2.	Agril. Statistics	02	B.Sc. Ag./B.Sc. with Maths/Statistics as one of the major subjects/ B.Sc. Horticulture/B.Sc. Forestry.
3.	Biochemistry	05	B.Sc. in Biochemistry/Biotechnology/Microbiology/Agriculture/Home Science/ Fisheries/Vety. Science/ Forestry / B.Sc. with Chemistry as one of the major subjects/ B.Sc. Horticulture.
4.	Biophysics	06	B.Sc.(Physics, Chemistry & Mathematics) /B.Sc. Ag./B.Sc.(Zoology, Botany and Chemistry) /B.Sc. (Biotechnology).
5.	Botany	06	B.Sc. with Botany as one of the major subjects.
6.	Chemistry	08	B.Sc. with Chemistry as one of the major subjects.
7.	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.
8.	Food Technology	04	B.Sc. Agriculture/ Fisheries/Home Science/Dairy Technology/Food Technology /(Chemistry, Botany & Food Science & Quality Control) /B.Sc. Horticulture.
9.	Mathematics	04	B.Sc. with Mathematics as one of the major subjects.
10.	Microbiology	06	B.Sc. in Microbiology/ Biochemistry/ Agriculture/ Fisheries/ Forestry/ Home Science/Biotechnology/Biology (Zoology and Botany with any other subject)/B.Sc. Horticulture.
11.	Molecular Biology & Biotechnology	25	Bachelor's Degree in Science/Agriculture/Horticulture/ Forestry/ Vety. Science/Fisheries Science/Biotechnology.

12.	Plant Physiology	04	B.Sc. in Agriculture/ Zoology, Botany and Chemistry/ Horticulture/ Microbiology with Chemistry/B.Sc. Forestry.
13.	Physics	10	B.Sc. with Physics as one of the major subjects.
<b>Veterinary Science Majors</b>			
1.	Vety. Anatomy	04	B.V.Sc. & A.H./B.V.Sc.
2.	Vety. Economics	04	B.V.Sc. & A.H./B.V.Sc.
3.	Vety. Gynaecology & Obstetrics	04	B.V.Sc. & A.H./B.V.Sc.
4.	Vety. Public Health	04	B.V.Sc. & A.H./B.V.Sc.
5.	Vety. Surgery & Radiology	04	B.V.Sc. & A.H./B.V.Sc.
6.	Vety. Biochemistry	04	B.V.Sc. & A.H./B.V.Sc.
7.	Vety. Medicine	04	B.V.Sc. & A.H./B.V.Sc.
8.	Vety. Microbiology	01	B.V.Sc. & A.H./B.V.Sc.
9.	Vety. Parasitology	04	B.V.Sc. & A.H./B.V.Sc.
10.	Vety. Pathology	04	B.V.Sc. & A.H./B.V.Sc.
11.	Vety. Pharmacology & Toxicology	04	B.V.Sc. & A.H./B.V.Sc.
12.	Vety. Physiology	04	B.V.Sc. & A.H./B.V.Sc.
13.	Vety. and Animal Husbandry Extension	04	B.V.Sc. & A.H./B.V.Sc.
14.	Livestock Products Technology	04	B.V.Sc. & A.H./B.V.Sc.
#15.	Livestock Production & Management	06	B.V.Sc. & A.H./B.V.Sc./ Bachelor's Degree in Agriculture
#16.	Poultry Science	06	B.V.Sc. & A.H./B.V.Sc./ Bachelor's Degree in Agriculture
#17.	Animal Nutrition	06	B.V.Sc. & A.H./B.V.Sc./ Bachelor's Degree in Agriculture
#18.	Animal Genetics & Breeding	06	B.V.Sc. & A.H./B.V.Sc./ Bachelor's Degree in Agriculture
19.	Animal Biotechnology	04	B.V.Sc. & A.H./B.V.Sc.
<b>Management Programmes</b>			
**1.	MBA (Agribusiness)	44	Bachelor's and/or Master's degree in Agriculture, Agricultural Chemicals, Agricultural Engineering, Dairy Science/Technology, Fisheries, Food Science /Technology, Forestry, Home Science, Horticulture or Veterinary Science and B.Tech. (Bio-Tech.)
**2.	MBA	16	Bachelor's degree in any branch of Engineering/Technology from AICTE approved Institutions/ UGC approved Universities.
<b>M.C.A. Programme</b>			
**1.	MCA	48	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.**

\*50% seats subject to meeting the merit requirements shall be filled by the candidates Bonafide resident of the Uttarakhand State who have obtained their qualifying degree from Institutions/Universities other than Govind Ballabh Pant University of Agriculture & Technology, Pantnagar. If the candidates from other Institutions/Universities of the State are not available, the seats in excess of 50% shall be filled by the candidates Bonafide resident of Uttarakhand who have obtained their qualifying degree from Govind Ballabh Pant University of Agriculture & Technology, Pantnagar.

**# Also available as Agriculture Majors for Agricultural Graduates.**

**\*\* Self-Financing**

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.

### C. Undergraduate Programmes

S. No.	Name of Programme	No. of Seats	Minimum Eligibility Qualifications
1.	B.Sc. Agriculture	130	Intermediate Agriculture/Science with Mathematics or Biology.
2.	B.Sc. Home Science	65	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 40% for reserved categories (OBC, SC & ST) in aggregate in the subjects of Physics, Chemistry, Biology and English.
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.	60	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.	60	-do-
8.	B. Tech. Computer Engg.	75	-do-
9.	B. Tech. Elect. Engg.	60	-do-
10.	B. Tech. Electronics & Communication Engg.	75	-do-
11.	B. Tech. Mech. Engg.	60	-do-
12.	B.Tech. Production Engg.	45	-do-
13.	B. Tech. Information Technology	45	-do-
*14.	B.Tech. (Biotechnology)	40	-do-

**For all Undergraduate programme except B.Tech. programmes a candidate should pass in the subjects mentioned in the eligibility qualifications above.**

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 B.Sc. Food Technology, MCA & Ph.D. in Management) 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.Sc. Food Technology, B.Tech. programmes) as per the conditions laid down by the ICAR/VCI for admitting candidates. In case of B.Sc. Food Technology 50% of the sanctioned seats shall be filled through ICAR. If the seats of B.Sc. [Food Technology] self-financing programme are not filled the same shall be filled from the candidates of Uttarakhand State and vice-versa.  
In Master's programme (except MCA) self-financing programme over and above the sanctioned seats, 30 percent of sanctioned seats are allotted to ICAR.
- (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 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. In case of Ph.D. in Management 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. If the seats of Ph.D. in Management (self financing) programme are not filled the same shall be filled from the candidates' Bonafide resident of Uttarakhand State and vice-versa.

(vi) 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 2012-2013 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 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 2012-2013 upon vacancy.

(b) **Horizontal Reservations:** Out of reservation applicable to different categories, the horizontal reservation 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 %

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

(c) The candidates who have obtained qualifying degree from G.B.P.U.A. & T., 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

of G.B.P.U.A.&T., Pantnagar - 5% seats in each programme

ii. ICAR Nominee

- 10% for Foreign Nationals who pay an Institutional Fee  
US\$ 4000 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:** (i) The University reserves the right to change the reservation pattern either on account of Govt. orders or on its own.

(ii) In B.Sc. Home Science programme the admission of male candidates shall be restricted to 20% of the sanctioned seats.

#### 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 “M.H.R.D. Govt. of India sponsored/ nominated Candidates”	As per notification of Uttarakhand Government.
(v)	In-service candidates of Pantnagar University /Farm	Admission of inservice 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**

Foreign National nominated by ICAR/Govt. of India or Junior/Senior research fellowship Holders of UGC/ICAR/CSIR/DBT etc. and sponsored candidate from ICAR, GOI., Other Universities/ Staff Candidate of G.B.P.U.A. &T. Pantnagar and Development Department of State Govts. : <b>Note: Admissions to above category shall be granted only in those disciplines having sanctioned strength of four &amp; above.</b>	<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\$4000 per year subject to their fulfillment of eligibility qualifications laid down in Appendix – I (B).</p> <p><i>Four</i> seats are reserved in each Ph.D. major except Molecular Biology &amp; Biotechnology for UGC/ICAR/CSIR fellowship holders. In case of Ph.D. in Molecular Biology &amp; Biotechnology major two seats are reserved for DBT fellowship holders and two seats for UGC/ICAR/CSIR fellowship holders.</p> <p>Two seats in Ph.D. Management are available for in-service teachers of UGC/ICAR/AICTE/VCI approved Institutions.</p> <p>Two seats in each Masters’ and Ph.D. Major are reserved for the sponsored candidates by the ICAR, Indian Universities, Development Departments of State Governments and staff candidates of University subject to the following conditions:</p> <p>(a) Applicants who have earned entitlement to fellowship based on National Selection (UGC/ICAR/CSIR/DBT) and the sponsored candidates by ICAR, GOI, other Indian Universities, Development Departments and the staff candidates of G.B.P.U.A. &amp; T., Pantnagar are not required to appear in the University Entrance Examination. They shall be admitted subject to fulfilment of minimum eligibility qualification as laid down in para 12 ‘A’ or ‘B’ of the Prospectus (Chapter II). The inter-se-merit of UGC/ICAR/CSIR/DBT 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>
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**16. Mode of Admission**

**(a) Subjects & Scheme of Examination**

- (i) All candidates seeking admission to Ph.D. Programmes shall take subject matter test comprising 600 marks, 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 and shall be of 3 hours duration.
- (ii)(a) All candidates seeking admission to Masters’ programmes (except MCA) shall take (i) Aptitude Test and (ii) Subject Matter Test without any break from 10.00 a.m. to 1.00 p.m. while for MCA programme the candidate shall take (i) Aptitude Test and (ii) Subject Matter Test without any break from 3.00 p.m. to 6.00 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 consist 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, Forestry, Fisheries, Horticulture, 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, Forestry, Horticulture 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, Forestry, Fisheries and Horticulture.

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 ALL THE PROGRAMMES VIZ. Ph.D., 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.**

**(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 qualifying the entrance examination after declaration of Rank-wise list of the candidates appeared in the Entrance Examination conducted by the University.
- (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) All the qualified candidates, as per merit, shall be called for counselling on a specified date and time for consideration for admission to various Undergraduate, Masters' and Ph.D. programmes. The counselling will continue till the last seat in each programme is filled-up. The candidate will be informed by registered post at his/her mailing address given on the self-addressed envelope (un stamped) provided by the candidate. The University will not be responsible for non-delivery/late delivery of letter.
- (ii) No letter, fax or telegram enquiring about the result of the Entrance Examination will be entertained.
- (iii) 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.
- (iv) The candidates coming for personal appearance should bring alongwith them the following documents for checking and depositing before counselling:

1. Attested photocopies of High School Certificate and Marks-Sheet alongwith the originals.
2. Attested photocopies of Intermediate Certificate and Marks-Sheet alongwith the originals.
3. 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 2012-2013, 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 31.3.2012 must be submitted in original on the prescribed proforma given in the Prospectus 2012-13.
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.**

- (v) Candidate not fulfilling the eligibility condition(s) at the time of Counselling and not declared medically fit will not be granted admission.
- (vi) 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.
- (vii) 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 Cards for the Entrance Examination will be despatched by registered post at the mailing address given in the OMR application by the candidates. Candidates who fail to receive the ADMIT CARD by **25-5-2012** may contact the Coordinator (Admissions), G. B. Pant University of Agriculture & Technology, Pantnagar.
- (b) In case a candidate has not received the Admit Card 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. 10.00 and a copy of passport size photograph similar to that pasted on the verification form.

### **19. Age Limit**

Maximum age limit for admission to all Undergraduate programmes except B.Tech./B.V.Sc. & A.H degree programmes is 22 years (25 years for SC/ST categories) as on 30-6-2012. 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 as on or before 31December. 2012.

### **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 poor academic performance or 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.
- (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
<b>GENERAL</b>					
1. Uttarakhand General	UKG	1100	1101	1102	1103
2. Physically Handicapped of Uttarakhand	UKPH	1600	-	-	-
3. Children of Retired/Killed/Disabled Defence Personnel of Uttarakhand	UKDP	1700	1701	1702	1703
4. Children of Freedom Fighters of Uttarakhand	UKFF	1800	1801	1802	1803
<b>OTHER BACKWARD CLASSES OF UTTARAKHAND</b>					
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
<b>SCHEDULED CASTES OF UTTARAKHAND</b>					
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

<b>SCHEDULED TRIBES OF UTTARAKHAND</b>					
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 OMR 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 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. 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. 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. 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.	Bachelor's Degree in Agril. Marketing	Agril. Marketing	02
3.	B.Sc. (Horticulture)	Horticulture	03
4.	B.Sc. (Forestry)	Forestry	04
5.	B.F.Sc.	Fisheries	05
6.	(i) B.Sc. in Home Science (ii) B.Sc. in Home Economics (iii) B.Sc. in Family & Community Sciences	Home Science	06
7.	B.V.Sc. & A.H./B.V.Sc.	Vety. Sciences	07
8.	(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
9.	(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
10.	(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
11.	(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. Refund of fee at the time of Counselling /Admissions

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. If the candidate fails to register within the stipulated period, his/her admission will stand cancelled automatically and an Advance fee deposited will be **forfeited**. 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 will be intimated through the counselling letter. 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 candidates in advance. The advance fee of Rs.5000/- deposited at the time of counselling will be adjusted against the University fee in the IInd semester of 2012-13.

### 25. 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 one week of date of Registration will be cancelled.

### 26. 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	Maximum duration for part-time students (full time staff)
1.	B.Sc. Agriculture	8 Semesters	12 Semesters	16 Semesters
2.	B.V.Sc. & A.H.	10 Semesters	16 Semesters	20 Semesters
3.	B.Sc. Home Science	8 Semesters	12 Semesters	16 Semesters
4.	B.F.Sc.	8 Semesters	12 Semesters	16 Semesters
5.	B.Sc. (Forestry)	8 Semesters	12 Semesters	16 Semesters
6.	B.Sc. Horticulture	8 Semesters	12 Semesters	16 Semesters
7.	B.Sc. Food Technology	8 Semesters	12 Semesters	16 Semesters
8.	B.Tech.	8 Semesters	12 Semesters	16 Semesters
9.	B.Tech. For Diploma holders and B.Sc. (Maths) degree holders to be admitted to 2 <sup>nd</sup> year level.	6 Semesters	9 Semesters	
10.	Master's degree in various majors except MCA	4 Semesters	8 Semesters	12 Semesters
11.	MCA	6 Semester	9 Semesters	12 Semesters
12.	Ph.D. degree in various majors	6 Semesters	12 Semesters	16 Semesters



## 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 ICAR/VCI/GOVT. OF INDIA/STATE GOVT. OF UTTARAKHAND AT UNDERGRADUATE LEVEL AND STAFF CANDIDATES OF ICAR/INDIAN UNIVERSITIES/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 at least 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) 50% marks in Intermediate Science with Biology or equivalent examination with at least 50% marks in High School or equivalent examination.

**(ii) In service candidates from Animal Husbandry department sponsored by the Govt. of Uttarakhand**

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**.

##### **III. Bachelor of Fisheries Science**

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

**OR**

(ii) Intermediate Science with Biology or equivalent examination with at least 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 at least 55% marks in High School and Intermediate examination both.

##### **IV. Bachelor of Science (Home 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 at least 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 2<sup>nd</sup> year of B.Tech. degree programmes:**

Admissions to 2<sup>nd</sup> 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 2<sup>nd</sup> year B.Tech. degree programmes:**

Admissions to 2<sup>nd</sup> 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.

## **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. However, candidates having two years field/teaching/research experience in the related field 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. However, candidates having two years field/teaching/research experience in the related field 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 of Candidate:				Age:		Sex:	
Roll No.:			Category:			Subcategory:	
Merit Position:			Father's Name:				
(To be filled in by the candidate)							
L.T.			M.I.	V	Colour Vision		
Height	Weight	Chest	Abdomen	I	Without glass		
				S			
				I			
				O			
				N	With glass		
History	Operation	Kock's	Colic's	BP			
	Seizures	Asthma	Piles	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)

I .....RollNo.....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 .....  
Name in Block Letters.....  
Place .....  
Date.....

Student’s Signature .....  
Name in Block Letters .....  
Place .....  
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 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**

- I. 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; न्छतद्ध**

प्रमाणित किया जाता है कि श्री/श्रीमती/कुमारी .....सुपुत्र/सुपुत्री श्री ..... निवासी  
ग्राम .....तहसील.....नगर.....जिला ..... उत्तराखण्ड  
राज्य की .....पिछड़ी जाति के व्यक्ति हैं। यह जाति उत्तराखण्ड लोक सेवा (अनुसूचित जातियों/अनुसूचित  
जनजातियों तथा अन्य पिछड़े वर्गों के लिए आरक्षण) अधिनियम ..... की अनुसूची .....के अन्तर्गत मान्यता प्राप्त है।

यह भी प्रमाणित किया जाता है कि श्री/श्रीमती/कुमारी .....उक्त अधिनियम .....द्वारा निर्धारित  
क्रीमिलियर से आच्छादित नहीं है।

श्री/श्रीमती/कुमारी .....तथा अथवा उनका परिवार उत्तराखण्ड के ग्राम.....  
तहसील .....नगर.....जिला .....में सामान्यता रहता है।

अभ्यर्थी के हस्ताक्षर :

हस्ताक्षर

दिनांक :

पूरा नाम :

स्थान :

मोहर

जिला अधिकारी/अतिरिक्त जिला अधिकारी/सिटीमजिस्ट्रेट/  
परगना मजिस्ट्रेट/तहसीलदार

टिप्पणी : यह प्रमाण-पत्र तभी मान्य होगा जबकि यह मार्च 31, 2012 के बाद निर्गत किया गया हो।

**CERTIFICATE-2**

**अनुसूचित जाति/जनजाति; न्छतद्ध**

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

प्रमाणित किया जाता है कि श्री/श्रीमती/कुमारी .....सुपुत्र/सुपुत्री श्री ..... निवासी  
गांव/षहर .....तहसील.....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 :

हस्ताक्षर

दिनांक :

पूरा नाम :

स्थान :

मोहर

जिला अधिकारी/अतिरिक्त जिला अधिकारी/सिटीमजिस्ट्रेट/  
परगना मजिस्ट्रेट/तहसीलदार

**CERTIFICATE-3**

**स्थाई निवास प्रमाण-पत्र**

(षासनादेश 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 मैं जांच से पूर्णतया सन्तुष्ट हूँ।

हस्ताक्षर जिला मजिस्ट्रेट

नाम :

मोहर



## **CERTIFICATE-4**

**उत्तराखण्ड के स्वतंत्रता सेनानी नैऋत बंजमहवतल बिपसकतमद वथितममकवउ थपहीजमतेद्ध**  
(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/श्रीमती  
.....ने 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 घेषित 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/श्रीमती .....के 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 श्री .....पुत्र/पुत्री .....निवासी  
गाँव/षहर.....तहसील.....जिला..... उत्तराखण्ड ..... दिनांक .....  
को सेवा निवृत्त नैऋतमतददनजमकद्ध/युद्ध में मारे गये/अपंग हो गये। वे उस समय भारतीय थल सेना, जलसेना/वायु  
सेना स्थान .....में .....के पद पर कार्यरत थे।

दिनांक :  
स्थान :

यूनिट कमान्डिंग आफिसर के हस्ताक्षर  
नाम :  
मोहर

(जिला मजिस्ट्रेट द्वारा प्रमाणित)

यह प्रमाणित किया जाता है कि श्री/कु0 .....निवासी गाँव/षहर.....तहसील.  
.....जिला.....उपरोक्त सेना दल के सेवा निवृत्त नैऋतमतददनजमकद्ध/युद्ध में मारे गये/अपंग हो  
गये कर्मचारी जो उत्तराखण्ड के स्थायी निवासी हैं/थे, 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/कु० .....ने ..... कालेज .....से इण्टरमीडिएट की शिक्षा प्राप्त की है। यह कालेज तहसील .....जिला..... 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 .चैलेपबंससल भ्दकपबंचमक (मुख्य चिकित्सा अधिकारी द्वारा प्रमाणित)

प्रमाणित किया जाता है कि श्री/कु० .....पुत्र/पुत्री, श्री/श्रीमती.....निवासी  
गाँव/षहर..... 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 \_\_\_\_\_ 2012

(Signature of Principal)  
Office Seal

**COUNTERSIGNED**

Date \_\_\_\_\_ 2012

(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 \_\_\_\_\_ 2012

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

**COUNTERSIGNED**

Date \_\_\_\_\_ 2012

(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 2012-13)**

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 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 2012 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.....2012

(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 coplanar 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, Lorentz'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 spectroscopes, 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 antibonding, 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; Alkanes  $sp^2$  hybridization, carbon-carbon double bond, sigma and pi-bonds. Planer molecular of ethylene cis-trans isomerism; Alkanes:  $sp$ -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 alkynes (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 Mayer'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, pullies and gears, questions relating to number of teeth in gears according to speed and size of pullies, 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, Sommerfield 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  $\beta$  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,  $\alpha$ ,  $\beta$ ,  $\gamma$ . decay.

## UNIT V

Real analysis: continuity and discontinuity, Riemann 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, Thermochemistry – 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

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 relieved as per rules of this Institution.

Yours faithfully,

( )



## IMPORTANT INFORMATION AT A GLANCE

### 1. Sale of Application form & Prospectus

- (a) On cash Payment from Post Offices : 15-2-2012 to 26-3-2012  
(b) By post from admission cell : 15-2-2012 to 26-3-2012  
(c) Sale of Application form from admission cell with late fee of Rs. 200/- : 04-4-2012 to 11-4-2012

### 2. Last date for receipt of application form

- (a) Without late fee upto : 03-4-2012  
(b) With a late fee of Rs. 200/- : 11-4-2012

### 3. Date of despatch of Admit Cards to the candidates

- (a) For Postgraduate Programmes : 16-5-2012  
(b) For Undergraduate Programmes : 16-5-2012

### 4. Date of Entrance Examination

- (a) For Postgraduate Programmes : 02-6-2012  
(b) For Undergraduate Programmes : 03-6-2012

### 5. Scheduled Time of Examination

- (a) For Postgraduate Programmes : 10.00 AM to 1.00 PM  
(b) For MCA Programme : 03.00 PM to 6.00 PM  
(c) For Undergraduate Programmes : 10.00 AM to 1.00 PM

### 6. Declaration of Result (on or before) : On or before 20-6-2012

### 7. Counselling : 18-7-2012 to 26-7-2012

### 8. Date of Registration : 30-7-2012

### 9. Last date for Registration after first counselling : 7-8-2012

### 10. Second Counselling (Counselling fee as given in Chapter II section 24) : 10-8-2012 to 12-8-2012 (UG & PG – No separate letter will be issued for second counselling). There will be no third counselling in any circumstances.

#### **N.B:**

The candidates who fail to receive the Admit Card may enquire about their centre of Examination from the Coordinator (Admissions), G.B. Pant University of Agriculture & Technology, Pantnagar.

#### **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

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