

# **Advance Learner Report Department of Agricultural Studies**

Session- 2022-23

HEAD OF DEPARTMENT Dept of Agriculture Studies Quantum University, Roorkee Registrar Quantum University



Faculty of Agricultural Studies Quantum University, Roorkee



### **ADVANCE LEARNER REPORT**

Department of Agricultural Studies have identified some advance learner students in 6th Sem Bachelor of Science (Hons) in Agriculture on the basis of

- 1. Students who carry more than 80% Marks in different subjects in Midterm examination.
- 2. Overall regularity, sincerity and performance throughout the year.

Mid-term marks of Students in different subjects of Bachelor of Science (Hons) in Agriculture 6<sup>th</sup>Sem are given below:

|           | Mid Term Marks(6 <sup>th</sup> Sem) Session:2022-23 |   |   |  |   |   |  |  |  |  |
|-----------|---|---|---|--|---|---|--|--|--|--|
|           | Bachelor of Science (Hons) in Agriculture           |   |   |  |   |   |  |  |  |  |
|           |   | Subject Name  |   |  |   |   |  |  |  |  |
| StudentID | Student<br>Name                                     | Entrepren<br>eurship<br>Developm<br>ent and<br>Business<br>Communi<br>cation<br>(Out of 60) | Diseases of Field and Horticultu ral Crops and Their Managem ent II (Out of 60) | Farm Managem ent Productio n and Resource Economic S (Out of 60) | Geoinforma<br>tics and<br>Nanotechno<br>logy and<br>Precision<br>Farming<br>(Out of 60) | Post Harvest Managem ent and Value Addition of Fruits and Vegetable (Out of 60) | Principl es of Organi C Farmin g (Out of 60) | Problema<br>tic Soil<br>and Their<br>Managem<br>ent<br>(Out of 60) | Principle<br>s of<br>Seed<br>Technol<br>ogy<br>(Out of 60) | Renewa<br>ble<br>Energy<br>and<br>Green<br>Technolo<br>gy<br>(Out of 60) |
| 20280057  | AAYUSHEE<br>MISHRA                                  | 35  | 23  | 29   | 37  | 34  | 34   | 39   | А  | Α  |
| 19280119  | ABHISHEK<br>GANGA                                   | А   | А   | А  | A A A   |   | А  | 22   | А  | А  |
| 20280022  | ADITYA<br>SARKAR                                    | 34  | 6   | 30   | 39  | 41  | 30   | 32   | 15   | 26   |
| 20280002  | Aditya<br>Thakur                                    | 42  | 24  | 41   | 43  | 47  | 40   | 43   | 24   | 33   |
| 20280064  | AJAY<br>KUMAR                                       | 44  | 28  | 36   | 40  | 39  | 45   | 38   | 19   | 40   |
| 20280056  | AKASHA<br>HASAN                                     | А   | А   | А  | А   | А   | А  | А  | А  | А  |
| 20280021  | AKSHAT<br>KUMAR<br>CHOUBEY                          | 48  | 34  | 30   | 46  | 48  | 44   | 45   | 27   | 43   |
| 20280003  | AKSHIT<br>SINGH<br>DESHWAL                          | 30  | 8   | 21   | 12  | 33  | 30   | 25   | 16   | 37   |
| 20280004  | ANKIT<br>KUMAR RAI                                  | 54  | 39  | 48   | 53  | 56  | 51   | 53   | 26   | 51   |
| 20280044  | ANUKOOL<br>TYAGI                                    | 39  | 26  | 24   | 4 33 37 29 33   |   |  |  | 24   | 24   |
| 20280030  | ANURAG<br>YADAV                                     | 15  | 8   | 28   | 36  | 28  | 17   | 19   | 10   | 27   |
| 20280070  | ASHISON<br>KUJUR                                    | 45  | 22  | 42   | 41  | 44  | 42   | А  | 21   | 47   |

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| UNIV<br>ROORKEE, | ERSITY<br>UTTARAKHAND               |    |    |    |    |    |    |    |    |    |
|------------------|-------------------------------------|----|----|----|----|----|----|----|----|----|
| 20280028         | ATISH<br>KUMAR<br>MISHRA            | 44 | А  | А  | А  | 43 | 39 | 44 | А  | А  |
| 20280050         | BHAVANAM<br>VARUN<br>KUMAR<br>REDDY | А  | 10 | А  | 39 | А  | 34 | 37 | А  | А  |
| 20280032         | BOBBY<br>KUMAR JHA                  | 38 | 19 | 36 | 30 | 32 | 36 | 39 | 22 | 38 |
| 20280037         | DIVYA<br>SINGH                      | 47 | 33 | 40 | 44 | 53 | 42 | 51 | 17 | 44 |
| 20280043         | GANGESHW<br>ARI KUJUR               | 54 | 45 | 45 | 54 | 47 | 52 | 50 | 29 | 51 |
| 20280027         | HEERAKAR<br>SAI LOKESH              | А  | 10 | 17 | А  | 25 | 22 | 19 | 5  | 19 |
| 20280036         | ISHA<br>GUSAIN                      | 44 | 42 | 43 | 52 | 47 | 52 | 41 | 26 | 40 |
| 20280048         | KAVYA ROY                           | 54 | 42 | 48 | 50 | 54 | 46 | 51 | 25 | 50 |
| 20280063         | KOMAL RAJ                           | 46 | 45 | 43 | 46 | 47 | 48 | 49 | 41 | 49 |
| 20280042         | KUMARI<br>VARSHA                    | 53 | 29 | 40 | 51 | 45 | 46 | 41 | A  | А  |
| 20280058         | MADHWAN<br>TYAGI                    | 23 | 13 | 30 | 22 | 37 | 29 | 27 | 13 | 24 |
| 20280069         | MAHAK<br>MALIK                      | А  | А  | 29 | 44 | 42 | 40 | 35 | А  | А  |
| 20280072         | MEKALA<br>BHANU<br>PRAKASH          | А  | 10 | 20 | А  | 22 | 21 | 20 | 6  | 14 |
| 20280059         | NANDINI<br>KUMARI                   | 36 | 19 | 33 | 26 | 34 | 22 | 32 | 12 | 15 |
| 20280073         | NISHANT<br>KUMAR                    | 28 | 24 | 40 | 30 | 27 | 22 | 37 | 10 | 31 |
| 20280061         | PallaviKuma<br>ri                   | 50 | 34 | 42 | 52 | 40 | 32 | 40 | 31 | 37 |
| 20280049         | PAWAN<br>KUMAR<br>YADAV             | 44 | 29 | 41 | 49 | 56 | 43 | 52 | 17 | 42 |
| 20280009         | POORVA                              | 43 | 19 | 44 | 43 | 43 | 41 | 44 | 29 | 38 |
| 20280045         | PRAGYA<br>KUMARI                    | 35 | 24 | 27 | А  | 37 | 40 | 34 | 24 |    |
| 20280038         | PREETY<br>KUMARI                    | 52 | 45 | 44 | 54 | 58 | 52 | 58 | 33 | 52 |
| 20280012         | PRITAM<br>KUMAR<br>MANDAL           | 25 | А  | А  | 23 |    | 19 | 22 | 8  | 31 |
| 20280013         | RANJAN<br>KUMAR                     | 33 | 19 | 20 | А  | 23 | 20 | 31 | 14 | 18 |
| 20280024         | RANJU                               | 44 | А  | А  | Α  | 41 | 42 | 44 | Α  | А  |
| 20280014         | resheb<br>Kumar                     | 23 | 8  | 22 | А  | 22 | 10 | 22 | 7  | 18 |
| 20280053         | RHONIT RAJ<br>RANJAN                | 48 | 32 | 46 | 51 | 49 | 44 | 49 | 35 | 40 |
| 20280067         | SaloniKumar<br>i                    | 45 | А  | 32 | 47 | 35 | 43 | 36 | А  | А  |
| 20280068         | SAMPURNA<br>SEN GUPTA               | 45 | 14 | 42 | 44 | 42 | 44 | 46 | 20 | 43 |
| 20280065         | SAYANI<br>PAUL                      | 49 | 28 | 33 | 28 | 44 | 39 | 43 |    | 36 |
| 20280017         | SHALINI<br>SHARMA                   | 44 | 27 | 23 | 41 | 45 | 42 | 44 | 23 | 32 |
| 20280074         | SHANI<br>KUMARI<br>YADAV            | 55 | 34 | 41 | 52 | 40 | 40 | 44 | 40 | 47 |
| 20280046         | SHINU                               | 30 | А  | А  | А  | А  | 24 | А  | 13 | A  |
|                  | 383                                 |    |    |    |    |    |    |    |    | 10 |

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\* IQAC \*



|          | KUMAR                                  |    |    |    |    |    |    |    |    |    |
|----------|--|----|----|----|----|----|----|----|----|----|
| 20280060 | SHIVANI<br>SHIBENDRA<br>NATH<br>BARMAN | 50 | 30 | А  | 43 | 41 | 40 | 44 | А  | А  |
| 20280018 | SHIVANSH<br>CHAUHAN                    | 41 | 20 | 41 | 37 | 47 | 42 | 46 | 27 | 42 |
| 20280051 | SOAMYA                                 | А  | А  | Α  | А  | А  | А  | А  | А  | А  |
| 20280033 | SUMIRAN<br>PINGUA                      | 35 | 20 | 30 | 32 | 38 | 34 | 37 | 16 | А  |
| 20280031 | TANVI<br>CHOUDHAR<br>Y                 | 31 | 12 | 29 | 19 | А  | 17 | 30 | 14 | А  |
| 20280034 | TUSHAR                                 | 21 | 12 | 12 |    | 34 | 23 | 24 | 10 | 11 |
| 20280071 | UJJWAL<br>KUMAR                        | 51 | 19 | 36 | 44 | 41 | 40 | 40 | 18 | 34 |
| 20280054 | USMAN<br>HUSAIN                        | А  | 8  | А  | А  | А  | 11 | 14 | А  | А  |
| 20280035 | VISHWAJEET<br>KUMAR                    | А  | А  | А  | А  | А  | А  | 17 | А  | А  |

By this mid-term marks table, department has identified (Green Highlighted) Advance learner Students given below, who carry more than 80% marks.

|        | List of Advance Learner |                               |  |  |  |  |  |  |
|--------|-------------------------|-------------------------------|--|--|--|--|--|--|
|        | Bachelor o              | f Science (Hons) in Ag        | griculture   |  |  |  |  |  |
| S. No. | Semester                | No. of Students<br>Identified | Name of Students   |  |  |  |  |  |
| 1      | Sem-6                   | 16                            | AKSHAT KUMAR CHOUBEY ANKIT KUMAR RAI DIVYA SINGH GANGESHWARI KUJUR ISHA GUSAIN KAVYA ROY KOMAL RAJ KUMARI VARSHA PALLAVI KUMARI PAWAN KUMAR YADAV PREETY KUMARI RHONIT RAJ RANJAN SAYANI PAUL SHANI KUMARI YADAV SHIVANI SHIBENDRANATH BARMAN UJJWAL KUMAR |  |  |  |  |  |

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## **ADVANCE LEARNER ACTIVITIES**

Department of Agricultural Studies has encouraged, advanced learners students to participate in

- 1. Research papers,
- 2. Book chapters,
- 3. Patents,
- 4. Mini projects.

These programs widened the scope of learning for the advanced learners and engaged them effectively in learning and development.

# List of Research Papers Published by Faculty members with the help of Advance Learners (Three Students details are as given below)

|  | Bachelor of Science (Hons) in Agriculture  |   |            |                |  |  |  |  |
|--|--|---|------------|----------------|--|--|--|--|
| Name of the Authors  | Paper Title  | Name of the<br>Journals   | Issue Date | ISSN No.       |  |  |  |  |
| ANJIL KUMAR1 , PAWAN<br>KUMAR YADAV2 , ANKIT<br>KUMAR RAI3 AND<br>LOKESH K. DAS4 | AN UPTICK IN GROWTH & PRODUCE OF STRAWBERRY: IS NUTRITIONAL INTERMIXTURE A WAY FORWARD?                        | Asian Journal of<br>Microbiology,<br>Biotechnology &<br>Environmental<br>Sciences | 2023       | ISSN-0972-3005 |  |  |  |  |
| Anjil Kumar1 , Pawan<br>Kumar Yadav2 and<br>Ankit Kumar Rai3                     | Acreage Superintendence<br>in Punjab:<br>Implementation and<br>Inspection Approach                             | Ecology,<br>Environment and<br>Conservation                                       | 2023       | ISSN 0971-765X |  |  |  |  |
| Anjil Kumar, Ankit<br>Kumar Rai and Pawan<br>Kumar Yadav                         | Micro propagation of ornamental plants: Empirical implementation of the phase inclusive of its mercantile uses | Ecology,<br>Environment and<br>Conservation                                       | 2023       | ISSN 0971-765X |  |  |  |  |

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# List of Book Chapters Published by Faculty members with the help of Advance Learners :14 Students published Book Chapters. The

details are as given below-

|            | Yearof Publications:2023  |   |                                       |          |   |  |  |  |  |  |
|------------|---|---|---------------------------------------|----------|---|--|--|--|--|--|
|            | Name of the publisher:Book World  |   |                                       |          |   |  |  |  |  |  |
| Sl.<br>No. | Name of the teacher  Title of the book/chapters published                   |   | book/chapters proceedings of the      |          | ISBN/ISSN<br>number of<br>the<br>proceeding |  |  |  |  |  |
| 1          | Avinash kumar Varma and, Preety Kumari                                      | Basic Principles of Heredity  | Principles of                         | National | 978-81-964005-0-7                           |  |  |  |  |  |
| 2          | Anjil Kumar and Pawan<br>Kumar yadav  | Extensions and<br>Modifications of Basic<br>principle of Genetics                               | Genetics                              | National | 978-81-964005-0-7                           |  |  |  |  |  |
| 3          | Avinash kumar Varma,<br>Preety Kumari, Rhonit<br>raj Ranjan, Komal Raj      | Current development on<br>IPR in India  |                                       | National | 978-81-964376-4-0                           |  |  |  |  |  |
| 4          | Shivani Tyagi, Anjil<br>Kumar, Pawan Kumar<br>yadav                         | Silent Feature of<br>protection of plant<br>varieties and farmer's right<br>(PPV & FR act 2000) |                                       | National | 978-81-964376-4-0                           |  |  |  |  |  |
| 5          | Pradeep kumar varma,<br>Ankit kumar Rai, Divya<br>Singh, Kavya Roy          | Concept of benefit<br>sharing:- Biodiversity Act<br>2002  | Intellectual Property Rights:-A       | National | 978-81-964376-4-0                           |  |  |  |  |  |
| 6          | Swatantra Pratap Singh,<br>Shani kumari, Pallavi raj                        | Trademark issues in digital era   | new approach in Agriculture Growth    | National | 978-81-964376-4-0                           |  |  |  |  |  |
| 7          | Naveen Chandra,<br>Sampurna Sen, Sumiran<br>Pingua, Ujjwal Kumar,<br>Soamya | Application of IPR to conserve global genetic resources   |                                       | National | 978-81-964376-4-0                           |  |  |  |  |  |
| 8          | Shivansh Chauhan,<br>Akshat Kumar Chubey,<br>Isha Gusain                    | Overview of changes to the Indian copy rights   |                                       | National | 978-81-964376-4-0                           |  |  |  |  |  |
| 9          | Pooja Barthwal and<br>Shani Yadav   | Entrepreneurship in<br>Different Fields of<br>Community for<br>Agricultural Development         |                                       | National | 978-81-964005-4-5                           |  |  |  |  |  |
| 10         | Pawan Kumar Yadav<br>and Ankit Kumar  | Opportunities and<br>Challenges for Rural<br>Development in India                               | ROLE OF<br>AGRICULTURAL<br>SCIENCE IN | National | 978-81-964005-4-5                           |  |  |  |  |  |
| 11         | Gangeshwari Kujur and<br>Sampurna Sen Gupta                                 | Psychological Issues and<br>Challenges related to<br>Agricultural Production in<br>a Community  | COMMUNITY<br>MOBILIZATION             | National | 978-81-964005-4-5                           |  |  |  |  |  |
| 12         | Naveen Chandra and<br>Kumari Varsha   | Ergonomics  |                                       | National | 978-81-964005-4-5                           |  |  |  |  |  |

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| JNIVERSITY<br>Roorkee, uttarakhand  |  |  |  |  |
|---|--|--|--|--|
| Bobby Kumar Jha and<br>Rhonit Raj Ranjan  | Effects of Empowerment, Employment, Unemployment, Poverty, etc. on Nutrition Availability /Agriculture Opportunities   |  | National   | 978-81-964005-4-5  |
| Puja Barthwal, Pradeep<br>Kumar Verma, Abhishek<br>Ganga and Divya Singh        | Nano pesticides and nano<br>fertilizers  | Smart Technologies<br>in Sustainable<br>Agriculture  | National   | 978-81-964005-1-4  |
| Dr. Aditya Lama and<br>Pawan Kumar Yadav  | Managing forms of<br>Agribusiness Development  |  | National   | 978-81-964005-8-3  |
| Mr. Pradeep Kumar<br>Verma and Ankit Kumar<br>Rai                               | Government Economic<br>Policies for Agriculture<br>Farmers   | Agribusiness   | National   | 978-81-964005-8-3  |
| Dr. Gaurav Aggarwal<br>and Kumari Varsha  | Agriculture and Rural<br>Sustainable Development<br>Policy   | Economic Transformation  | National   | 978-81-964005-8-3  |
| Dr. S. P. Singh, Avinash<br>Verma and Gangeshwari<br>Kujur                      | Economic Analysis of the<br>Present Condition of<br>Indian Agricultural Farmers  |  | National   | 978-81-964005-8-3  |
| Kusum Rawat,Anjay<br>Singh Bisht,<br>Gangeshwari kuzur,<br>Kumari Varsha        | Food And Food Safety   |  | National   | 978-81-964005-7-6  |
| Gaurav Aggarwal, Anjay<br>Singh Bisht, Adithi<br>Kumari, Pawan Kumar<br>Yadav   | Food Storage   | Food Safety<br>Management<br>System  | National   | 978-81-964005-7-6  |
| Gaurav Aggarwal, Pooja<br>Barthwal, Shalini<br>Sharma, Isha Gusain              | Water Analysis   |  | National   | 978-81-964005-7-6  |
| Dr. Avinash Varma and<br>Pawan Kumar Yadav                                      | Crop Production<br>Technology for Summer<br>squash   | Advance Production Technology for Cucurbitaceous vegetable Crops.  | National   | 978-81-964005-5-2  |
| Naveen Chandra, Anjay<br>Singh Bisht, Pawan<br>Kumar Yadav and<br>Nishant Kumar | Recent agronomical practices for sustainable agriculture development.  |  | National   | 978-81-964005-9-0  |
| Avinash Varma, Anjil<br>Panwar, Vikash Kumar<br>Singh and Ankit Kumar<br>Rai    | Current status of soil<br>fertility and its influences<br>in future agriculture of<br>India  | Frontiers in   | National   | 978-81-964005-9-0  |
| Shivani Tyagi, Pradeep<br>Kumar Verma, Kavya<br>Roy and Divya Singh             | Innovative molecular<br>techniques to identify<br>agricultural<br>microorganisms   | Production   | National   | 978-81-964005-9-0  |
| Gaurav Aggarwal,<br>Avinash Varma, Preety<br>Kumari and Sampoorna<br>Sen        | Advanced diagnostic<br>technologies for seed<br>borne and storage-borne<br>diseases  |  | National   | 978-81-964005-9-0  |
| Kusum Rawat, Gaurav<br>Aggarwal, Ankit kumar<br>Rai, Sneha Kumari               | Introduction and concept of soil erosion   | Soil and water   | National   | 978-81-964005-6-9  |
| Pooja Barthwal, Naveen<br>Chandra, shalini<br>Sharma, Sayani Paul               | Water erosion and control  | conservation<br>engineering  | National   | 978-81-964005-6-9  |
|   | Bobby Kumar Jha and Rhonit Raj Ranjan  Puja Barthwal, Pradeep Kumar Verma, Abhishek Ganga and Divya Singh  Dr. Aditya Lama and Pawan Kumar Yadav  Mr. Pradeep Kumar Verma and Ankit Kumar Rai  Dr. Gaurav Aggarwal and Kumari Varsha  Dr. S. P. Singh, Avinash Verma and Gangeshwari Kujur  Kusum Rawat, Anjay Singh Bisht, Gangeshwari kuzur, Kumari Varsha  Gaurav Aggarwal, Anjay Singh Bisht, Adithi Kumari, Pawan Kumar Yadav  Gaurav Aggarwal, Pooja Barthwal, Shalini Sharma, Isha Gusain  Dr. Avinash Varma and Pawan Kumar Yadav  Naveen Chandra, Anjay Singh Bisht, Pawan Kumar Yadav and Nishant Kumar  Avinash Varma, Anjil Panwar, Vikash Kumar Singh and Ankit Kumar Rai  Shivani Tyagi, Pradeep Kumar Verma, Kavya Roy and Divya Singh  Gaurav Aggarwal, Avinash Varma, Preety Kumari and Sampoorna Sen  Kusum Rawat, Gaurav Aggarwal, Ankit kumar Rai, Sneha Kumari  Pooja Barthwal, Naveen Chandra, shalini | Bobby Kumar Jha and Rhonit Raj Ranjan  Puja Barthwal, Pradeep Kumar Verma, Abhishek Ganga and Divya Singh  Dr. Aditya Lama and Pawan Kumar Yadav  Mr. Pradeep Kumar Verma and Ankit Kumar Rai  Dr. Gaurav Aggarwal and Kumari Varsha  Dr. S. P. Singh, Avinash Verma and Gangeshwari Kujur  Kusum Rawat, Anjay Singh Bisht, Gangeshwari kurar, Kumari Varsha  Gaurav Aggarwal, Anjay Singh Bisht, Adithi Kumari, Pawan Kumar Yadav  Gaurav Aggarwal, Pooja Barthwal, Shalini Sharma, Isha Gusain  Dr. Avinash Varma and Pawan Kumar Yadav  Naveen Chandra, Anjay Singh Bisht, Pawan Kumar Yadav  Naveen Chandra, Anjil Panwar, Vikash Kumar Singh and Ankit Kumar Rai  Shivani Tyagi, Pradeep Kumar Verma, Kayya Roy and Divya Singh Bisht Kumar Singh and Ankit Kumar Rai  Shivani Tyagi, Pradeep Kumar Verma, Kayya Roy and Divya Singh Gaurav Aggarwal, Avinash Varma, Preety Kumari and Sampoorna Sen  Kusum Rawat, Gaurav Aggarwal, Aggarwal, Ankit kumar Rai Innovative molecular techniques to identify agricultural microorganisms  Advanced diagnostic technologies for seed borne and storage-borne diseases  Introduction and concept of soil erosion  Water Panlary Pooja Barthwal, Naveen Chandra, shalini  Water erosion and concept of soil erosion | Effects of Empowerment, Employment, Overty, etc. on Nutrition Availability / Agriculture Opportunities | Effects of Empowerment, Employment, etc. on Nutrition   Pulia Barthwal, Pradeep Campan |

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| 29 | Swatantra Pratap Singh,<br>Kusum Rawat, Preeti<br>Kumari, Isha Gusain                 | Factors affecting soil<br>erosion effects of soil<br>erosion | National | 978-81-964005-6-9 |
|----|---|--|----------|-------------------|
| 30 | Kusum Rawat, Naveen<br>Chandra, Gangeshwari<br>Kujur, Kumari Varsha                   | Hydrology  | National | 978-81-964005-6-9 |
| 31 | Avinash Verma, Pradeep<br>Verma, Garima Chand,<br>Ujjwal Kumar, B. Varun<br>Kr. Reddy | Grassed waterway   | National | 978-81-964005-6-9 |
| 32 | Kusum Rawat, Anjay<br>Singh Bisht, Sampurna<br>Sen Gupta, Pallavi<br>Kumari           | Land use capability classification                           | National | 978-81-964005-6-9 |
| 33 | Kusum Rawat,<br>Swatantra Pratap Singh,<br>Kavya Roy, Divya Singh                     | Drainage and Dewatering                                      | National | 978-81-964005-6-9 |

## List of Patent Published by faculty members and Advance

Learners: Seven Advance learner students has published patent details are as given below

| Bachelor of Science (Hons) in Agriculture |              |                      |              |                                   |  |  |  |
|---|--------------|----------------------|--------------|-----------------------------------|--|--|--|
| Name of Students                          | Patent No.   | Date of<br>Published | Patent Topic | Drive Link                        |  |  |  |
| Mr.Anjil Kumar                            | 202311046067 | 08/07/2023           | Intellectual | https://drive.google.com/drive/u/ |  |  |  |
| Mr.Pawan Kumar Yadav,                     |              |                      | Property     | 0/folders/1X1Oguh159FZ0alrKIOL9   |  |  |  |
| Mr.Ankit Rai, Ms.Kavya                    |              |                      | India        | CC6lHx4brWyb                      |  |  |  |
| Roy Ms.Preety Kumari,                     |              |                      |              |                                   |  |  |  |
| Ms.Divya Singh                            |              |                      |              |                                   |  |  |  |
| Ms.Gangeshwari Kujur,                     |              |                      |              |                                   |  |  |  |
| Mr.Rhonit Raj Ranjan,                     |              |                      |              |                                   |  |  |  |
| Mr.Nishant Kumar                          |              |                      |              |                                   |  |  |  |
|   |              |                      |              |                                   |  |  |  |
|   |              |                      |              |                                   |  |  |  |
|   |              |                      |              |                                   |  |  |  |
|   |              |                      |              |                                   |  |  |  |
|   |              |                      |              |                                   |  |  |  |

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### List of advance learners involved in Mini Projects developed

<u>in department.</u> :15 Advance Learner students has developed mini projects. The details are as given below.

| Bachelor of Science (Hons) in Agriculture |  |                      |  |  |  |  |
|---|--|----------------------|--|--|--|--|
| Name Of Faculty                           | Project Title  | Name Of Student      |  |  |  |  |
| Mr Anjil Kumar                            | Project on hydroponics using vertical farming        | Kavya Roy            |  |  |  |  |
|   |  | Divya Singh          |  |  |  |  |
|   |  | Ronit Raj Ranjan     |  |  |  |  |
| Dr Aditya Lama                            | Decision Making Process of Farm Women in             | Ankit Kumar Rai      |  |  |  |  |
|   | Agriculture  | Pawan K Yadav        |  |  |  |  |
| Dr Anjay Singh Bisht                      | Effect Of Natural Farming Modules On Flowering       | IshaGusain           |  |  |  |  |
|   | And Yield Of Winter Season Flowers                   | PreetyKumari         |  |  |  |  |
|   |  | Akshat Kumar Choubey |  |  |  |  |
| Dr Gaurav Aggarwal                        | In Vitro regeneration studies on important medicinal | Gangeshwari          |  |  |  |  |
|   | plants of Uttarakhand                                | Komal Raj            |  |  |  |  |
|   |  | Shani KumariYadav    |  |  |  |  |
| Ms Kusum Rawat                            | Evaluation of the parameters of water quality in     | Shivani Burman       |  |  |  |  |
|   | industrial region of Roorkee, Uttarakhand            | Pallavi Kumari       |  |  |  |  |
|   |  | Ujjwal Kumar         |  |  |  |  |
|   |  | Sayani Paul          |  |  |  |  |

# Photographs of the Mini projects developed by Advance learners students:





Registrar Quantum University



HEAD OF DEPARTMENT
Dept of Agriculture Studies
Quantum University, Roorkee



# **ADVANCED LEARNER REPORT**

Bachelor of Science in Nutrition and Dietetics (Department of Applied Medical Sciences)

**Session: 2021-22** 

Faculty of Health Sciences **Quantum University, Roorkee** 

HEAD OF DEPARTMENT Dept. of Applied Medical Sciences Quantum University, Roorkee



### **ADVANCED LEARNER REPORT**

As per the evaluation of the Mid-Term Examination conducted by the Department of Applied Medical Sciences, some of the students have been identified in the category of Advanced Learner (those students who carry less than 80% Marks considered as advanced learner).

Mid Term Examination Marks of all four subjects are given below, in which Green highlighted marks obtained by students in each subject are above 80%:

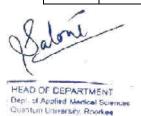
#### **Bachelor of Science in Nutrition and Dietetics**

Session: 2021-22

Mid Semester Examination Marks (Max. Marks: 60)

Semester: 2<sup>nd</sup>

| S.No. | Student_ID | Student_Name      | Nutrition<br>Through<br>Life<br>Cycle<br>(ND3203) | Fundamental<br>of Food &<br>Nutrition II<br>(ND3205) | Nutritional<br>Biochemistry<br>(ND3206) | Basics of<br>Human<br>Physiology<br>II (RD3206) |
|-------|------------|-------------------|---|--|---|---|
| 1     | 21320002   | AMISHA<br>MISHRA  | 24  | 25   | 20                                      | 41  |
| 2     | 21320005   | DIPANSHU<br>KUMAR | 46  | 55   | 41                                      | 53  |
| 3     | 21320001   | PRIYA<br>MISHRA   | 31  | 46   | 27                                      | 42  |
| 4     | 21320004   | RESHU<br>KARNWAL  | 18  | 30   | 19                                      | 22  |
| 5     | 21320009   | RINI BHATI        | 27  | 31   | 19                                      | 29  |
| 6     | 21310034   | SATYAM<br>KUMAR   | 18  | 18   | 10                                      | 25  |



Les Planson United Brown Land Contract Andrews Andrews

| 7 | 21320010 | TARUNA<br>MONDAL  | 45 | 53 | 46 | 53 |
|---|----------|-------------------|----|----|----|----|
| 8 | 21320003 | TUSI<br>BHARADWAJ | 43 | 53 | 37 | 53 |

### **LIST OF ADVANCE LEARNER STUDENTS**

#### (who has more than 80% marks in Mid Semester Examination)

| Semester        | No. of Students | Student_ID | Student_Name   |
|-----------------|-----------------|------------|----------------|
|                 | 03              | 21320005   | DIPANSHU KUMAR |
| 2 <sup>nd</sup> |                 | 21320010   | TARUNA MONDAL  |
|                 |                 | 21320003   | TUSI BHARADWAJ |

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### **ADVANCED LEARNER REPORT**

As per the evaluation of the Mid-Term Examination (Even Semester) conducted by the department of Applied Medical Science, some of these Bachelor of Science in Nutrition and Dietetics 2<sup>nd</sup> semester students are identified as Advanced learners.

#### **Advanced Activity:**

The institution assesses the learning levels of the students and organizes special Programmes for advanced learners.

- This has enabled the students to take initiative to participate in coming out with the students e-journal, where all the case reports, conference proceedings, project reports are published.
- Students are encouraged to participate in National and International conferences and to present papers.
- Motivated the students in various event and activities.
- Given them complex problems and assignments to enable them to enhance their problem-solving abilities
- Motivate the students to take the seminar in the class to improve the delivery method.
- Encouraged the students to obtain the university rank.
- Guided them to enroll in online courses like NPTEL, SWAYAM, Coursera.

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## Certificates are attached for the proof of

### **Advanced Learner Students**

1) Mr. Dipanshu Kumar (Advanced Learner) has participated in various activities like published patent, published book chapter etc. the certificate of these activities are attached below:

| DE  | FORM HE PATENTS (39 of 19 & THE PATENTS R CLARATION AS TO (See Section 10(6) a | ACT, 1970<br>70)<br>ULES, 2003<br>INVENTORSHIP   |  |  |
|---|--|--|--|--|
| 1. APPLICANT(S)   |  |  |  |  |
| NAME  | NATIONALITY  | ADDRESS  |  |  |
| Quantum University  | INDIAN   | Roorkee, Uttarakhand- 247167, India  |  |  |
| Ms. Saloni Arora  | Indian   | Phd. Scholar, Dept of Applied Medica<br>Sciences<br>Quantum University, Roorkee-<br>247167, Uttarakhand, India |  |  |
| Mr. Dipanshu Kumar  | Indian   | Student, B.Sc. Nutrition and Dietetics<br>Quantum University, Roorkee-<br>247167, Uttarakhand, India           |  |  |
|   |  | s) of the invention disclosed in the ur application  |  |  |
| 2. INVENTOR(S)  |  |  |  |  |
| NAME  | NATIONALITY  | ADDRESS  |  |  |
| Ms. Saloni Arora  | Indian   | Phd. Scholar, Dept of Applied Medica<br>Sciences<br>Quantum University, Roorkee-<br>247167, Uttarakhand, India |  |  |
| Mr. Dipanshu Kumar  | Indian   | Student, B.Sc. Nutrition and Dietetics<br>Quantum University, Roorkee-<br>247167, Uttarakhand, India           |  |  |
| I/We the applicant(s) in the patent in India is by way of a Dated this 22 <sup>nd</sup> Day of May, | ssignment from the t   | ereby declare that our right to apply for a rue and first inventor(s).   |  |  |

Figure: Certificate of Patent of Mr. Dipanshu Kumar (Advanced Learner) under the Guidance of faculty Ms.

Saloni Arora

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Quantum University. Roorkee



# INSTITUTION'S INNOVATION COUNCIL MOE'S INNOVATION CELL



Institute Name:

Quantum University

Title of the Innovation/Prototype:

High protein and high fibre composition

Team Lead Name: Team Lead Email: Team Lead Phone: Team Lead Gender:

Dipanshu Kumar ⊾ dipanshudhavan521@gmail.com 7488243431 Male

FY of Development:\ Developed as part of: Innovation Type: TRL LEVEL:

2021-22 Academic Requirement/Study Project Product 5

MRL Level:

MRL 8: Pilot line capability demonstrated. Ready to begin low rate production.

IRL Level

IRL 6: Validate Business/Revenue Model: Integrated Pilot Development—understanding operational nuances

Thomas

Food Processing/Nutrition/Biotech

Define the problem and its relevance to today's market / sociaty / industry need:

Snacking means to eat or drink something between meals, regardless of whether the food is healthy. Factors like hunger, location, social environment, time of day, and food availability contribute a well. Sometimes, people often snack when appetizing food is around - even when they're not hungry. Too much snacking can cause one to skip a meal entirely, which increases the risk of losing out on important nutrients.

Describe the Solution / Proposed / Developed:

The present invention relates to a snack composition which provides quick energy and to a method for preparing the snack. More particularly, the present invention relates to a high protein and high fivre snack composition which does not contain any processed or artificial sugar.

Explain the uniqueness and distinctive features of the (product / process / service) solution:

Accordingly, it is an object of the present invention to provide a snack which is high in protein and fibre. It is another object of the present invention to provide a snack which has less or no sugar. A further object of the present invention to provide a snack which has less or no sugar. A further object of the present invention is to provide a snack which contains less or no sugar.

How your proposed / developed (product / process / service) solution is different from similiar kind of product by the competitors if any:

A wok is taken and puffed rice is dry roasted on slow flame till it gets crunchy. It is kept aside to cool. Similarly, oats, white sesame seeds and flaxseeds are also roasted separately and kept aside for cooling. Finally, peanuts are roasted and husk is removed. All the dry ingredients are mixed together and chopped raisins are also mixed with all the roasted ingredients which are roasted. Separately, dark chocolate slab is heated in double boiler.

<u>Figure: Certificate of Innovation to Start-Up Title: High Protein and High Fibre Compositions of Mr. Dipanshu Kumar</u>
(Advanced Learner)

HEAD OF DEPARTMENT Dept. of Applied Medical Sciences Quantum University, Roorkee Registrar Quantum University Acura Consolidado de la Consol

#### **Front Page**

 $\mathbf{of}$ 

#### **Book Published**

#### **NUTRITION AND IMMUNITY**

A WEAPON FOR VIRAL AND MICROBIAL ILLNESS

Himanshu Kumar Dr. Shatakshi Dr. Himanshu Chaurasia Dr. Ashwani K. Jangra



#### **Second Page**

<u>of</u>

#### **Publication Details**

Published by

HSRA Publications 2023

#02, Sri Annapoorneshwari Nilaya, 1st Main,

Byraveshwara Nagar, Laggere,

Bangalore - 560058

Ph- 7892793054

Sales Headquarters - Bangalore

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ISBN: 978-93-5506-568-1 First Edition: *August 2023* No. of Pages - 153

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Quantum University, Roorkee



# Book Chpater by Mr. Dipanshu Kumar (Advance Learner)

#### 12. Immunity and obesity

Dr. Shatakshi \* Dipanshu Kumar Quantum School of Health Sciences Quantum University, Roorkee, Uttarakhand

Introduction: Obesity and immunity have a complex relationship that has been the subject of numerous research studies over the years. In general, obesity is associated with a state of chronic low-grade inflammation that can have a negative impact on the immune system. This chapter will explore the link between obesity and immunity in more detail, including how obesity affects immune function, the role of inflammation in this relationship, and potential strategies for improving immune function in obese individuals.

According to the World Health Organization (WHO), obesity is defined as "abnormal or excessive fat accumulation that may impair health". It is commonly measured by body mass index (BMI), which is calculated by dividing a person's weight in kilograms by the square of their height in meters (kg/m²). A BMI of 30 or higher is considered obese, while a BMI between 25 and 29.9 is considered overweight. Obesity is a major risk factor for numerous chronic health conditions, including type 2 diabetes, cardiovascular disease, and some cancers.

Obesity is a complex and multifactorial health condition that is characterized by an excessive accumulation of body fat that can lead to a number of adverse health consequences. In recent years, obesity has become a global health crisis, affecting more than 600 million adults worldwide, according to the World Health Organization (WHO). Obesity is not just a cosmetic issue, but it is also associated with a range of chronic diseases, including type 2 diabetes, cardiovascular disease, and certain cancers.

In addition to these well-known health complications, obesity also has a significant impact on the immune system, which is responsible for protecting the body against infections and other diseases. The immune system is a complex network of cells, tissues, and organs that work together to defend the body against harmful invaders, such as bacteria, viruses, and cancer cells. The immune system also helps to remove damaged cells and tissues and promote tissue repair.

119 | Nutrition And Immunity

### **Book Chapter by**

#### Ms. Taruna Mondal

#### (Advance Learner)

#### 2. Effect Of Nutritional Status On Immunity

Dr. Shatakshi \*, Taruna Mondal Quantum School of Health Science Quantum University, Roorkee

Introduction: The link between nutritional status and immunity has long been established, with malnutrition being a significant risk factor for infectious diseases. Nutritional deficiencies can affect various components of the immune system, leading to impaired responses to infections and decreased resistance to pathogens. On the other hand, a balanced and adequate diet can boost immunity, improve vaccine efficacy, and reduce the risk of infections.

This chapter aims to provide the information about how the immune system and immunity is affected by both positive and negative nutritional status. We will discuss the role of different nutrients, such as protein and micronutrients, such as vitamins and minerals, in immune function. Additionally, we will explore the impact of malnutrition on specific aspects of the immune system, including innate and adaptive immunity, and how it may affect susceptibility to infectious diseases.

micronutrients, such as vitamins and minerals, in immune function. Additionally, we will explore the impact of malnutrition on specific aspects of the immune system, including innate and adaptive immunity, and how it may affect susceptibility to infectious diseases.

Nutritional Status: Nutritional status is defined as the condition of body with respect to the nutrition intake, it's metabolism and utilization in the body.

By assessing weight and height in people, general adequacy is evaluated; the result is frequently stated as the body mass index, or the ratio of weight (kg) to height2 (m). Skinfold thickness measurements and measurements of the diameter of the muscles can both be used to determine body fat.

By eating in moderation and utilizing nutrients normally, one can maintain a normal nutritional state. Unbalanced dietary intake and improper nutritional utilization result in malnutrition.

Whenever there is inadequate supply of nutrition or the nutrients are not being utilized properly in the body it leads to the condition of malnutrition that is either under nutrition or over nutrition.

10 | Nutrition And Immunity

Figure: Book Chapter Details by Advanced Learner Students

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# Figure: Certificate of completion of Victorial Strawberry Sponge Cake Workshop organized by Airblack Culinary Club

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Figure: Certificate of participation in 'JHAROKHA-2022' National

Photography & Digital Poster Design Exhibition organized by Quantum

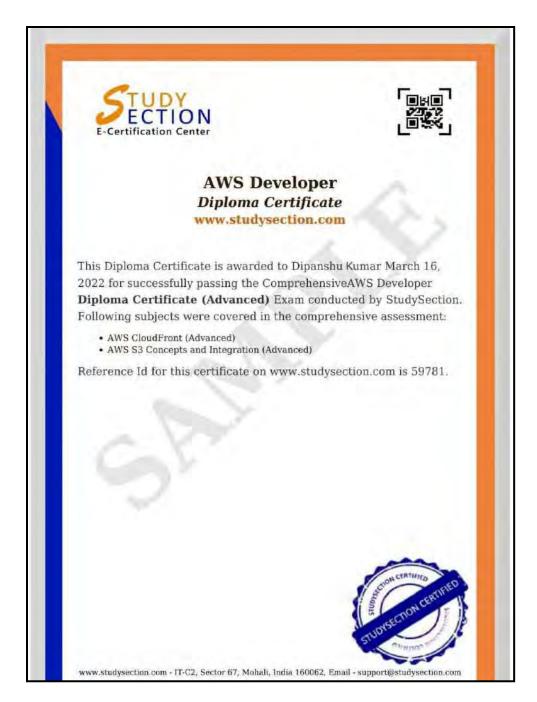
University, Roorkee

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Figure: Certificate to Participate in a Quiz organized by Hindusthan College of Arts and Science, Coimbatore by Advanced Learner Student

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# Figure: Diploma certificate of completion of AWS Developer organized by Study Section

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Dept. of Applied Medical Sciences
Quantum University, Rookee



1) Ms. Tusi Bhardwaj (Advanced Learner) has participated in various activities the certificate of these activities are attached below:

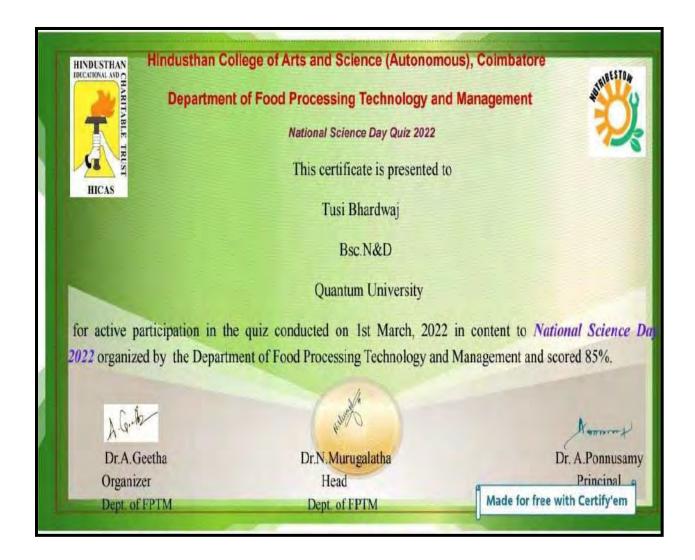


Figure: Certificate to Participate in a Quiz organized by Hindusthan College
of Arts and Science, Coimbatore by Advanced Learner Student

Ms. Tusi Bhardwaj

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# Figure: Certificate to attend 7 days International Training Programme organized by DFSRDA-NAHEP, VNMKV, Parbhani & JAE Group

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# Figure: Certificate of Participation in Webinar on Nutrigenomics by Advanced Learner Student

Registrar Quantum University

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Figure: Certificate of selection to attend FUNDRAISING INTERNSHIP at

Muskurahat Foundation through Internshala Platform.

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Figure: Certificate of completion of Victorial Strawberry Sponge Cake
Workshop organized by Airblack Culinary Club

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Figure: Certificate of completion of Online AYURVEDA Quiz Programme

by Advanced Learner Student

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Figure: Diploma certificate of completion of AWS Developer organized by Study Section

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3) Ms. Taruna Mondal (Advanced Learner) has participated in various activities the certificate of these activities are attached below:

International Conference on Fourth Industrial Revolution-Based Technology and Practices (ICFIRTP) 2022

ICFIRTP-Paper ID: 7894

#### Nutrition Education Using Ai And E-Learning

<sup>1</sup>Taruna Mondal, <sup>2</sup>Vaibhav Rathi, <sup>3</sup>Sneha Sarkar, <sup>4</sup>Niharika Vardhan Saxena <sup>1,2,3,4</sup> Quantum University, Roorkee, India

Abstract: The 20th century is the era of digitalisation and advancement in almost every field so as in the field of nutrition and dietetics. E-learning is a learning system which is based on formalized teaching but with the help of electronic media. Introducing E-learning in the field of nutrition will help the people to access the knowledge of nutrition anytime from anywhere. It provides a wide spread of knowledge unaffected by any timelines and boundaries. Introducing E-learning and AI in the nutrition and dietetics will give an attractive interface to the students and teachers to learn with graphic and interactive videos so that basics of the food nutrition can be understood by the students in audio visual form. Different feature courses can be prepared using AI technique which will guide the learners about the role of nutrition and its interaction with physiology of the human body. These courses may include the gut nutrient connection, mind nutrient connection and affect of nutrition on overall health. For making these interfaces more interactive inclusion of attractive quizzes and certificates at the end of each video course can be included. These animated audio visuals may include the fundamentals of healthy eating, typical nutritional deficiencies, the prevalence of malnutrition in various populations, the populations most at risk, the causes of undemutition, and critical indicators. The main population-based treatments to enhance nutritional status are also described can also be described. This wouldn't only give the knowledge but can also be a great platform for upgrading the status of nutrition in India. Linking e-learning with nutrition will bloom the field of both education and public health.

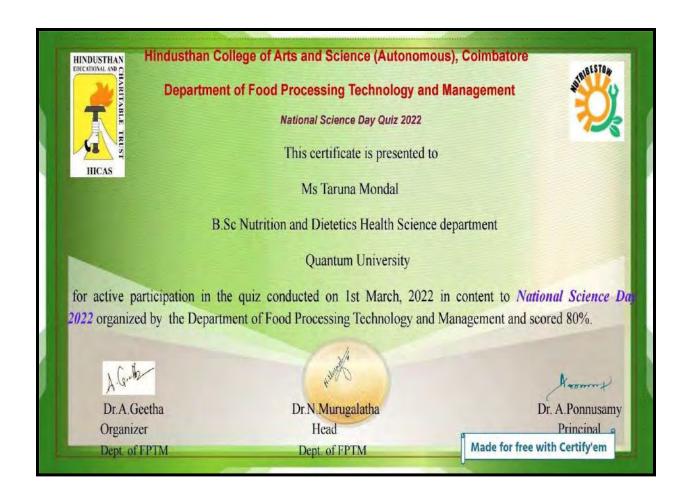
Keywords: nutrient, public health, AI

Figure: Abstract published in ICFIRTP 2022 Conference Proceeding by

**Advanced Learner Student** 

Ms. Taruna Mondal

HEAD OF DEPARTMENT Dept. of Applied Medical Sciences Quantum University, Roorkee Registrar Quantum University Andrew Andrew



# Figure: Certificate to Participate in a Quiz organized by Hindusthan College of Arts and Science, Coimbatore by Advanced Learner Student Ms. Taruna Mondal

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Figure: Certificate of completion of two weeks Cybersecurity awareness
online training program under CyberShiksha initiative of MICROSOFT and
DSCI conducted by QUICK HEAL ACADEMY

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Jalone

#### **Impact Observed:**

- ✓ Increases in number of student participation in various contests.
- ✓ Students applied for online courses.
- ✓ Increases in number of students to take participate in internship programs.
- ✓ Increases in number of students for start-ups, conferences, webinar etc.
- ✓ Advanced learners are selected to be the committee coordinators of different technical/professional departmental and university level committees.

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