

AN OVERVIEW

THE INSTITUTE

Forest Research Institute (F.R.I.), Dehra Dun made a humble beginning as Forest School established in 1878. Initially named as Imperial Forest Research Institute, F.R.I., came into being in 1906. Later renamed as Forest Research Institute and Colleges, with a number of centres located at different places all over the country administering research as well as training of Forest Officers and Forest Rangers. After reorganization of Forestry Research in the country and creation of Indian Council of Forestry Research and Education (ICFRE) in 1988, the training and research centres were given an independent status of institutes. Forest Research Institute, now one of the institutes under ICFRE, was conferred the status of Deemed University in December 1991 on the recommendations of the U.G.C., Ministry of Human Resource Development, Government of India.

OBJECTIVES OF THE FRI DEEMED TO BE UNIVERSITY

- To impart education in different branches of forestry and environment.
- To provide for research, advancement and dissemination of knowledge in the field of forestry and environment.
- To create consciousness about forest and environment among people through forestry extension programme.
- To carry out such other activities as may be necessary and desirable to further the safeguarding of environment and protection of forests and wildlife.

RESEARCH DIVISIONS AND DISCIPLINES IN THE INSTITUTE

- FOREST BOTANY (Systematic Botany, Wood Anatomy and Plant Physiology)
- CHEMISTRY of FOREST PRODUCT (Chemical Extracts from Trees and Forest Based Oilseeds)
- EXTENSION (Social Forestry, Extension and Agro-forestry)
- ECOLOGY, CLIMATE CHANGE AND FOREST INFLUENCE (Forest Productivity, Biodiversity, Environment and Pollution)
- FOREST ENTOMOLOGY (Control Measures and Taxonomy)
- FOREST PATHOLOGY (Forest Diseases and Biofertilizers)
- FOREST PRODUCTS (Timber Mechanics, Wood Seasoning, Wood Preservation, Composite Wood, Wood Working & Finishing, and Timber Engineering)
- FOREST SOIL and LAND RECLAMATION (Wasteland reclamation, Soil Fertility, Soil Geology and Mineralogy)

- GENETICS and TREE PROPAGATION (Genetics, Improvement, Breeding and Tissue Culture)
- NON WOOD FOREST PRODUCTS (Medicinal and Aromatic Plants, Resins and Gums)
- RESOURCE SURVEY and MANAGEMENT (Forest Mensuration and Forest Economics)
- SILVICULTURE (Experimental Silviculture, Logging and Seed Technology)
- CELLULOSE & PAPER (Paper Technology)
- FOREST BIOTECHNOLOGY
- FOREST BIO INFORMATICS
- ENVIRONMENT MANAGEMENT
- WILDLIFE MANAGEMENT
- FOREST GEOINFORMATICS
- FOREST HYDROLOGY

THE APPLICATION FORM

The Forest Research Institute Deemed to be University admission test, 2018 will be held at 12 centres in the country on **Sunday, 20th May, 2018** for the following courses:-

Sl.No.	Courses	Duration (Years)	No. of seats	
			Indian	Foreign Nationals
1.	M.Sc. Forestry	2	38	2
2.	M.Sc. Wood Science & Technology	2	38	2
3.	M.Sc. Environment Management	2	38	2
4.	M.Sc. Cellulose & Paper Technology	2	20	-

Applications for admission shall be made in the prescribed form available from the Registrar, Forest Research Institute Deemed to be University, Dehra Dun. The application form and the 'Information Bulletin' can be obtained in person or by post on payment of Rs.1200/- wherever applicable through bank draft drawn in favour of Registrar, Forest Research Institute Deemed to be University payable at Dehra Dun. **Forms can also be downloaded from the website www.fridu.edu.in**

Date of sale of forms: 22nd January, 2018 to 30th March, 2018

Application forms will be available from 22nd January to 30th March 2018 from the counter of the office of the FRI Deemed to be University/ Union Bank of India, FRI Branch, Dehra Dun. The last date for issue of forms from the office of the FRI Deemed to be University by post is 26th March, 2018. Thereafter any request for sending the forms by post will not be entertained. *(For details of important dates please see the last page of the Information Bulletin, 2018)*

Application duly filled in legibly in applicant's own handwriting with blue/black pen should be sent so as to reach the Registrar, Forest Research Institute Deemed to be University, P.O.: I.P.E., Kaulagarh Road, Dehra Dun – 248 195 on or before the last date. The application form can also be downloaded from the website www.fridu.edu.in . The candidates filling the downloaded form must pay fee of Rs.1200/-.

The last date of receipt of completed application form: 06th April 2018.

(Forms received after the last date will not be accepted)

It is advised that the application form be sent by Registered Post/Speed Post/Courier. Postal delay will not be accepted as a plea to entertain applications after the last date.

Admit card containing centre code and roll number will be mailed to the applicant by the fourth week of April, 2018.

If the admit card is not received by 30th April, 2018, the Registrar, FRI Deemed to be University may be contacted on e-mail tripathiak@icfre.org & registrarfri@icfre.org

Please quote your Name, Fathers Name and Date of Birth in all correspondence with the Registrar, FRI Deemed to be University, P.O. I.P.E., Kaulagarh Road, Dehra Dun – 248 195.

In case a candidate has either not received the admit card or has lost it, duplicate card can be obtained from the centre superintendent of his/her examination centre. Alternatively, the candidate may reach office of the Registrar, FRI Deemed to be University, Dehra Dun on working day during working hours. Where duplicate admit card will be issued after submission of a bank draft of Rs. 50/- and a photograph identical to that pasted on the admission test form.

Under no circumstances the admission test fee, once paid, will be refunded or held in reserve for any future admission test.

ELIGIBILITY REQUIREMENTS

The eligibility requirements for admission to these courses are as follows:

Sl. No.	Course Code No.	Courses of Studies	Eligibility requirement
1	01 (A)	M.Sc. Forestry	Three years bachelor's degree in science with at least one of the subjects namely Botany, Chemistry, Geology, Mathematics, Physics, Zoology or a Bachelor's degree in Agriculture or Forestry.
2	01 (B)	M.Sc. Wood Science & Technology	Three years bachelor's degree with Physics, Mathematics and Chemistry or B.Sc. degree in Forestry.
3	01 (C)	M.Sc. Environment Management	Three years bachelor's degree in any branch of Basic or Applied Sciences or Bachelor's degree in Forestry or Agriculture or BE/B.Tech in Environment Science.
4	01 (D)	M.Sc. Cellulose & Paper Technology	Graduate degree with minimum 50% marks in aggregate in Science with Chemistry as one of the subjects. BE/B.Tech. (Chemical or Mechanical Engineering with minimum 50% aggregate).

Age Limit for In-service Candidate:

The maximum age limit in respect of in-service candidate to M.Sc. Environment Management course shall be 50 years. The age shall be reckoned as on 31st July of the year of admission and no further relaxation will be given in any case.

CHOICE BASED CREDIT SYSTEM

The FRI Deemed to be University has implemented the Choice Based Credit System for M.Sc. courses of FRI Deemed to be University from the session 2016-2017.

RESERVATION OF SEATS

A) SCHEDULED CASTES AND SCHEDULED TRIBES:

Fifteen percent (15%) of the total available seats shall be reserved for scheduled castes and seven and half percent (7.5%) for scheduled tribes candidates subject to their being otherwise suitable. These reservations shall be interchangeable e.g. if sufficient number of candidates are not available to fill up the seats reserved for scheduled tribe candidates, these can be filled up from suitable scheduled castes candidates within the course concerned.

B) OTHER BACKWARD CLASSE (OBC):

The reservation to OBC is being provided as per the policy of the Govt. of India.

C) PHYSICALLY HANDICAPPED:

3% reservation to the persons with Disabilities under the persons with Disabilities (Equal opportunities, Protection of Rights and Full Participation) Act, 1995 Chapter No. 39, in each course for the candidates with locomotor disabilities one leg, one arms (without mobility restriction) and persons with partial deafness as per Govt. of India rules. The Candidates will have to produce Disability certificate issued by competent authority at the time of Counseling for admission.

D) IN-SERVICE CANDIDATES:

Five seats shall be reserved in M.Sc. Environment Management course for in-service candidates working in Government Departments/Autonomous bodies under the Central/State/Union Territory/ICFRE. However, if in-service candidates are not available then the seats reserved for them will be filled up by general candidate(s).

E) FOREIGN NATIONALS:

Reservation to the extent of 15% of the prescribed seats on supernumerary basis for Foreign Nationals shall be made for admission to each M.Sc. course available in the Institute. The foreign nationals are **exempted from appearing in admission test** provided they have passed the equivalent qualifying examination from a University outside India and fulfill the following conditions:

- (a) that they must have minimum eligibility requirements;
- (b) that the applications of scholarship holding Foreign Nationals (Under various schemes) are routed through Indian Council for Cultural Relations /Ministry of Human Resource & Development (Dept. of Education), Govt. of India, New Delhi;
- (c) that the applications of self-financing Foreign nationals should be routed through concerned Indian Diplomatic Mission abroad or Diplomatic Mission of the country of the

applicant in India and should be reached in the office of the FRI Deemed to be University by the 31st May, 2018. Fee to be charged from the foreign nationals is given below.

- (d) that they have valid residential permit in India granted for studies/Student Visa for the prescribed duration of the concerned course;
- (e) that the antecedents of the candidate have been verified by the forwarding Agencies/Ministry and found in order;
- (f) that the candidate must submit certificate duly verified by the Ministry/Agencies to the effect that he/she has been subjected to AIDS test and found negative;
- (g) that the degree/certificates of the candidates have been approved by the Association of Indian Universities (AIU) as equivalent to the corresponding degrees/certificates of the AIU;
- (h) that they have adequate knowledge of English as per requirements of the course.

Fee

- | | | | |
|----|--|---|--|
| 1. | Semester fee | - | 750 US\$ per semester
(1 st installment is payable at the time of admission) |
| 2. | Caution money | - | 50 US\$ (Refundable) |
| 3. | Hostel fee | - | 40 US\$ per month |
| 4. | Sports, Magazines fees | - | 30 US\$ p.a. |
| 5. | Library/Teaching aid fee | - | 50 US\$ per semester |
| 6. | Degree fee | - | 10 US\$ |
| 7. | The mess charges will be around 23 US\$ p.m., if they join mess run by the students. | | |

COMMITTEES

The FRI Deemed to be University has constituted the following committees for safe, secure and stress free environment in the University to the students of the FRI Deemed to be University.

- 1. Anti-Sexual Harassment Committee
- 2. Committee to look after the complaints of caste discrimination of SC/ST students
- 3. Student Counseling Centre
- 4. Student's Welfare & Disciplinary Committee

GUIDELINES

- ❖ In case a candidate has appeared for the degree examination required for admission but the result of the same has not been announced till the time of submission of application, the application form may still be completed in all other respects and may be submitted to the Registrar, Forest Research Institute Deemed to be University on or before the last date. The degree/result (mark sheet) should however be furnished as soon

as it becomes available, which must reach the office of the Registrar, FRI Deemed to be University on or before the date fixed for admission failing which he/she shall not be admitted treating his/her application for admission as incomplete.

- ❖ In case a candidate comes from a university/institute that follows the course credit system, the application shall be considered even though the final viva/voce is yet to be completed provided a full transcript is enclosed showing the grade point average obtained along with a course completion certificate from the Registrar of the University/Institute/Head of the College, Dean/Associate Dean of the campus of multi-campus, Universities/Institutes to the effect that the candidate has completed all the prescribed work. The certificate issued in this regard by the Head of the Department/Division shall not be entertained. However, at the time of admission a certificate shall have to be produced from the Registrar/Head of the College, Dean/Associate Dean of the campus of multicampus Universities stating clearly that the candidate has passed the last degree examination, failing which the candidate shall not be admitted treating his/her application for admission as incomplete.
- ❖ The candidate must in his/her own interest fill up the application form most ***carefully and ensure that all the columns are filled up correctly. Incomplete application shall be rejected out right.***
- ❖ A candidate may apply in more than one course in test but he/she is required ***to fill up the separate admission form and separate fee for each course e.g. In case candidate applies for two courses the fee payable shall be Rs.2400/- for application forms. Similarly, for three courses the fee payable shall be Rs.3600/- respectively.***
- ❖ The applicant is required to mention his/her category in clear terms. The category to which the applicant belongs once mentioned on the form shall be final and no subsequent change shall be allowed. If boxes requiring indication of category on the application form are left blank, the candidate shall be treated as general category and he/she cannot claim the benefit of any other category.
- ❖ Candidates are allowed to appear for the Admission Tests provisionally subject to the verification of equivalence of degrees/certificates and validity of certificates/marks-sheets of qualifying examination and also whether involved in the adoption of unfair means in any of the examinations of the University/Admission Tests held earlier at the time of admission in the respective courses. Degree/Certificate recognized by AIU shall be deemed as equivalent degrees.
- ❖ Candidates who were admitted as regular students to any course of studies in this Institute through Admission Test in earlier year(s) shall not be allowed to re-appear in the admission test for admission in same course.
- ❖ Please fill up all the columns correctly.
- ❖ Please read the Information Bulletin thoroughly before filling up the form.

- ❖ In your own interest please do not give any false information which may make you liable for disqualification.
- ❖ List of test centres and their codes are as follows.

<u>Test Centre</u>	<u>Code No.</u>	<u>Test Centre</u>	<u>Code No.</u>
Bangalore	1	Jodhpur	7
Chandigarh	2	Jorhat	8
Coimbatore	3	Kolkata	9
Dehradun	4	Lucknow	10
Delhi	5	Ranchi	11
Jabalpur	6	Shimla	12

Production of original certificates and mark sheet at the time of admission is an essential requirement which is not relaxable in any case under any circumstances. If any information submitted by the candidate is found to be false at any stage during his/her study at FRI Deemed to be University, his/her admission shall be cancelled.

- ❖ The minimum qualifying marks for allowing candidate to appear in the written test are 50 percent in aggregate at B.Sc. level/M.Sc. level prescribed for admission to the different courses in respect of general category candidates including physically handicapped, in-service candidates and foreign nationals and 45 percent in aggregate in respect of SC/ST candidates.
- ❖ Candidates selected for written test based on the academic and other requirements will be sent the admit card through e-mail/surface mail. In case of admission to the M.Sc. courses the aggregate marks of all the three science subjects will only be computed for ascertaining the **50%** qualifying marks in respect of General/OBC candidate and **45%** in respect of SC/ST candidates. The marks of other than Science subjects and aggregate marks of honours subject shall not be considered in any case for ascertaining the qualifying marks for appearing in the admission test.

❖ In case there is any change in the date of examination for some unforeseen reasons, the final date will be indicated in the admit card.

ANNOUNCEMENT OF RESULTS & ADMISSION

- ❖ A merit list of candidates including a waiting list will be formed for each course on the basis of aggregate marks secured in the written test. Candidates will be selected in order of merit in all the categories. The result of the exam will be declared on the website www.fridu.edu.in. **Date of first counseling is 06th July, 2018 and date of second counseling is 09th July, 2018. The candidates will be suitably advised before they come for counseling.**
- ❖ The selected candidates will have to pay the prescribed fees and join the course by the due date notified. The fee has to be paid at the time of counseling otherwise the seat will be offered to the next candidate.

- ❖ If a selected candidate does not join by the prescribed date or if no extension has been asked for and **granted** by the University the admission shall stand cancelled automatically and the seat shall be offered to the candidate in the merit/waiting list.

Documents in original to be produced by the candidate at the time of counselling:

1. Transfer Certificate
2. Migration Certificate, if passed from University (to be submitted not later than 90 days of admission)
3. High School Certificate/equivalent Certificate and Mark sheet.
4. Intermediate Certificate/equivalent Certificate and Mark sheet.
5. B.Sc. degree and Mark sheet of all the three years.
6. M.Sc. degree and Mark sheet.
7. Admission Test admit card issued from this office.
8. OBC certificate from District Magistrate or authorities empowered to issue certificate or verification issued not earlier than six months. Please ensure that you are eligible to get reservation under OBC category only as per the Central Educational Institutions (Reservation in Admissions) Act, 2008 and other relevant guidelines issued by Govt. of India.
9. SC/ST certificate on the basis of which reservation is claimed.
10. Physically Handicapped certificate from Civil Surgeon/C.M.O.
11. Aadhar Card

❖ *The candidates called for admission have to produce original certificates, mark sheet etc. before the payment of fees. However in cases where the original mark sheet indicates clearly that the candidate have passed the qualifying examination prescribed for admission he/she be admitted on the condition that he/she shall produce the original degree/provisional degree within one month failing which his /her admission is liable to be cancelled. There can be no appeal to any authority if the candidate fails to produce the original documents at the time of admission.*

❖ In case equal marks in written test, the following criteria shall be adopted for taking admission in the course concerned:-

- i) Preference will be given to the candidate who has higher percentage of aggregate marks in the qualifying examination.
- ii) In case the candidates have equal percentage of aggregate marks in qualifying examination then the candidate higher % in graduation will be given preference.

PLACEMENTS

FRI Deemed to be University provides assistance in placement of deserving students. Various industries/ organizations visit the campus for campus interviews. On an average 50% of the students get placements through the campus interviews. However, in case of M.Sc. Wood Science & Technology the placement is 100% in general.

SCHOLARSHIP

FRI Deemed to be University provides merit scholarship to the topper students in each course. The scholarship may be upto Rs.12,000/- per semester and is awarded separately for each semester depending on the result of the previous semester. For the purpose of award of scholarship in the first semester the result of the entrance test is considered and the topper in general category and SC/ST category are awarded the scholarship in each course. However general category candidate must score minimum 50% marks and SC/ST must score 30% marks for obtaining the scholarship.

GENERAL

- a) Candidate who satisfies the above eligibility requirements may apply for admission test on the prescribed application form for any of the courses mentioning the name of the course with its Code No.
- b) The category to which the applicant belongs once mentioned on the form is final and no subsequent change shall be allowed. Boxes requiring indication of category, if left, blank will be treated as indicating General Category.
- c) Application forms of candidates, who have submitted forged/fake certificates or adopted fraudulent means, shall be rejected without any reference to the candidate. Further, such candidates are liable to be prosecuted and shall be debarred from appearing in any subsequent Admission Test conducted by FRI Deemed to be University.
- d) Candidates are allowed to appear in the Admission Tests provisionally subject to the final decision of equivalence of degrees/certificates of qualifying examination at the time of admission in the respective courses.
- e) *Mere appearance in the admission test will not entitle a candidate to be considered for admission to the course unless he/she fulfills the eligibility conditions. Applicants must fully satisfy themselves about their eligibility as prescribed above, before filling in the application form.*
- f) No candidate shall be allowed to appear in the Admission Test without a valid admit card issued by the office of the Registrar, FRI Deemed to be University.
- g) The **Admission Test will be held on 20th May, 2018.** Date, time and venue for test will be indicated on the admit card.

- h) In all matters relating to the Admission Test, the decision of Registrar, FRI Deemed to be University shall be final and binding.
- i) No scrutiny or revaluation of the answer book of the Admission Test shall be allowed on any grounds.
- j) The candidate who wants to apply for more than one course may do so but he/she is required to fill up **separate form and fee @ Rs. 1200/- for each course** and indicate the same in prescribed column of the form. Test for all the courses will be the same.

CANCELLATION OF ADMISSION

REASONS FOR REJECTION OF APPLICATION FORMS

- a) Non-submission of self-attested identical recent photographs at all appropriate places. **(Xeroxed copy/copies of photographs shall not be accepted.)**
- b) Lack of signature of the candidate at any of the appropriate place.
- c) Submission of application form by a candidate after erasing the entries made earlier by another candidate.

FRI Deemed to be University has the right to cancel, at any stage, the admission of a candidate who is admitted to a course to which he/she is not entitled, being unqualified or ineligible in accordance with the rules and regulations in force.

INSTRUCTIONS FOR WRITTEN TEST

- a) There will be an objective type written test of three hours with questions grouped under the following four sections:
 - I.** Basic Sciences including Social Science **(100 questions)**
 - II.** Arithmetic and Quantitative abilities, Computational ability, Quantitative reasoning, Interpretation of Tables, Graphs, etc. **(40 questions)**
 - III.** General Knowledge and Current Affairs **(30 questions)**
 - IV.** English Language, Comprehension, Vocabulary, Grammar, Idioms, etc. **(30 questions)**
- b) The candidate will check within 5 minutes of issue of the test booklet, and ensure that it contains all the pages and no question is missing. If any discrepancy is noticed the candidate must bring it to the notice of the Superintendent/Invigilator and obtain a fresh booklet.
- c) The entries in answer sheet must be made with Black/Blue ball point pen only. The options in the answers are also to be rounded with ball point pen only.
- d) The candidate will fill in all the details in the space provided for it on the front page and affix his signature before starting to answer the questions.

- e) Each question will be followed by four alternative answers. The candidate is required to select the one which he/she feels is correct answer. The detail instructions will be printed on the answer sheet. The candidate is advised to go through the instructions.
- f) **There will be negative marking for wrong answer to the extent of one-fourth (1/4) of the marks allotted to the questions.**
- g) No page from the test booklet is to be torn or removed. If candidate is found tearing any paper from the test booklet, he/she is liable to be punished for use of unfair means.
- h) Inner cover page of the Test Booklet or the blank space/pages at the end of the Test Booklet may be used for rough work.
- i) In case of any dispute it will be subject to jurisdiction of Dehra Dun court only.

SAMPLE WRITTEN TEST QUESTIONS

The set of questions given below will familiarize the candidates with the type of Questions in the FRI Deemed to be University Admission Test. These questions are only indicative of the nature of the test and it is possible that types of questions not illustrated here may appear in the test.

ANSWER ALL THE QUESTIONS

1. Evaporation takes place at ----- temperature/s
 - a. A fixed
 - b. Boiling
 - c. All
 - d. Melting
2. The atmospheric pressure is due to the ----- of the air acting on unit area of any surface
 - a. Mass
 - b. Weight
 - c. Volume
 - d. Area
3. The force of attraction between similar kinds of molecules is called the force of -----
 - a. Cohesion
 - b. Adhesion
 - c. Repulsion
 - d. None of the above
4. The amount of matter contained in a body is called-----
 - a. Weight
 - b. Mass
 - c. Gravity
 - d. Volume

5. Property of material which allows it to be drawn out into plane sheet is -----
 - a. Ductility
 - b. Solderability
 - c. Super conductivity
 - d. Malleability

6. ----- radiations can damage or destroy the cells of living organisms.
 - a. Solar
 - b. Nuclear
 - c. Sulphur
 - d. CO₂

7. The magnetic lines of force ----- intersects with each other.
 - a. can
 - b. never
 - c. sometimes
 - d. most of the times

8. The material which can be deformed permanently by heat and pressure is called a ----
 - a. Thermoplastic
 - b. Thermoset
 - c. Polymer
 - d. None

9. ----- converts electrical energy to mechanical energy
 - a. An electric motor
 - b. A generator
 - c. A dynamo
 - d. A transformer

10. Identify the vector quantity from the following
 - a. Heat
 - b. Angular momentum
 - c. Time
 - d. Work

11. Work done in a free expansion process is -----
 - a. Zero
 - b. Minimum
 - c. Maximum
 - d. Positive

12. The splitting of different colours of light in a prism is -----
 - a. Refraction of light
 - b. Diffraction of light
 - c. Dispersion of light
 - d. Reflection of light

13. Over the elastic range of a material, stress and strain are related to each other in a -----
- Exponential manner
 - Logarithmic manner
 - Linear manner
 - None of the above
14. The principle that all microscopic physical entities have both wave and particle properties is called the wave-particle:
- Singularity
 - Duality
 - Infinality
 - Nullility
15. Which of the following alkanes has 80% of carbon?
- Ethane
 - Methane
 - Propane
 - Butane
16. The shape of p orbital is
- Spherical
 - Dumb bell
 - Rectangular
 - Oval
17. In α - decay
- Z and A are unchanged
 - Z decreases by 4 and A decreases by 2
 - Z decreases by 2 and A decreases by 4
 - Z decreases by 4 and A decreases by 4
18. The unit of viscosity is:
- poise
 - centipoise
 - Both a and b
 - None of the above
19. The pH of boiling water is
- 7
 - >7
 - <7
 - Cannot be predicted
20. IUPAC name of succinic acid is
- 1,4-butanedioic acid
 - Butanoic acid
 - Butane-1,4-dioic acid
 - 1-Butane-4-dioic acid

21. Alkylation of nitrobenzene results into formation of
- o*-alkyl nitrobenzene
 - p*-alkyl nitrobenzene
 - o*- and *p*-alkyl nitrobenzene
 - m*-alkyl nitrobenzene
22. Heterolytic fission of a covalent bond can form
- Free radicals
 - Carbocation only
 - Carbanion ion only
 - Both carbocation and carbanion
23. If the valence shell electronic structure for an element is ns^2np^6 , this element will belong to
- Alkali metal
 - Inert metal
 - Noble gas
 - Halogen
24. Schiff base is a product of reaction of primary amine with
- Aldehyde only
 - Ketone only
 - Carbonyl compounds
 - None of the above
25. On moving top to bottom in VIIth group of periodic table, electronegativity of elements
- Increases
 - Decreases
 - First increases then decreases
 - First decreases then decreases
26. The units of a rate of a reaction are
- Mole- L^{-1} -Sec⁻¹
 - Mole- L-Sec⁻¹
 - Mole⁻ - L^{-1} -Sec
 - Mole- L-Sec
27. Which of the following is a colligative property?
- Elevation in boiling point
 - Depression in freezing point
 - Both of the above
 - None of the above
28. Blood is an example of
- Sol
 - Gel
 - Suspension
 - None of the above

29. A Shield area composed of geologically ancient rocks of diverse origin:
a. Peninsula b. Extra-Peninsula
c. Indo-gangetic Plain d. All the three
30. Average altitude of Lesser Himalayan Zone is:
a. 1000m b. 2000m c. 3000m d. 4000m
31. Rate of weathering depends upon:
a. Nature of rocks b. Climate
c. Topography d. All the three
32. Asaphus is found in:
a. Brachiopods b. Trilobites c. Crinoids d. Bryozoa
33. Average specific gravity of all non-metallic minerals is:
a. 1.5 b. 2.5 c. 3.5 d. 4.5
34. Chemical composition of orthoclase:
a. Hydrous magnesium silicate b. Potassium aluminum silicate
c. Sodium aluminum silicate d. None of the three
35. Rocks which are formed during the solidification of magma near the earths
Surface:
a. Plutonic rocks b. Hypabyssal rocks
c. Volcanic rocks d. All the three
36. Most faults in the Himalaya are
a. Strike slip fault b. Thrust c. Normal fault d. Landforms
37. The most important mineral in the Garnet group is:
a. Grossularite b. Pyrope
c. Uvarovite d. All the three
38. When lateral pressure brings change in the rocks, this process is called:
a. Thermal metamorphism b. Dynamic metamorphism
c. Static metamorphism d. local metamorphism
39. When temperature ranges from human body to boiling point of water, the springs are:
a. Mineral spring b. Scarp foot spring
c. Hot spring and Geyser d. Dip foot spring
40. Admantine is the typical luster of:
a. Quartz b. Galena
c. Diamond d. Topaz
41. Name the non reducing sugar from the following
a. Glucose
b. Fructose
c. Mannose
d. Sucrose

42. Osmosis is the diffusion of
 a. Water
 b. Solute particle
 c. Gas
 d. Energy
43. Which of the following organisms does not obey the 'Cell Theory'?
 a. Virus b. Bacteria c. Fungi d. Plants
44. Plants that grow in saline water are known as?
 a. Hrdrophytes b. Thallophtyes c. Halophytes d. Mesophytes
45. Which of the following impart yellow colour to urine in humans?
 a. Cholesterol b. Urea c. Bile salts d. Urochrome
46. Fruits after ripping become soft. It is due to?
 a. Dissolution of tannins in sap
 b. Dissolution of middle lamella
 c. Formation of ethylene gas
 d. Formation of auxins
47. Vessels are present in all plants except
 a. Pinus b. Rose c. Gnetum d. Gingko
48. Which of the following are the examples of phloem fibres
 a. Jute b. Hemp c. Flax d. All the above
49. Which of the following is micronutrient of the plant
 a. Manganese b. Phosphorus c. Calcium d. Magnesium
50. Yeast is unlike bacteria in being
 a. Unicellular b. Multicellular c. Prokaryotic d. Eukaryotic
51. Fungi usually store the reserve food material in the form of
 a. Starch b. Lipid c. Glycogen d. Protein
52. What is the correct descending sequence of taxonomic categories?
 a. Division-Class-Order-Family-Tribe-Genus
 b. Class-Order-Division-Family-Species-Tribe
 c. Tribe-Genus-Class-Division-Family-Order
 d. Family-Order-Genus-Tribe-Division-Class
53. First transgenic crop is
 a. Tobacco b. Wheat c. tomato d. Maize
54. The error degree of freedom for a RBD design with 10 treatments and 4 replications is
 a. 20 b. 27 c. 40 d. 36

55. Growth of plant towards light is called?
 a. Phototropism b. Photorespiration c. Photocromatism d. Photoperiodism
56. The C: N ratio of humus is
 a. 20: 1 b. 100: 1 c. 10: 1 d. 400:1
57. Plants absorb phosphorus in the form of
 a. H_2PO_4 b. PO_4 c. SSP d. P
58. Principle of Experimental design is given by
 a. R A Fisher b. Wilcox c. Cox and Cochran d. WG Cochran
59. Which one of the plant is the C4 plant?
 a. Maize b. Potato c. Pea d. Papaya
60. Which one of the following element is a constituent of protoplasm?
 a. Sulphur b. Calcium c. Iron d. Potassium
61. Which one of the following element is mobile in plants but immobile in soil?
 a. Sulphur b. Zinc c. Boron d. Phosphorus
62. Khaira disease in rice is due to the deficiency of
 a. Boron b. Mn c. S d. Zn
63. The number of Agro-climatic zones of India is
 a. 17 b. 7 c. 15 d. 10
64. Norin - dwarf gene was introduced in which cereal?
 a. Wheat b. Oat c. Rice d. Maize
65. The centre of origin of *Triticum aestivum* is
 a. Chilean centre
 b. South Mexican centre
 c. Mediterranean centre
 d. Near eastern region
66. Which part of the plant cell is known as power house?
 a. Golgi bodies b. Ribosomes c. Mitochondria d. Lysosomes
67. According to the mode of regeneration, silviculture systems are classified in to:
 a. High forests systems b. Coppice system
 c. Both a. and b. d. None of these
68. A silviculture system in which clear felling is done in form of strips which progress successively in one time is known as
 a. Clear strip system b. Alternate strip system
 c. Both a. and b. d. None of these

69. Shelterwood-strip system evolved from
 a. Uniform system
 c. Clear felling system
 b. Group system
 d. Irregular shelterwood system
70. Flowering season of *Alnus nepalensis* is
 a. October – December
 c. January - March
 b. July to September
 d. September to November
71. *Shorea robusta* is a
 a. Shade loving
 c. Shade bearing
 b. Light demanding
 d. Shade tolerant
72. *Populus deltoides* sheds its leaves in the month of
 a. January – February
 c. February – March
 b. September – October
 d. November – December
73. Flowering in *Tectona grandis* occurs from:
 a. June to September
 c. July to October
 b. August to November
 d. May to August
74. *Eucalyptus* species is native of
 a. Canada
 c. Australia
 b. the USA
 d. Mexico
75. *Pinus roxburghii* is aneedle pine.
 a. three
 c. six
 b. five
 d. seven
76. *Casuarina equisetifolia*
 a. Western Himalaya
 c. central India
 b. North east India
 d. Coastal regions
77. Most important tree for plywood industry in India is
 a. *Eucalyptus* hybrid
 c. *Eucalyptus teretecornis*
 b. *Populus deltoides*
 d. *Casurina equisatefolia*
78. Major forest types in India are
 a. twelve
 c. sixteen
 b. thirteen
 d. eighteen
79. Kathha or Cutch dye obtained from
 a. *Acacia nilotica*
 c. *Acacia tortolis*
 b. *Acacia catechu*
 d. *Acacia mearensii*
80. Lac or Lakh is an important non timber forest product obtained from
 a. an insect
 c. plant bark
 b. plant root extract
 d. fungus
81. When was *Jawahar Rojgaar Youjna* was launched
 a. 1989
 b. 1991
 c. 1993
 d. 1995

82. FDI refers to
- Fixed Deposit Interest
 - Foreign Deposit Investment
 - Foreign Direct Investment
 - Future Demonetization Initiatives
83. In India gold mines are located in
- Kolar
 - Dhanbad
 - Raniganj
 - All of the above
84. What was 10th five year plan period
- 2002-2007
 - 2007-2012
 - 1997-2002
 - 1999-2003
85. Main source of income in India is
- Service sector
 - Agricultural sector
 - Industrial sector
 - Educational sector
86. Which is the highest National Award
- Padma Vibhushan
 - Padma Shri
 - Bharat Ratna
 - Ashok Chakra
87. The 79th amendment of Indian constitution was related to
- Reservation of SC and ST in Lok Sabha and State Assembly
 - Laying strong foundation for the Panchayati Raj institutions in the country
 - Administration of the Union Territories
 - Formation of Interstate Councils
88. Method of constitutional amendment is provided in the Article
- 348
 - 358
 - 378
 - 368
89. First general election was held in
- 1948
 - 1951
 - 1953
 - None of the above

90. First Finance Commission was constituted in
- 1950
 - 1951
 - 1952
 - 1953
91. First Municipal Corporation was set up in
- New Delhi
 - Madras
 - Bombay
 - Calcutta
92. Executive head of the state Government is
- Governor
 - Chief Minister
 - Prime Minister
 - President
93. The system of judicial review exist in
- India and UK
 - UK and USA
 - India and USA
 - UK and Australia
94. Name of 16 digit identification number for each individual is
- UID
 - Aadhar
 - Both the above
 - None of the above
95. In which year state of Jharkhand was formed
- 1999
 - 2000
 - 2001
 - 2002
96. Sikkim was made integral part of India under
- 36th Amendment
 - 38th Amendment
 - 32nd Amendment
 - 30th Amendment
97. Who was Tagore of Punjab
- Puran Singh
 - Amrita Pritam
 - Kartar Singh Duggal
 - None of the above

98. Who gave the slogan 'Jai Hind'
- Mahatma Gandhi
 - Subhash Chandra Bose
 - Jawahar Lal Nehru
 - Sardar Vallabhbhai Patel
99. Which Party was founded by Subhash Chandra Bose
- Indian Freedom Party
 - Azad Hind Fauj
 - Forward Block
 - Hind Army
100. Who started news paper Bande Mataram
- Bipin Chandra Pal
 - Rabindra Nath Tagore
 - Devendra Nath Tagore
 - Surendra Nath Bannerjee
101. The difference between the place value and face value of 6 in 856973 is
- 984
 - 8563
 - 5994
 - 3765
102. The unit digit in $(7^{95} - 3^{58})$ is
- 4
 - 6
 - 0
 - 8
103. The least number which should be added to 24978 so that the sum is exactly divisible by 5,6,4 and 3 is
- 13
 - 23
 - 62
 - 3
104. Six bells commence tolling together and toll at intervals of 2,4,6,8,10 and 12 seconds respectively. In 30 minutes, how many times do they toll together?
- 16
 - 12
 - 8
 - 4
105. 0.232323..... when converted into a fraction is
- 15/40
 - 23/99
 - 23/100
 - 15/17

106. The value of 0.002×0.5 is
- 0.01
 - 0.001
 - 0.1
 - 0.0001
107. A sum of Rs. 312 was divided among 100 boys and girls in such a way that each girl gets Rs. 3.60 and each boy gets Rs. 2.40. The number of boys is
- 40
 - 30
 - 20
 - 50
108. Ajay and Vijay distribute Rs. 100 each in charity. Ajay distributes money to 5 more people than Vijay and Vijay gives Rs. 1 more than Ajay. How many people receive the charity?
- 65
 - 55
 - 45
 - 30
109. The number when divided by $\sqrt{0.25}$ gives the result as 25 is
- 25
 - 0.25
 - 12.5
 - 50
110. The cube root of 0.000216 is
- 0.06
 - 0.6
 - 0.24
 - 0.006
111. When 15 is subtracted from 7 times a number, the result is 10 more than twice the number. The number is
- 7
 - 9
 - 11
 - 5
112. 50 is divided into two parts such that the sum of their reciprocals is $1/12$. The two parts are
- 35 and 15
 - 30 and 20
 - 10 and 40
 - 25 and 25
113. A batsman makes a score of 87 runs in the 17th inning and results in increasing his average by 3. The average after 17th Inning is
- 39
 - 33
 - 37
 - 49

114. The product of two fractions is $\frac{14}{15}$ and their quotient is $\frac{35}{24}$. The greater fraction is
- $\frac{7}{4}$
 - $\frac{7}{3}$
 - $\frac{9}{7}$
 - $\frac{7}{6}$
115. A two-digit number is such that the product of the digits is 8. When 18 is added to the number, the digit is reversed. The number is
- 18
 - 42
 - 24
 - 81
116. The value of $(27)^{2/3}$ is
- 8
 - 9
 - 6
 - 3
117. If $\sqrt{2^n} = 64$, n is
- 12
 - 8
 - 4
 - 16
118. In expressing a length 81.472 km as nearly as possible with three significant digits, the percentage of error is
- 0.028%
 - 0.016%
 - 0.020%
 - 0.034%
119. If the numerator of a fraction be increased by 15% and its denominator decreased by 8%, the value of fraction is $\frac{15}{16}$. The original fraction is
- $\frac{2}{3}$
 - $\frac{3}{4}$
 - $\frac{4}{5}$
 - $\frac{3}{5}$
120. A shopkeeper sells an article at a loss of 20%. If the selling price had been increased by Rs. 100, there would have been a gain of 5%. The cost price of the article was
- 300
 - 200
 - 100
 - 400

121. Present ages of Kiran and Syam are in the ratio of 5:4 respectively. Three years hence, the ratio of their ages will become 11:9 respectively. What is Syam's present age in years?
- 24
 - 22
 - 18
 - 29
122. A rectangular parking space is marked out by painting three of its sides. If the length of the unpainted side is 9 feet, and the sum of the lengths of the painted sides is 37 feet, find out the area of the parking space in square feet?
- 120
 - 154
 - 126
 - 100
123. $4211.01 + 22.261 - ? = 2645.759$
- 1587.512
 - 1262.542
 - 1348.526
 - 1232.658
124. How much time will it take for an amount of Rs. 900 to yield Rs. 81 as interest at 4.5% per annum of simple interest?
- 4 years
 - 6 years
 - 1 year
 - 2 years
125. The square root of 16641 is
- 229
 - 199
 - 129
 - 139
126. $\sqrt{248 + \sqrt{64}}$ equals to
- 14
 - 18
 - 20
 - 16
127. What smallest number should be added to 8444 such that the sum is completely divisible by 7?
- 3
 - 4
 - 5
 - 6

128. The missing number, x , of the series 1, 8, 27, 64, 125, 216, x is
- 243
 - 453
 - 456
 - 343
129. A train of length 150 metres takes 40.5 seconds to cross a tunnel of length 300 metres. The speed of the train in kmph is
- 60
 - 50
 - 40
 - 30
130. One side of a rectangular field is 15 m and one its diagonal is 17 m. The area of the field is
- 100 m^2
 - 120 m^2
 - 140 m^2
 - 100 m^2
131. The percentage profit earned by selling an item for Rs. 1920 is equal to the percentage loss incurred by selling the same item for Rs. 1280. At what price should the item be sold to make 25% profit?
- 2000
 - 2500
 - 3000
 - 4000
132. In a km race A beat B by 28 metres or 7 seconds. A's time over the course is
- 3 min. 4 sec.
 - 4 min. 3 sec.
 - 2 min. 5 sec.
 - 5 min. 4 sec.
133. The average of five numbers is 27. If one number is excluded, the average becomes 25. The excluded number is
- 30
 - 25
 - 35
 - 20
134. The ratio 5:4 expressed as a percent equals
- 125
 - 12.5
 - 40
 - 30

135. The least number which when increased by 5 is divisible by 24, 32, 36 and 54, is
- 859
 - 429
 - 879
 - 359
136. If $1.125 \times 10^k = 0.001125$, the k is
- 1
 - 2
 - 3
 - 4
137. A hemisphere and a cone have equal bases. If their heights are also equal, the ratio of their curved surfaces will be
- 1:2
 - 1:3
 - $1:\sqrt{3}$
 - $1:\sqrt{2}$
138. In a rain shower 5 cm of rain falls. The volume of water that falls on 1.5 hectares of ground is
- 75 cu. m
 - 750 cu. m
 - 7.5 cu. m
 - 75000 cu. m
139. In what ratio must a grocer mix two varieties of tea worth Rs. 60 a kg and Rs. 65 a kg so that selling the mixture at Rs. 68.20 per kg gives him a profit of 10%?
- 2:3
 - 3:2
 - 3:4
 - 4:3
140. The fourth proportional to 4, 9, 12 is
- 27
 - 15
 - 18
 - 30
141. Which day is observed as Diabetes Day
- 14th November
 - 24th November
 - 2nd November
 - 4th November

142. Who wrote the famous book “Origin of Species by Means of Natural Selection”
- Darwin
 - Lamarck
 - Hooker
 - Wallace
143. The Prime Minister launched Swachh Bharat Abhiyan on October 2014 at
- Rashtrapathi Bhawan, New Delhi
 - Rajghat, New Delhi
 - Gandhi Nagar, Gujarat
 - Sabarmati, Ahmedabad, Gujarat
144. Ozone hole is maximum over
- Russia
 - Antarctica
 - Alaska
 - America
145. The most abundant element is
- Nitrogen
 - Iron
 - Calcium
 - Silicon
146. Hydrocarbons from Petroleum are isolated through
- Pyrolysis
 - Fractional Crystallization
 - Fractional distillation
 - Sublimation
147. Milk is
- Oil in water emulsion
 - Water in oil emulsion
 - Fat in protein emulsion
 - None of the above
148. What is speed of light in vacuum
- $8 \times 10^{13} \text{ m s}^{-1}$
 - $3 \times 10^{18} \text{ m s}^{-1}$
 - $8 \times 10^3 \text{ m s}^{-1}$
 - $3 \times 10^8 \text{ m s}^{-1}$
149. A fuse wire is made up of
- Tin and Copper Alloy
 - Tin and Lead Alloy
 - Tin and Silver Alloy
 - Tin and Aluminum Alloy

150. Which of the following is not a poor conductor of electricity
- Selenium
 - Sulphur
 - Phosphorus
 - Bromine
151. SI unit for amount of substance
- gram
 - kilogram
 - mol
 - dalton
152. Bandipur National Park is situated in
- Rajasthan
 - Madhya Pradesh
 - Karnataka
 - Chhattisgarh
153. National Institute of Design is situated in
- New Delhi
 - Hyderabad
 - Ahmedabad
 - Mumbai
154. First Five Year Plan was started in
- 1949-50
 - 1950-51
 - 1951-52
 - 1952-53
155. The national flower of India is
- Rose
 - Sunflower
 - Jasmine
 - Lotus
156. *Canis* is genus name for
- cats
 - dogs
 - pigs
 - monkey
157. Which of the following was twice winner of the Nobel Prize
- Marie Curie
 - Maria Goeppert Mayer
 - Youyou Tu
 - née Sklodowska

158. Who was awarded Padma Vibhushan award 2015
- Shri L. K. Advani
 - Shri Prakash Singh Badal
 - Shri Kottayan K. Venugopal
 - All of the above
159. Recently GBU-43/B bomb was dropped in Afghanistan. It is a
- Low Powered Nuclear Bomb (LPNB)**
 - Massive Ordnance Air Blast Bomb (MOAB)
 - None of the above
 - Both the above
160. Which country was first to make Corporate Social Responsible Act
- England
 - USA
 - Japan
 - China
161. Montreal Protocol is related to
- Global warming
 - Protection of Ozone layer
 - Green house gas emission
 - Deforestation
162. International Mother Earth Day is observed every year on
- 22 April
 - 22 May
 - 22 June
 - 22 July
163. 'Amrapali' is a name of
- Litchi variety
 - Pineapple variety
 - Mango variety
 - Basmati rice variety
164. Where XIX Commonwealth Forestry Conference was organized in India
- New Delhi
 - Uttarakhand
 - Tamil Nadu
 - Madhya Pradesh
165. Tropical Forest Research Institute is situated in
- Dehradun
 - Bangalore
 - Jabalpur
 - New Delhi

166. Who is the Minister of State for Environment, Forest and Climate Change (Independent Charge)
- Shri Prakash Javadekar
 - Shri Anil Madhav Dave
 - Smt. Sushma Swaraj
 - Smt. Maneka Sanjay Gandhi
167. Shri Yogi Adityanath is New Chief Minister of
- Uttarakhand
 - Uttar Pradesh
 - Punjab
 - Goa
168. First GM variety of cotton developed by
- Punjab Agriculture University
 - Tamil Nadu Agriculture University
 - G. B. Pant University of Agriculture and Technology
 - Indian Agriculture Research Institute
169. IFFCO and which bank provide credit cards to the farmers with overdraft facility
- State Bank of India
 - Reserve Bank of India
 - Bank of Baroda
 - ICICI Bank
170. Indian health institute winning first prize for sanitation and hygiene under the Kayakalp awards 2017
- All India Institute of Medical Sciences, New Delhi
 - Sanjay Gandhi Postgraduate Institute of Medical Sciences
 - The Christian Medical College, Vellore
 - Maulana Azad Medical College, New Delhi

171-175: Out of the four alternatives, choose the one which best expresses the meaning of the given

Word

171. Abstruse

- Exiting
- Profound
- Suspended
- Recondite

172. Veracious

- Truthful
- Gluttonous
- Funny
- Venturous

173. Truculent

- a. Juicy
- b. Aggressive
- c. Violent
- d. Uncivilized

174. Supercilious

- a. Trivial
- b. Haughty
- c. Secret
- d. Honest

175. recalcitrant

- a. Fragrant
- b. Revolutionary
- c. Obstinate stubborn
- d. Curative

176-180: In each of the four words given under following four choices, one word is **wrongly spelt.**

Identify the incorrect word

176.

- a. DECENT
- b. DESCENT
- c. DISSENT
- d. DESENT

177.

- a. PHYSICS
- b. PHYSICK
- c. PHYSIQUE
- d. PHYSIC

178.

- a. CITE
- b. SIGT
- c. SIGHT
- d. SITE

179.

- a. AFECT
- b. EFFECT
- c. CASUAL
- d. CAUSAL

- 180.
- a. VAIN
 - b. VEIN
 - c. VANE
 - d. VAIN

181-185: Pick out the most appropriate meaning of the following underlined phrases in each sentence out of four options –

181. You should be fare and square in your dealings
- a. Reasonable
 - b. Honest
 - c. Prudent
 - d. Quick

182. By and by he became expert in dealing customers
- a. Gradually
 - b. Very soon
 - c. Without any efforts
 - d. With great efforts

183. His honor is at stake
- a. Watched by everybody
 - b. Disliked
 - c. Respected
 - d. In danger

184. The whole night he talked at random
- a) Continuously
 - b) Very loudly
 - c) Without any aim
 - d) Honestly

185. The then Vice Chancellor was all in all at Allahabad University
- a. Supreme
 - b. Holding all the administrative posts
 - c. Very resourceful
 - d. Helping to all

186-190: Pick out the most appropriate meaning of the following idiomatic expressions out of four options given in each case

186. To nip in the bud
- a. To pluck a flower bud
 - b. To destroy at an early stage
 - c. To poke a needle to a very soft thing
 - d. To destroy a soft thing

187. To give the cold shoulder
- To treat coldly
 - To treat nicely
 - To treat warmly
 - None of the above
188. To do yeoman's service
- To do social work
 - To do public service
 - To do excellent work
 - To do poor work
189. To cry over spilt milk
- To spend time in useless regret
 - To cry after the event is over
 - To fight over unnecessary things
 - To cry for some loss
190. To make a figure
- To draw a sketch
 - To distinguish oneself
 - To make a statue of mud
 - To make a statue of wood

191-195: Fill in the blank with appropriate preposition

191. Come what may adhere to -----my principles
- With
 - To
 - On
 - Upon
192. Sincere people always abide _____ their friends in all circumstances
- With
 - In
 - By
 - Up
193. They sailed_____ the river.
- In
 - On
 - Down
 - Against
194. Everyone of us will have to atone -----his or her misdeeds.
- Of
 - About
 - With
 - For

195. I waited _____ him for four hours but he did not turn up.
- a. By
 - b. Upon
 - c. For
 - d. Seeing

196-200: Chose the most correct answer from the given choices based on the contents of the passage only-

The memory can be improved. It can be improved vastly and by anyone with normal intelligence. Moreover, the methods by which it can be cultivated are all based on practical common sense. Every experience in life makes an impression through one or more of the senses on the brain or other nerve centers. The problem of memory improvement is to emphasize these impressions and to file them away in such an orderly manner that many will remain intact and stay put. The clearer and neater your mental storehouse, the easier it will be to remember.

196. Memory is something which is
- a. Hereditary
 - b. Rare
 - c. Natural
 - d. Can be improved
197. Every experience in life makes an impression on
- a. The senses
 - b. The brain
 - c. The spinal chord
 - d. Both the brain and the spinal chord
198. Mental clarity and neatness
- a. Improve memory
 - b. Have no effect on memory
 - c. Are impossible to attain
 - d. Result in confusion
199. Memory is best cultivated by methods based on
- a. Magic
 - b. Practical common sense
 - c. Practice
 - d. Hypnotism
200. Improvement in memory can be done
- a. By doing regular exercise
 - b. By writing in a piece of paper and then reading it regularly
 - c. By remembering the events again and again
 - d. By keeping the impressions experienced by senses in orderly manner in mind

DESCRIPTION OF COURSES OFFERED

M.Sc. Forestry

Programme Objective: Master in Forestry programme aims to provide opportunity to the students wishing to pursue professional careers in the management and policy of forest resources and to make themselves aware about the problems related to forest across the span of urban to rural environments. The syllabus draws from coursework in the natural and social sciences and focuses on the complex relationships among the science, management and policy of forest resources. The structure of the curriculum is designed to synthesis of knowledge in multiple disciplinary exposures in the biological and social sciences. The goal is to prepare students to manage forest resources for various public and private values within a complex social, political and ecological environment. These professional opportunities can be private or public sector forest management, corporate or consulting, government conservation of forest resources or education. Students are also expected to improve their capacities as leaders and managers through summer internships, professional skills courses and other opportunities.

Programme structure: The Programme consists of courses and other requirements worth a total of 90 credits. One credit is equivalent to one hour of teaching (lecture or tutorial) or two hours of practical work/field work per week. Each semester consists of 18 to 20 weeks of academic work equivalent to 90 actual teaching days. The programme structure and respective credits are given below as:

Programme Structure	Credit
Core courses	: 54
Foundation courses	: 5
Elective courses	: 5
Synopsis	: 1
Master's thesis	: 17
Master thesis seminar	: 2
Term paper I	: 2
Term paper II	: 2
Study tour	: 2
Total	: 90

Allotment of credits to different courses

FIRST SEMESTER

Course Code	Course	Credit	
		Theory	Practical
Foundation Course			
FMS 101	Elements of Mathematics and Statistics	1	1
FCR 102	Computer Application, Remote Sensing and GIS	1	1
FOF 103	Overview of Forestry	1	-
Core course			
FBS 111	Elements of Biological Science	1	1
FFF 112	Fundamentals of Forest Ecology	2	1
FSC 113	Silviculture – I	2	1
FGS 114	Basic Geology and Soil science	2	1
FMB 115	Forest Mensuration and Biometry	2	1
FHV 116	Forest Health and Vitality	2	1
FTP 117	Term Paper I	2	-
Total credits in first semester: $14^a+8^b+2^c=24$			

SECOND SEMESTER

Course Code	Course	Credit	
		Theory	Practical
Core course			
FPL 211	Forest Policy and Law	2	-
FLM 212	Landscape Approach to Management	2	1
FRU 213	Forest Resource Utilization – I (NTFP)	2	1
FFE 214	Forest Economics	2	1

FFP 215	Forest and People	2	-
FRM 216	Natural Resource Management	2	-
FSC 217	Silviculture–II	2	1
FSN 218	Seed and Nursery Technology	1	1
FTP 219	Term Paper II	2	-
Total credits in first semester: $15^a+5^b+2^c=22$			

THIRD SEMESTER

Course Code	Course	Credit	
		Theory	Practical
Core course			
FRM 311	Resource Survey and Forest Management	2	1
FWD 312	Wildlife and Eco Development	2	1
FRU 313	Forest Resource Utilization – II (Wood)	2	1
FGT 314	Forest Genetics and Tree Improvement	2	1
FFC 315	Forest Certification	2	-
FCC 316	Forest, Society and Climate Change	2	1
FST 317	Study Tour	2	-
Elective		5	
Total credits in first semester: $12^a+5^b+2^d+5^e=24$			

FOURTH SEMESTER

Code	Particulars	Credit
FSY 441	Synopsis	1
FMT 442	Master's thesis	17
FTS 443	Master thesis seminar	2
Total		20

LIST OF ELECTIVE COURSE

Course Code	Elective Course	Credit	
		Theory	Practical
FGB 321	Forest Genetics and Biotechnology	3	2
FRG 322	Remote Sensing and Geographic Information System	2	3
FWH 323	Wildlife and Habitat Management	3	2
FSM 324	Sustainable Forest Management	3	2
FAF 325	Agro forestry	4	1
FFP 326	Forest Pathology	2	3
FFE 327	Forest Entomology	2	3
EIA 328	Environmental Impact Assessment	4	1
FPT 329	Plantation Technology	4	1
PTN 330	Plant Taxonomy	2	3

a: Theory, b: Practical, c: Term paper, d: Study tour, e: Elective paper.

One lecture credit comprises of one hour teaching of the course in a week, while one practical credit comprises of two hours of practical/assignment work in a week

Descriptions of Course Code

The courses of M. Sc. programme are divided into four series:

- ❖ 100-series courses pertain to first semester
- ❖ 200-series courses pertain to second semester
- ❖ 300-series courses pertain to third semester
- ❖ 400-series courses pertain to fourth semester
- ❖ Credit for Synopsis, Master's thesis and Master thesis seminar is designated by code no. 441, 442 and 443 respectively

Course code is formulated as:

- First alphabet shows programme
- Second and third alphabet shows course name
- First digit shows semester number
- Second digit shows course type (0= foundation, 1= core, 2= elective)
- Last digit shows course number

M.Sc. Wood Science & Technology

Programme Objective: The Master in Wood Science and Technology programme aims to provide opportunity to the students wishing to pursue professional careers in science and technology of wood as natural resource and to make themselves aware about the problems related to wood as basic material to manufacture various useful products. The structure of the curriculum is designed to synthesize multi-disciplinary knowledge in the biological and physical science of wood and its industrial application. The syllabus comprises of basics of wood anatomy, chemistry, physics, mechanics as well as processing knowledge and techniques to manufacture solid and composite wood products. The programme is designed to improve the qualitative, quantitative and futuristic aspects of students. Students are also expected to improve their capacities as leaders and managers through study tour, industrial attachment and excursions and other opportunities. Human Resource Management and Marketing and Enterprise Development are also the part of syllabus to build their entrepreneurial skills and aptitude.

Programme structure: The programme consists of courses and other requirements worth a total of 90 credits. One credit is equivalent to one hour of teaching (lecture or tutorial) or two hours of practical work/field work per week. Each semester will consist of 18 to 20 weeks of academic work equivalent to 90 actual teaching days. The programme structure and respective credits are given below as:

Programme Structure	Credits
Core course	: 59
Foundation courses	: 7
Elective courses	: 5
Master’s thesis	: 12
Master thesis seminar	: 2
Study tour	: 2
Industrial Attachment	: 3
Total	: 90

Allotment of credits to different courses

FIRST SEMESTER

Course Code	Course	Credit	
		Theory	Practical
Foundation Course			
WOC 101	Orientation Course (Wood Science, Basic Forestry, Basic Botany)	2	.-
WCA 102	Computer Application	-	1
Core Course			
WWC 111	Wood Chemistry	2	1
WWP 112	Wood Physics - I	2	1
WWP 113	Wood Physics - II	2	
WSM 114	Sawmilling and Saw Doctoring	2	1
WWA 115	Wood Anatomy- I	2	1
WWA 116	Wood Anatomy -II	2	
WEM 117	Timber Entomology and Microbiology	3	1
Total credits in first semester $17^a + 6^b = 23$			

SECOND SEMESTER

Course Code	Course	Credit	
		Theory	Practical
Foundation Course			
WSM 201	Statistics and Research Methodology	1	1
Core Course			
WTM 211	Timber Mechanics -I	2	1
WTM 212	Timber Mechanics -II	2	
WWP 213	Wood Preservation -I	2	1

WAD 214	Composite Wood I - Adhesives	2	1
WPW 215	Composite Wood II - Plywood	2	
WWS 216	Wood Seasoning - I	2	1
WWW217	Wood Working	2	1
Total Credits		15	6
Total credits in second semester $15^a + 6^b = 21$			

THIRD SEMESTER

Course Code	Course	Credit	
		Theory	Practical
Core Course			
WWS 311	Wood Seasoning -II	2	1
WWP 312	Wood Preservation II	2	1
WWF 313	Wood Finishing	2	1
WRW 314	Composite Wood III-Reconstituted Wood	2	1
WLW 315	Composite Wood IV- Laminated Wood	2	
WTE 316	Timber Engineering	2	1
WPD 317	Products Design and Fabrication	2	1
WST 318	Study Tour	2	
WIA 319	Industrial attachment and Report	3	
Total credits in third semester = $14^a + 6^b + 2^c + 3^d = 25$			

FOURTH SEMESTER

Course Code	Course	Credit	
		Theory	Practical
Foundation Course			
WHR 401	Human Resource Management	1	-

WME 402	Marketing and Enterprise Development	1	-
Elective Courses		5	
WFC 421	Forest Certification and Nano-technology	5	-
WFJ 422	Finger Joints for Efficient Wood Utilization	3	2
WVS 423	Vaccum Seasoning Technology	3	2
WMT 441	Master 's thesis	12	
WMS 442	Master thesis seminar	2	
Total credits in fourth semester		$2^a + 5^b + 12^f + 2^g = 21$	

a- Theory, b- Practical, c- Study tour, d- Industrial attachment, e- Elective paper, f- master thesis report, g-seminar . One lecture credit comprises of one hour teaching of the course in a week, while one practical credit comprises of two hours of practical/assignment work in a week

Descriptions of Course Code

The courses of M. Sc. programme are divided into four series:

- ❖ 100-series courses pertain to first semester
- ❖ 200-series courses pertain to second semester
- ❖ 300-series courses pertain to third semester
- ❖ 400-series courses pertain to fourth semester
- ❖ Credit for Master's thesis and Master thesis seminar is designated by code no. 441 by 442 respectively.

Course code is formulated as:

- First alphabet shows programme
- Second and third alphabet shows course name
- First digit shows semester number
- Second digit shows course type (0= foundation, 1= core, 2= elective)
- Last digit shows course number

M.Sc. Environment Management

Programme objectives: The programme aims to provide opportunities to the students to make themselves aware about the problems related to environmental concerns and its management. The programme is designed to provide a holistic and integrated approach of learning comprising of classroom lectures, classroom assignments, practical sessions, interactive seminars, field visits, industrial visits, term papers, divisional attachments and master's thesis writing. The course builds and facilitates understanding of the dynamics of environment especially in the context of ecology, forestry, and climate change. Different types of processes, models, plans and techniques related to environmental processes are described and discussed through class room interaction as well as exposures visits to different ecosystems and institutional/industrial arrangements. The students are expected to get enough exposure for practical solutions to various ecological and environmental problems in the context of today's world.

Programme structure: The programme consists of courses and other requirements worth a total of 89 credits. One credit is equivalent to one hour of teaching (lecture or tutorial) or two hours of practical work/field work per week. Each semester will consist of 18 to 20 weeks of academic work equivalent to 90 actual teaching days. The programme structure and respective credits are given below as:

Programme Structure		Credits
Core courses	:	53
Foundation courses	:	5
Elective courses	:	5
Synopsis	:	1
Master's thesis	:	17
Master thesis seminar	:	2
Term paper I	:	2
Term paper II	:	2
Study tour	:	2
Total	:	89

Allotment of credits to different courses

FIRST SEMESTER

Course Code	Course	Credit	
		Theory	Practical
Foundation Course			
ERG 101	Remote Sensing and Geographical Information System	1	1
Core Course			
EFE 111	Fundamentals of Ecology	3	1
EEA 112	Ecosystem Analysis	3	1
EPB 113	Environment Physics and Biogeochemistry	3	1
ECE 114	Conservation Ecology	3	1
EIA 115	Environment Impact Assessment	3	1
ERE 116	Restoration Ecology	3	1
ETP 117	Term Paper I	2	-
Total credits in first semester		19^a +7^b+ 2^c =28	

SECOND SEMESTER

Course Code	Course	Credit	
		Theory	Practical
Foundation Course			
ESC 201	Environment Statistics and Computer Application	2	1
Core Course			
EFM 211	Forestry for Sustainable Management	3	1
EEM 212	Environment Microbiology	3	1
EGF 213	Global Climate Change and Forest	3	1
EDM 214	Disaster Management	3	1
FFE 214	Forest Economics	2	1

ETM 215	Term Paper II	2	-
Total credits in second semester		$16^a + 6^b + 2^c = 24$	

THIRD SEMESTER

Course Code	Course	Credit	
		Theory	Practical
Core Course			
EPS 311	Environment Policy, Law and Sociology	3	1
EPM 312	Environment Pollution Management	3	1
EFC 313	Forest Certification	2	-
EST 314	Study Tour	2	-
Elective course 5 Credits			
ENM 321	Natural Resource Conservation and Management	4	1
EBM 322	Bio Diversity Monitoring and Management	4	1
EBC 323	Bio Statistics and Computer Application	4	1
ESM 324	Solid Waste Management	4	1
EPC 325	Forest, Society and Climate Change	4	1
ERG 326	Remote sensing and Geographic Information System- Advance and Application in Environment Management	4	1
EIA 328	Environment Impact Assessment	4	1
PTN 330	Plant Taxonomy	2	3
Total credits in first semester		$8^a + 2^b + 5^c + 2^d = 17$	

FOURTH – SEMESTER

Code	Particulars	Credit
ESY 441	Synopsis	1
EMT 442	Master's thesis	17
ETS 443	Master thesis seminar	2
Total		20

a- Theory, b- Practical, c- Term paper, d-Study tour, e- Elective paper. One lecture credit comprises of one hour teaching of the course in a week, while one practical credit comprises of two hours of practical/assignment work in a week

Descriptions of Course Code

The courses of M. Sc. programme are divided into four series:

- ❖ 100-series courses pertain to first semester
- ❖ 200-series courses pertain to second semester
- ❖ 300-series courses pertain to third semester
- ❖ 400-series courses pertain to fourth semester
- ❖ Credit for Synopsis, Master's thesis and Master thesis seminar is designated by code no. 441, 442 and 443 respectively

Course code is formulated as:

- First alphabet shows programme
- Second and third alphabet shows course name
- First digit shows semester number
- Second digit shows course type (0= foundation, 1= core, 2= elective)
- Last digit shows course number

M.Sc. Cellulose & Paper Technology

Programme objectives: The academic programme emphasizes on skills in multidisciplinary and advance education in cellulose and paper sciences. Programme includes courses in modern areas of applied paper science, industrial processing and paper technology. During the university's educational programme at Masters level, the students receive adequate exposure of theoretical and practical aspects of cellulose and paper technology and gain competence in a distinctive set of skills to lead in paper industry. The course is also ideal for

engineers and scientists currently working in the industry who wish to retrain and refresh in a new field. The current demand for pulp and paper experts indicates that this programme will be in high demand in the near future.

Programme structure: The programme consists of courses and other requirements worth a total of 91 credits. One credit is equivalent to one hour of teaching (lecture or tutorial) or two hours of practical work/field work per week. Each semester will consist of 18-20 weeks of academic work equivalent to 90 teaching days. The programme structure and respective credits are given below as:

Programme Structure	Credits
Core courses	: 77
Foundation courses	: 3
Project work	: 8
In Plant training	: 3
Total	: 91

Allotment of credits to different courses

FIRST SEMESTER

S. No.	Course Code	Course	Credit
Foundation course			
1.	PP-111	Basic Forestry	3
Core Course			
2.	PP-112	Paper Industry and Fibrous Raw Materials	4
3.	PP-113	Pulping	4
4.	PP-114	Elements of Mechanical and Electrical Engineering	4
5.	PP-115	Washing of pulp	3
6.	PP-116	Practical	5
Total credits in first semester : 23			

SECOND SEMESTER

S. No	Course code	Course	Credit
Core Course			
1.	PP-121	Refining, Beating and Chemical Additives	4
2.	PP-122	Paper Machines-I	4
3.	PP-123	Paper Machines-II	3
4.	PP-124	Papermaking Chemistry	3
5.	PP-125	Screening and Cleaning	3

6.	PP-126	Practical	5
Total Credits in second semester: 22			

THIRD SEMESTER

S. No	Course code	Course	Credit
Core course			
1.	PP-211	Chemical Recovery	4
2.	PP-212	Bleaching Technology	4
3.	PP-213	Material and Energy Balance	4
4.	PP-214	Specialty Paper	3
5.	PP-215	Secondary Fibre Technology	4
6.	PP-216	Practical	5
Total Credits in third semester: 24			

FOURTH SEMESTER

S. No	Course code	Course	Credit
Core course			
1.	PP-221	Paper Properties	3
2.	PP-222	Environmental Pollution Control	3
3.	PP-223	Project Work	8
4.	PP-224	In Plant Training	3
5.	PP-225	Practical	5
Total Credits in fourth semester: 22			

FEES AND DEPOSITS

The fees is to be paid by a student to the Registrar, FRI Deemed to be University, Dehradun through Bank Draft payable at Dehradun only. A marginal upward revision of the fee is under active consideration of the University.

M.Sc. Courses:

i) **General Seats:**

Tuition fee Rs. 96,000/- payable in four equal installments of Rs.24,000/- each.

ii) **Foreign National Seats:**

Tuition fee 3000 US \$ payable in four equal installments of 750 US \$ each.

First installment fee will be paid at the time of admission and rest fee at the beginning of each semester.

Fee once paid will not be refunded under any circumstances.

Besides course fee they have to pay students club, sports and magazine, Library, Degree, Electricity/water, Hostel fees etc. as per schedule fixed by the Institute. The student who will be allotted hostel have to pay hostel fees as per schedule.

a) Caution Money:

Rs. 3,000/- is payable at the time of admission. The caution money will be refunded on completion of the course after making deductions, if any.

The breakup of fee chargeable from students is as follows:-

Fee Structure of M.Sc. Forestry, Environment Management and Wood Science & Technology Courses of FRI Deemed to be University

1st Semester at the time of admission

Sl. No.	Item	Revised Fee (in Rs.)
1	Admission Fee	4000.00
2	Misc. Fee/Sports / Cultural Fee (at the time of admission)	2500.00
3	Degree Fee (at the time of admission)	200.00
4	Tuition Fee per semester	24000.00
5	Hostel charges per semester Double occupancy	3000.00
6	Electricity, Water & Other maintenance per semester	1200.00
7	Library/Teaching aid per semester	1000.00
8	Caution Money (refundable) one time	3000.00
9	Semester Exam Fee M.Sc./PGD/PMD courses	1000.00
10	Study Tour/Field Excursion Fee	500.00
	Total	40400.00
2nd Semester		
1	Tuition fees per semester	24000.00
2	Hostel charges per semester Double occupancy	3000.00
3	Electricity Water & Other maintenance per semester	1200.00
4	Library/Teaching aid per semester	1000.00
5	Semester Exam Fee M.Sc./PGD/PMD courses	1000.00
6	Study Tour/Field Excursion Fee	500.00
	Total	30700.00
3rd Semester		
1	Tuition fees per semester	24000.00
2	Hostel charges per semester Double occupancy	3000.00
3	Electricity Water & Other maintenance per semester	1200.00
4	Library/Teaching aid per semester	1000.00
5	Semester Exam Fee M.Sc./PGD/PMD courses	1000.00
6	Study Tour/Field Excursion Fee	8000.00
	Total	38200.00

4th Semester		
1	Tuition fees per semester	24000.00
2	Hostel charges per semester Double occupancy	3000.00
3	Electricity Water & Other maintenance per semester	1200.00
4	Library/Teaching aid per semester	1000.00
5	Semester Exam Fee M.Sc./PGD/PMD courses	1500.00
	Total	30700.00

**Fee Structure of M.Sc. Cellulose & Paper Technology Course of
FRI Deemed to be University**

1st Semester at the time of admission

Sl. No.	Item	Revised Fee (in Rs.)
1	Admission Fee	4000.00
2	Misc. Fee/Sports / Cultural Fee (at the time of admission)	2500.00
3	Degree Fee (at the time of admission)	200.00
4	Tuition Fee per semester	24000.00
5	Hostel charges per semester Double occupancy	3000.00
6	Electricity, Water & Other maintenance per semester	1200.00
7	Library/Teaching aid per semester	1000.00
8	Caution Money (refundable) one time	3000.00
9	Semester Exam Fee M.Sc./PGD/PMD courses	1000.00
10	Study Tour/Field Excursion Fee	500.00
	Total	40400.00

2nd Semester

1	Tuition fees per semester	24000.00
2	Hostel charges per semester Double occupancy	3000.00
3	Electricity Water & Other maintenance per semester	1200.00
4	Library/Teaching aid per semester	1000.00
5	Semester Exam Fee M.Sc./PGD/PMD courses	1000.00
6	Study Tour/Field Excursion Fee	500.00
	Total	30700.00

3rd Semester

1	Tuition fees per semester	24000.00
2	Hostel charges per semester Double occupancy	3000.00
3	Electricity Water & Other maintenance per semester	1200.00
4	Library/Teaching aid per semester	1000.00
5	Semester Exam Fee M.Sc./PGD/PMD courses	1000.00
6	Study Tour/Field Excursion Fee	500.00
	Total	30700.00

4th Semester		
1	Tuition fees per semester	24000.00
2	Hostel charges per semester Double occupancy	3000.00
3	Electricity Water & Other maintenance per semester	1200.00
4	Library/Teaching aid per semester	1000.00
5	Semester Exam Fee M.Sc./PGD/PMD courses	1500.00
	Total	30700.00

Fee payable at the time of admission (with double occupancy) Rs. 40,400.00

HOSTEL RULES

Subject the general control of the Academic Council, the following Ordinances and Regulations shall regulate the maintenance of discipline among the students residing in the Hostels. The hostel facility is normally provided all the students subject to availability.

INSTITUTE HOSTELS

1. Residence

- 1.1 Students may be admitted to the Institute Hostel, according to the criteria laid down (vide Appendix – I) for the purpose and in accordance with the accommodation available for residence.
- 1.2 The Institute hostels should be totally vacated for a period of one month preferably in June, every year to enable the administration to attend to the maintenance and other associated matters of the hostels. However, if the presence of certain research students is considered essential then they may be accommodated in one hostel.
- 1.3 Students failing to secure a seat in a hostel are required to make their own arrangement and intimate to the registry address of their residences.

For the purpose of the above Regulation the term “Guardian” shall mean the legal guardian of the student, if one has been appointed or as an alternative a near relative if any, of responsible age provided that the guardian so declared shall sign a declaration of his relationship if any, with the student and shall execute a bond indicating that he shall be responsible for the good behavior of the student.

2. Disciplinary Control

- 2.1 Every student living in a hostel (city campus) will be subject to the disciplinary control of the Registrar/Warden / Dean or any officer appointed by the Director, as the case may be. The Director shall constitute a Disciplinary Committee which will deal with all matter arising out of indiscipline and misconduct in the hostels.
- 2.2 An officer appointed by the Director shall with the cooperation of warden deal with all cases of indiscipline of students.
- 2.3 So long as the students is on the role of the Institute he/she shall be subject to the disciplinary control of the Institute authorities.

3. Rules of Residence

- 3.1 Students residing in the hostel, shall not absent themselves except under condition prescribed under regulation and shall follow the rules laid down under these regulations.
- 3.2 (a) A boy boarder is required to return by 9.00 p.m unless he has taken permission of the concerned warden.
- (b) A girl boarder is required to return by 7.30 p.m (from September to February) and 8.30 p.m (from March to August) unless she has taken permission from the concerned warden.
- 3.3 No boarder shall leave the hostel or remain outside Dehra Dun when the Institute is open and course under which he has taken admission is running except with the written permission of the warden. Permission shall be given by the warden only when the student concerned has obtained leave from Course Coordinator.
- 3.4 Unless the permission of the warden has been received no boarder shall leave hostel except in an emergency. In the later case he shall inform the warden at the earliest and seek his permission.
- 3.5 Students going out on authorized tours excursion, etc, shall inform the warden in writing, stating that they have been permitted by the Course Coordinator/Dean /Director to go on such tours excursion, etc. for a specific period. The permission must be taken before they leave the hostel.

4. Extra – Curricular Activities

- 4.1 Apart from the official organizations approved by the Institute, students residing in the hostel with the permission of the Director organise Societies and Association for healthy promotion of their academic cultural, athletic and social welfare activities.
- 4.2 The Societies and Associations for promoting the academic cultural and other activities of the inmates of the hostel shall be subject to the guidance and control of the warden. On the recommendations of the warden the names of such Associations or Societies along-with their constitutions shall be forwarded to the Registrar as soon as possible for getting recognition by the Academic Council / Board of Management as the case may be.
- 4.3 For any functions in the hostel in respect of the Associations / Societies use of loudspeaker shall not be permitted.
- 4.4 Students shall not hold any meeting or organise any activity in the hostel without the written permission of the warden.
- 4.5 In all function and meeting organised in the Institute student shall maintain due decorum. Such student as are found to create disturbance or to disobey any instruction given to them shall be liable to disciplinary action as per Appendix-2

5 **Accommodation of Guests**

No boarder residing in hostel shall accommodate a guest in his/her room.

6 **Boarder in Women's Hostel**

6.1 Women students residing in the Women's hostel are required to return as per time given at 3.2 clause unless specially permitted by the warden.

6.2 Women Students residing in the Women's hostel shall be allowed to meet the visitors in the visitors room only from 5:00 p.m. to 6:30. p.m.

6.3 No Women student residing in the Women's hostel shall accommodate guests in her room.

7. **Power of Enquiry from Students**

Every Officer/Scientist and other members of the staff have the power of demanding from the students their identity card and such other information as may be desired by him/her. Students failing to provide the correct information shall be liable to disciplinary action as per Appendix-2.

8. **Penalty for Violation**

For any contravention of the Ordinances/Rules relating to discipline misconduct or moral turpitude the guilty students shall be liable to such punishment as is provided for in the rules. Punishment for any omissions or commissions or for breach of discipline or any misconduct shall be awarded in accordance with the rules mentioned in Appendix-2.

1.1 In case of serious misconduct, the name of the students shall be entered in the conduct book maintained with the warden. If the name of the student has been entered thrice in the conduct book for misconduct the student shall be liable to expulsion from the hostel under the order of the Director.

1.2 Students found guilty of misconduct in the Institute are liable to be denied hostel facility.

1.3 For act of indiscipline and or misconduct student may be fined by the warden upto a limit of Rs. 200/-.

9 **Articles Permitted/Prohibited in the room**

9.1 Every boarder shall be provided at least the following articles

1	Takhat/Cot	(one)
2	Mattress	(one)
3	Table	(one)
4	Chair	(one)

9.2 Use of the heater by a boarder is not permitted.

9.3 Students desirous of keeping costly items may do at their own risk.

9.4 Students shall not be permitted to keep even licensed firearms, knives contraband material, etc, in the hostel room under any circumstances whatsoever. A breach of this regulation will lead to the expulsion of the student from the hostel without any enquiry.

9.5 Students shall not be permitted to use any hallucinogenic drug or alcoholic drinks. Even possession of these prohibited articles will render them to severe disciplinary action vide Appendix-2

10 Invitation to guests for inaugural and other functions

10.1 Students of the Institute may invite any person from outside the Institute for inaugural and other functions of the Societies, Associations, and Students function etc. after obtaining prior permission of the warden.

11 Breach of general rules of the Institute

11.1 Students of the Institution shall abide by the general rules of traffic, health, sanitation, messing extra curricular activities and security of property which may be announced by the Institute from time to time. Any breach on their part will render them liable to such disciplinary action as may be taken by the Institute vide Appendix-2. Wearing of helmet is compulsory in the campus.

12 Violation of general Laws of the land

12.1 All cases of indiscipline amounting to violation of the law of the land, shall be reported to the Registrar / Director who may after preliminary enquiry handover the student concerned to the police for instituting case in a Court of Law.

13 Saving Clause

13.1 Any question of discipline not covered by these rules and other rules framed by the Academic Council shall be dealt with by the Director.

Appendix – I

CATEGORY OF BOARDERS / RESIDENTS IN A INSTITUTE HOSTEL AND PERIOD OF THEIR STAY

1. Ph.D. Research Scholars

1.1 Residence facility - 4 years with effect from the date of registration or till submission of thesis, whichever is earlier.

It may be extended for one year in two installments of 6 months each on recommendation of the Supervisor / Head of the Division. However no extension will be given after the submission of thesis.

2. Other bonafide Students

2.1 Only such students who have joined a regular Post – graduate Diploma, Post – graduate Degree & other courses in the Institute shall be eligible for hostel accommodation. The period of allotment though renewable every year, shall not exceed the period of the course to which a student has been admitted.

- 2.2 Students, who have been expelled rusticated or are under suspension for various act (s) of indiscipline during the course of their studentship, shall not be considered for allotment of seats in the hostel.
- 2.3 Unauthorized occupants will be expelled from the hostel by the warden. It is equally the responsibility of the hosteller to see that no guest stays in his room. If they persist in disobeying the orders then they are likely to be subjected to severe disciplinary action including rusticated for a specified period or even expulsion from the Institute.
- 2.4 Defaulters in payment of fees will be liable for cancellation of their allotment in the hostel (vide appendix-2)
- 2.5 It shall be necessary for the boarders of the hostel to fulfill the requirement of attendance in the classes as laid down in the regulations. Boarders are liable to loose their hostel seats if they do not fulfill the attendance requirement as stated above (vide appendix -2)
- 2.6 Not withstanding the period of stay mentioned above at various level, no students of the Institute should be allowed to stay in the hostels of the Institute for a total period exceeding 7 (seven) years. Ordinarily it implies 2 years of post graduate course and maximum of 5 years of Ph.D. Programme but will depend on the duration of the courses run in the Institute.
- 2.7 No students of the Institute shall have the right to stay in the same room in the next academic session. In the beginning of each academic session fresh allotment of accommodation will be made on production of No Dues Certificate.

ATTENDANCE RULES

1. A student has to attend 75% of the lectures delivered and 75% of the practical held separately for each course in each semester.
2. The duration of Industrial attachment/dissertation/thesis works/study tour have to be accounted separately for 75% attendance.
3. The attendance of a student shall be counted from the date of his/her admission, while in the case of promoted student, attendance shall be counted from the date on which respective classes begin.

STUDENTS WELFARE ACTIVITIES

- The Institute provides basic medical facilities to its students.
- Hostel accommodation is available in the Institute. However, the admission to the Institute does not entitle a student to hostel accommodation automatically.
- The facilities for indoor games and common room/Gym are provided to the hostlers.
- Institute library facilities are available to the students.
- For hostel accommodation the students have to apply separately after taking admission in the FRI Deemed to be University.

UNIFORM

Boys

Maroon Blazer with FRI logo on the chest pocket of the Blazer (**In Winters**)
White shirt (Full sleeves)
Tie ; Brick Red with Diagonal pair of white strips and FRI Logo
Trouser : Black
Shoes: Black Leather shoes

Girls

Maroon Blazer with FRI logo on the chest pocket of the Blazer (**In Winters**)
Saree : Cream colour with Red Border of about two inches .
Blouse: Red colour with half sleeves
Shoes: cream colour bellies

ACCIDENTS DURING STUDY PERIOD

The Institute does not accept any liability in case of any injury caused due to any accident during the duration of the course.

DISCIPLINARY ACTION

Non conformity or infringements of the rules and regulations in force shall render a student liable to disciplinary action which may extend to expulsion of the student from the course and forfeiture of the deposits and fee already paid by him/her.

IMPORTANT DATES

Issue of application forms starts on	22nd January, 2018
Last date for issue of application forms by post	26th March, 2018
Last date for issue of application forms from Institute's/ Bank counter at Dehra Dun	30th March, 2018
Last date for receiving completed application forms	06th April, 2018
Date of admission test	20th May, 2018
Date of Ist counseling	06th July, 2018
Date of IInd counseling	09th July, 2018
Date of starting new session	16th July, 2018

The FRI Deemed to be University has the right to change these dates, if required. However, the candidates will be informed in case of a change of date.