



FOREST RESEARCH INSTITUTE DEEMED TO BE UNIVERSITY DEHRADUN

(Under Section 3 of the UGC Act 1956)
(vide Notification No.F.9-25/89-U.3 dated 6-12-1991)

INFORMATION BULLETIN
FOR
ADMISSION TEST
TO
Master of Science Courses
2025

P.O.I.P.E., Kaulagarh Road, Dehradun (Uttarakhand) – 248 195

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AN OVERVIEW

ABOUT 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 re named 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 centers 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 safe guarding of environment and protection of forests and wildlife.

RESEARCH DIVISIONS AND DISCIPLINES IN THE INSTITUTE

- ◆ **BOTANY** (*Systematic Botany, Wood Anatomy,*
- ◆ **CHEMISTRY & BIO-PROSPETING** (*Chemical Extracts from Trees, Forest based Oilseeds, Medicals and Aromatic Plants, Resins and Gums*)
- ◆ **EXTENSION** (*Social Forestry and Extension, Agroforestry*)
- ◆ **FOREST ECOLOGY & CLIMATE CHANGE** (*Forest Productivity, Biodiversity, Environment and Pollution Wasteland, Reclamation, Soil Geology and Mineralogy, Climate Change & Forest Influence*)
- ◆ **FOREST PROTECTION** (*Forest Diseases Forestry Bio-fertilizers Control Measure and Taxonomy*)
- ◆ **FOREST PRODUCTS** (*Timber Mechanics, Wood Seasoning, Wood Preservation, Composite Wood, Wood Working and Finishing, Timber Engineering Cellulose & Paper Technology*)
- ◆ **GENETICS AND TREE IMPROMENT** (*Genetics Improvement Plant Physiology, Tissue Culture, Breeding and Forest Biotechnology*)
- ◆ **SILVICULTURE & FOREST MANAGEMENT** (*Experimental Silviculture, Forest Mensuration, Forest Economics Logging & Seed Technology, ,*)
- ◆ **IT & GIS** (*Bioinformatics Centre, Information Technology Cell and GIS Centre*)
- ◆ **FACILITIES AND SERVICE DIVISION** (*Repair & maintenance*)

THE APPLICATION FORM

The Forest Research Institute Deemed to be University admission test, 2025 will be held at 13 centers in the country on **Sunday, 04th May, 2025** for the following courses:-

Sl.No.	Courses	Duration (Years)	No. of seats	
			Indian	Foreign Nationals
1.	M.Sc. Forestry	2	43	6
2.	M.Sc. Wood Science & Technology	2	43	6
3.	M.Sc. Environment Management	2	43	6
4.	M.Sc. Cellulose & Paper Technology	2	26	4

Application forms can be downloaded from the website www.fridu.edu.in. Candidates have to send the duly filled application form along with the **Demand Draft** of Rs. 1500/- (Rupees One thousand five hundred only) for each course in favour of **Registrar, FRI Deemed to be University payable at Dehradun** and send it to the Registrar, FRI Deemed to be University, P.O. IPE Kaulagarh Road, Dehradun-248 195 on or before the last date.

Or

Application forms will be available from 10th February to 10th March 2025 from the counter of the office of the FRI Deemed to be University/ Union Bank of India, FRI Branch, Dehradun. **(For details of important dates please see the last page of the Information Bulletin, 2025)**. The last date for issue of forms from the office of the FRI Deemed to be University/ Union Bank of India, FRI Branch is 10th March, 2025.

Or

The application form and the 'Information Bulletin' can be obtained by post from the office of Registrar, Forest Research Institute Deemed to be University, Dehra Dun on payment of Rs.1500/- wherever applicable through bank draft drawn in favour of **Registrar, Forest Research Institute Deemed to be University** payable at Dehra Dun. The last date for issue of forms from the office of the FRI Deemed to be University by post is 10th March, 2025.

Date of sale of forms: 10th February, 2025 to 10th March, 2025

The last date of receipt of completed application form: 31st March 2025.

Important: Forms received after the last date will not be accepted in any case

It is advised that the application form be sent by Registered Post/Speed Post/Courier. Postal delay/Lost 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, 2025.

If admit card is not received by 28th April, 2025, 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, Dehradun – 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, Dehradun on working day during working hours.

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	B.Sc. degree with at least one of the subjects namely Botany, Chemistry, Geology, Mathematics, Physics, Zoology or a B.Sc. degree in Agriculture or Forestry.(with minimum 50% aggregate for GEN/OBC/EWS and relaxation of 5% marks for SC/ST category).
2	01 (B)	M.Sc. Wood Science & Technology	B.Sc. degree with Physics, Mathematics and Chemistry (PCM) or B.Sc. degree in Forestry.(with minimum 50% aggregate for GEN/OBC/EWS and relaxation of 5% marks for SC/ST category).
3	01 (C)	M.Sc. Environment Management	B.Sc. degree in any branch of Basic or Applied Sciences or Bachelor's degree in Forestry or Agriculture or BE/B.Tech in Environment Science.(with minimum 50% aggregate for GEN/OBC/EWS and relaxation of 5% marks for SC/ST category).
4	01 (D)	M.Sc. Cellulose & Paper Technology	B.Sc. 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 for GEN/OBC/EWS and relaxation of 5% marks for SC/ST category).

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 CLASS & ECONOMICALLY WEAKER SECTION (OBC & EWS):

The reservation to OBC and EWS 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 M.Sc. Forestry & M.Sc. Environment Management Courses for the candidates with locomotors 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:

Two seats (02) shall be reserved in each M.Sc. course for regular employees of ICFRE and its institutes over and above general seats.

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 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 15th June 2025. 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 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;
- (g) that they have adequate knowledge of English as per requirements of the course.
- (h) Other formalities will be according to SII (Study in india) Guidelines.

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. Prevention of Cast Based Discrimination Committee
- 3. Student's Welfare & Disciplinary Committee
- 4. Anti Ragging Committee
- 5. Student Grievance Redressal Committee
- 6. Anti Drug Cell

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 multi-campus 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 outright.*
- ❖ 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.3000/- for application forms. Similarly, for three courses the fee payable shall be Rs.4500/- 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	01	Jodhpur	07
Chandigarh	02	Jorhat	08
Coimbatore	03	Kolkata	09
Dehradun	04	Lucknow	10
Delhi	05	Ranchi	11
Jabalpur	06	Shimla	12
		Hyderabad	13

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/EWS 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 7th July, 2025 and date of second counseling is 10th July, 2025. Any changes on the dates will be updated on website www.fridu.edu.in**
- ❖ **The candidates will be suitably advised before they come for counseling. The selected Students are directed to present in the counseling hall by 09:00 AM. The name of each candidate will be called three times. In case a candidate is absent in counseling, the seat will be allotted to the next candidate.**

- ❖ 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 and copy to be produced by the candidate at the time of counseling:

1. Migration Certificate, if passed from University (to be submitted not later than 90 days of admission)
 2. High School Certificate/equivalent Certificate and Mark sheet.
 3. Intermediate Certificate/equivalent Certificate and Mark sheet.
 4. B.Sc. degree and Mark sheet of all the three years.
 5. Admission Test Admit Card issued from this office.
 6. Applicants desirous of seeking the benefit of reservation of seats in admission to the various courses programmes offered by the University available to persons belonging to the SC / ST /OBC/ EWS / Persons with Disabilities, etc., must bring original authenticated certificate issued by the SDM/DM/CMO or competent authority, as the case may be, in the prescribed format at the time of admission.
 7. 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 time to time i.e. National Council for Backward Classes (NCBC) ncbc.nic.in
 8. 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 65% 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.13,500/- 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 04th May, 2025.** 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. 1500/- 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. Which of the following process converts solid into gas?
 - a. Vaporization
 - b. Sublimation
 - c. Deposition
 - d. Fusion
2. In which case the matter intermolecular force is stronger?
 - a. Plasma
 - b. Gas
 - c. Liquid
 - d. Solid
3. A system containing two equal and opposite charges separated by a finite distance is called as -----
 - a. Electric flux
 - b. Electric field
 - c. Electric dipole
 - d. None of the above
4. What is the effect on the capacitance of a conductor when an earthed conductor is brought near it?
 - a. Decreases
 - b. Increases
 - c. No effect
 - d. Always decrease
5. Which of the following statement about LED (Light Emitting diode) is correct?
 - a. Fast action
 - b. Low operational voltage
 - c. Short life span
 - d. Both (a) and (b)
6. The device used in satellites to recharge their batteries is -----
 - a. Photodiode
 - b. LED
 - c. Solar cell
 - d. Zener diode

7. Balmer series of the hydrogen emission spectrum lies in which region?
 - a. Ultraviolet region
 - b. Visible region
 - c. Far infrared region
 - d. None of the above

8. Which of the following statement about the Gamma rays is incorrect?
 - a. Gamma rays travel in a vacuum with the speed of light.
 - b. Gamma rays have the least penetration power.
 - c. Gamma rays have the least ionizing power.
 - d. Gamma rays are neutral.

9. What is the ratio of the radii of the two nuclei with the mass number 1 and 64?
 - a. $1/2$
 - b. $1/4$
 - c. $1/64$
 - d. $1/16$

10. The losses occurring in the core of the transformer that produces sound and vibrations is known as -----
 - a. Humming losses
 - b. Hysteresis losses
 - c. Iron losses
 - d. Copper losses

11. An instrument that comprises of only a single convex lens is -----
 - a. Refracting telescope
 - b. Compound telescope
 - c. Simple telescope
 - d. Reflecting telescope

12. Which of the following is not a use of the Polaroid?
 - a. Polaroid sheets present in sunglasses protect our eyes from the glass.
 - b. Polaroid is used in 3D pictures.
 - c. Partially polarized light beams show no variation in intensity.
 - d. It is used in the analysis of the given light beam.

13. The speed of sound in the medium depends on -----
 - a. Wavelength
 - b. Nature
 - c. Direction of propagation
 - d. Intensity

14. Which light is deviated more by a prism?
 - a. Red
 - b. Blue
 - c. Orange
 - d. Yellow

15. Carbon atom in ethene is _____ hybridised.
- sp
 - sp³
 - sp²
 - sp⁴
16. Naturally occurring fats and oils are fatty acid esters of _____.
- Ethylene glycol
 - Propylene glycol
 - Glycerol
 - All the above
17. The stability of carbocation is enhanced by the presence of
- Electron withdrawing substituent
 - Electron donating substituent
 - Both electron-donating and electron-withdrawing substituents
 - None of them
18. The molarity (M) of a solution that contains 1.825 grams of HCl in 2.00 liter of solution is
- 0.250 mol HCl/L
 - 0.050 mol HCl/L
 - 0.025 mol HCl/L
 - 2.50 mol HCl/L
19. When a mixture of alkyl halide and aryl halide gets treated with sodium in dry ether, the product obtained is called:
- alkane
 - alkyl arene
 - both alkane and alkyl arene
 - All the above
20. Trihalogen compounds that are derived from methane are known as:
- Methyl chloride
 - Haloform
 - Ethylene chloride
 - All the above
21. Aromatic compounds present as particulates are
- Benzene
 - Toluene
 - Polycyclic hydrocarbons
 - Nitrobenzene
22. The compound containing one carbon atom common to two rings are called
- Bicyclic compounds
 - Allenes
 - Spiranes
 - None of the above

23. Which of the following molecules is not chiral?
- 1,2,5-trihydroxy pentane
 - 3-hydroxy pentane
 - 1,3-dihydroxy pentane
 - 2- hydroxy pentane
24. The water will boil at 99°C at which one of the following pressure
- 1 atm
 - Slightly lesser than 1atm
 - Slightly more than 1atm
 - 0.1 atm
25. The oxidation number of hydrogen in the ionic metal hydride is
- 1
 - +1
 - 2
 - +2
26. Benzene is treated with carbon monoxide and hydrogen chloride in the presence of anhydrous aluminum chloride to give benzaldehyde. This reaction is known as:
- Gatterman Koch reaction
 - Clemmenson reduction
 - Aldol condensation
 - Canizarro reaction
27. Chlorophyll contains the following metal ion?
- Iron
 - Manganese
 - copper
 - Magnesium
28. Which of the following salts will not change the pH of pure water on dissociation
- KCl
 - AlCl_3
 - Na_2CO_3
 - $\text{Al}_2(\text{SO}_4)_3$
29. It is an igneous, volcanic and basic rock
- Porphyrite
 - Peridotite
 - Lamprophyre
 - Basalt
30. Invertebrate fossils were present during
- Pre-cambrian group
 - Palaeozoic group
 - Mesozoic group
 - Cannozoic group

31. In sedimentary rocks, joints parallel to strike are called
 - a. Dip joint
 - b. Strike joint
 - c. Oblique joint
 - d. Bedding joint

32. It is used in the manufacture of aluminum, aluminum compounds and as an abrasive. Name the mineral
 - a. Gypsum
 - b. Galena
 - c. Bauxite
 - d. Borax

33. When lateral pressure brings change in the rocks, this process is called
 - a. Thermal metamorphism
 - b. Dynamic metamorphism
 - c. Static metamorphism
 - d. local metamorphism

34. Mineral staurolite is present in
 - a. Igneous rocks
 - b. Sedimentary rocks
 - c. Metamorphic rocks
 - d. All the Three

35. Density of crust
 - a. 2.8 to 3.2
 - b. 4
 - c. 6 to 8
 - d. 10

36. Limbs in a fold are known as
 - a. Top
 - b. Sides
 - c. Bottom
 - d. None of the three

37. Submarine earthquakes which causes a considerable change in the level of ocean floor is known as
 - a. Sea caves
 - b. Spouting horn
 - c. Tsunamis
 - d. Chasms

38. A mass of comparatively new rocks surrounded by older rocks is known as
 - a. Inlier
 - b. Outlier
 - c. Outcrop
 - d. All the three

39. A peculiar type of rounded hill resembling in an inverted boat
- Kettle
 - Drumlin
 - Kame
 - Esker
40. Normal class of hexagonal system
- Beryl type
 - Zircon type
 - Galena type
 - None of the three
41. Transfer of pollen grain from anther to stigma of another flower of the same plant is called as:
- Geitonogamy
 - Xenogamy
 - Cleistogamy
 - Chasmogamy
42. Tapetal cells are characterized by:
- Mitotic division
 - Meiotic division
 - Endomitosis
 - Endomitosis as well as endopolyploidy
43. The entry of pollen tube into the ovule through micropyle is called as:
- Porogamy
 - Mesogamy
 - Anisogamy
 - Chalazogamy
44. Cytoplasm of ovum does not contain:
- Golgi complex
 - Centrosome
 - Mitochondria
 - Ribosomes
45. Sertoli cells are found in:
- Upper part of Fallopian tubes
 - Germinal epithelium of seminiferous tubule
 - Between the seminiferous tubule
 - Germinal epithelium of ovary
46. Which of the following viruses is not transferred through semen of an infected male?
- Hepatitis-B virus
 - HI Virus
 - Chikungunya virus
 - Ebola virus

47. Mating of an organism to a double recessive in order to determine whether it is homozygous or heterozygous for a character under consideration is called:
- Reciprocal cross
 - Test cross
 - Dihybrid cross
 - Back cross
48. Which of the following is a non-proteinaceous enzyme?
- Ligase
 - Deoxyribonuclease
 - Lysozyme
 - Ribozyme
49. What are Coacervates?
- Colloidal droplets containing nucleoproteins
 - Primates
 - Chordates
 - Bacteria
50. Which of the following facilitates opening of stomatal aperture?
- Decrease in turgidity of guard cells
 - Radial orientation of cellulose microfibrils in the cell wall of guard cells
 - Longitudinal orientation of cellulose microfibrils in the cell wall of guard cells
 - Contraction of outer wall of guard cells
51. Aerobic respiratory pathway is appropriately termed as:
- Catabolic
 - Parabolic
 - Amphibolic
 - Anabolic
52. Which one of the following is the correct matching of a Vitamin, its nature and its deficiency?
- Vitamin-A; Fat soluble, Night blindness
 - Vitamin-A; Fat soluble, Beri-beri
 - Vitamin-K; Fat soluble, Beri-beri
 - Vitamin-K; Water soluble, Pellagra
53. Lungs are made up of air-filled sacs, the alveoli. They do not collapse even after forceful expiration because of:
- Residual volume
 - Inspiratory volume
 - Tidal volume
 - Expiratory volume
54. There is a species which has been exploited for the production of Hirudin. What is this Hirudin?
- A protein produced by *Hordeum vulgare*, which is rich in lysine
 - A toxic molecule isolated from *Gossypium hirsutum*, which reduces human fertility
 - A protein produced by *Brassica napus*, which prevents blood clotting
 - An antibiotic produced by a genetically engineered bacterium, *Escherichia coli*

55. A rainy day called when rainfall received in 24 hrs
- >2.5 mm
 - >3.0 mm
 - >5.0 mm
 - >1.0 mm
56. Central Institute of Post-Harvest Engineering and Technology (CIPHET) is located at?
- Pune
 - Gurgaon
 - Jabalpur
 - Ludhiana
57. Which of the following design does not follow local control?
- Completely Randomized design
 - Latin Square design
 - Randomized block design
 - None of the above
58. Which one of the following is total root parasite?
- Striga
 - Loranthus
 - Cuscuta
 - Orobanche
59. What is the primary determinant of soil texture?
- Organic matter content
 - Soil pH
 - Particle size distribution
 - Cation exchange capacity
60. Which of the following practices is commonly used in sustainable agriculture to reduce soil erosion?
- Strip-till farming
 - Broadcast seeding
 - Continuous monoculture
 - Overhead irrigation
61. Which vegetable is classified as a brassica crop and is known for its high content of glucosinolates?
- Cauliflower
 - Green beans
 - Radish
 - Zucchini
62. **Polycarpic plant is**
- pear
 - pea
 - agave
 - bamboo

63. Which of the following is a fungal disease commonly affecting cereal crops and characterized by elongated lesions with dark brown or purple centers?
- Late blight
 - Rust
 - Fusarium wilt
 - Septoria leaf spot
64. Which of the following is an example of N₂ fixing organism?
- Frankia
 - all of these
 - rizhobium
 - azospirillum
65. Fruits after ripping become soft. It is due to?
- dissolution of tannins in sap
 - dissolution of middle lamella
 - formation of ethylene gas
 - formation of auxins
66. When a heterozygous offspring is crossed with a homozygous recessive parent, it is called
- Test cross
 - Reciprocal cross
 - Monohybrid cross
 - Dihybrid cross
67. Which of the following is not a micro irrigation system?
- Drip Irrigation
 - Sprinklers
 - Flow drip emitters
 - Surface irrigation
68. Which one of the following fertilizers is known as 'Kisan Khad'?
- Ammonium Sulphate
 - Urea
 - Calcium Ammonium Nitrate
 - None of these
69. Prior to 42nd Amendment to the Constitution of India, Forests as a subject were under
- The State list
 - The Central list
 - The Concurrent list
 - None of the above
70. The tiny particle of the plant cell responsible for Carbon Sequestration is
- Mitochondrion
 - Nucleus
 - Chloroplast
 - Ribosome

71. Maximum carbon foot prints are left behind by
- Hydro power generation
 - Thermal power generation
 - Nuclear power generation
 - All of them
72. In the phrase, “UNESCO’s MAB Program”, MAB stands for
- Medicinal & Aromatic Board
 - Management & Afforestation Board
 - Man and Biosphere
 - Monitoring & Assessment of Biodiversity
73. Geographically largest amongst the following
- Ecosystem
 - Biome
 - Ecotone
 - Habitat
74. Which of the following is not prepared from the wood obtained from forests
- Plywood Board
 - Particle Board
 - Thermacol Board
 - Match Splints
75. Forest Biometry is a synonym to
- Silviculture
 - Forest Mensuration
 - Forest Utilization
 - Forest Working Plan
76. Cutting of seedlings, plants or trees near to the ground level to induce new shoots is
- Coppicing
 - Pollarding
 - Girdling
 - None of the above
77. Botanical name of ‘Flame of the Forest’ is
- Diospyrous melanoxyton
 - Bo mbax ceiba
 - Butea monosperma
 - None of the above
78. Silvicultural Practice of ‘Selection System’ is applied to
- Mixed forests of all age gradations
 - Pure forests of even-aged crops
 - Monoculture Plantations of Exotics
 - None of the above
79. Bamboo is a
- Tree
 - Shrub

- c. Grass
 - d. None of the above
80. 'Forest Conservation Act' is enacted in the year
- a. 1927
 - b. 1952
 - c. 1972
 - d. 1980
81. Who among the following designed the famous structure the Gateway of India?
- a. Alexander Thompson
 - b. George Wittet
 - c. Edward Lyutens
 - d. James Miller
82. Who has the power to summon or prorogue the Parliament and dissolve the Lok Sabha?
- a. The Chief Justice of India
 - b. The Attorney General
 - c. The President
 - d. The Prime Minister
83. What is the minimum quorum required in Lok Sabha to transact any business?
- a. $\frac{1}{2}$
 - b. $\frac{1}{3}$
 - c. $\frac{1}{10}$
 - d. $\frac{1}{3}$
84. Which among the following is a narrow ridge of rock separating two valleys?
- a. Arete
 - b. Seifs
 - c. Canyon
 - d. Horn
85. Which among the following statements about igneous rocks is not correct?
- a. Igneous rocks cooled deep inside the earth are called as intrusive rocks
 - b. Igneous rocks in which the magma flows out and cools on the earth's surface are called as extrusive rocks
 - c. Intrusive rocks have small crystals
 - d. Basalt is an example of extrusive igneous rock
86. **The first symbol of the new era was _____. Its production boomed in the late nineteenth century.**
- a. Cotton
 - b. Wool
 - c. Silver
 - d. Aluminium
87. _____ was the famous Indian freedom fighter who made an important observation about resource conservation – "There is enough for everybody's need and not for anybody's greed".
- a. Mahatma Gandhi

- b. Jawaharlal Nehru
 - c. Subash Chandra Bose
 - d. Dr. B.R.Ambedkar
88. **On the basis of raw materials used, industries are classified as _____**
- a. Public sector and private sector
 - b. Basic industries and consumer industries
 - c. Agro-based and mineral-based industries
 - d. None of the above
89. **The historical Sher-Shah Suri Marg is called National Highway No.1, between Delhi and _____.**
- a. Jalandhar
 - b. Chandigarh
 - c. Ludhiana
 - d. Amritsar
90. **_____ port is the deepest landlocked and well-protected port of India.**
- a. Vishakhapatnam
 - b. Kochi
 - c. Tuticorin
 - d. Paradip
91. **A party that secures at least six per cent of the total votes in an election to the Legislative Assembly of a State and wins at least _____ is recognised as a State party.**
- a. two seats
 - b. three seats
 - c. one seat
 - d. four seats
92. **Which of the following is an example of ‘coming together’ federations?**
- a. Spain
 - b. Belgium
 - c. USA
 - d. All the above.
93. **Indira Sagar Dam located in Madhya Pradesh is built on which of the following river?**
- a. Yamuna
 - b. Chambal
 - c. Narmada
 - d. Krishna
94. **Which of the following countries are divided by the Durand Line?**
- a. Afghanistan and Pakistan
 - b. India and Pakistan
 - c. India and China
 - d. India and Burma

95. Which of the given points is not true about Democracy?
- It improves the quality of decision making
 - It worries about majorities and public opinion
 - It gives room to correct mistakes
 - Decision making is much faster
96. In which year was the Battle of Plassey fought?
- 1757
 - 1767
 - 1769
 - 1784
97. **The Sikh gurus who compiled the Guru Granth Sahib was**
- Nanak
 - Har Rai
 - Arjun
 - Bahadur
98. The resources of ownership are:
- Plantation
 - pasture land
 - ponds
 - All of these
99. Who were the philanthropists?
- People who wanted to stop crime, and work for social upliftment
 - People who worked for social upliftment and charity, donating time and money for the purpose
 - People who wanted a hard-working, orderly labour force
 - People who worried about law and order
100. Which of the following sedimentary minerals is formed as a result of evaporation, especially in arid regions?
- Coal
 - Potash salt
 - Iron ore
 - Sulphur
101. A and B begin a project together. The ratio of efficiency of A to that of B is 5:7. Working together, they can complete a work in 9 days. On the 4th day of the project, B fell sick and did not show up to work. A had to complete the remainder of the project by himself. How many days (rounded up) did the project take to complete?
- 15 days
 - 18 days
 - 21 days
 - 12 days
102. The average of 16 numbers is 57. The average of first 4 numbers is 49 and that of next 9 numbers is 61. The 14th number is 5 less than the 15th number which is half of the 16th number. What is the ratio of 14th and 16th numbers?
- 4:9

- b. 9:4
c. 2:1
d. cannot be determined
103. The graphs of the equation $4x+3y-8=0$ and $2x-3y+2=0$ intersect at $P(\alpha,\beta)$. What is the value of $4\alpha-3\beta$?
- a. 0
b. 1
c. 2
d. 3
104. The sides PQ and PR of ΔPQR are produced to M and N respectively. The bisectors of $\angle MQR$ and $\angle NRQ$ meet at O. If $\angle PQR$ is 64° , then what is $2\angle ROQ$?
- a. 58°
b. 116°
c. 66°
d. cannot be determined
105. The height of a cylinder is 3 cm less than the diameter of its base. If its radius of the base is equal to its height, how much would it cost to paint the whole cylinder @ $\text{₹}3.5/\text{cm}^2$?
- a. ₹198
b. ₹188
c. ₹606
d. ₹594
106. Salaries of A, B, C and D are in the ratio 2:3:5:7. During COVID-19 the company temporarily reduced their salaries by 20 percent, 30 percent, 40 percent and 50 percent respectively. If the salary of B was reduced by ₹13500, what is the revised salary of D?
- a. ₹105000
b. ₹70000
c. ₹52500
d. ₹45000
107. A person sells an article for 18% profit. His cost of production went up by 30% during COVID-19. To avoid incurring a loss, he had to increase his selling price by ₹18 to reach breakeven point. What was the old selling price of the article?
- a. 177
b. 195
c. 118
d. none of the above
108. Salary of Amit is 50% higher than Sumit. Salary of Sumit is how many percent lower than Amit?
- a. 50%
b. 25%
c. 33%
d. 40%
109. A solid ball of gold was melted to form 8 biscuits of 10.1 g each. What was the radius (approx.) of the original gold ball? (specific gravity_{gold}=19.3)
- a. 0.5 cm

- b. 1 cm
c. 1.5 cm
d. 2 cm
110. A bus took 5 hours to reach Dehradun from Delhi. How long would a car going 25% faster take to reach Delhi from Dehradun?
a. 3 hours
b. 3 ½ hours
c. 3 hours 45 minutes
d. 4 hours
111. How many ml of 20% v/V H₂SO₄ and distilled water each are needed to make 1 l solution of 5% v/V H₂SO₄?
a. 150 ml and 850 ml
b. 200 ml and 800 ml
c. 250 ml and 750 ml
d. none of the above
112. Two trains of length 250 m and 400 m are moving towards each other at 108 kmph and 72 kmph respectively. If the current distance between them is half a km, then in how much time will they completely cross each other?
a. 7 seconds
b. 11.5 seconds
c. 23 seconds
d. cannot be determined
113. A, B and C started a business with initial investments of ₹50000, ₹40000 and ₹20000 respectively. After 6 months, C invested 20000 more. At the end of the year A withdrew ₹10000. What will be the ratio of ownership of the business between the three at the end of next year assuming no new capital flow?
a. 5:4:2
b. 1:1:1
c. 9:8:7
d. cannot be determined
114. Manish and Shashank invested ₹30000 and ₹20000 in two different mutual funds. Manish realized a CAGR of 10% over 3 years and while Shashank received a CAGR of 20% over the same time period. What is the combined tax liability the pair given Long Term Capital Gains tax is 10%?
a. ₹2449
b. ₹6442
c. ₹7100
d. ₹2100
115. A rectangular garden has an area of 243 square meters. Its length is 3 times its width. What are the dimensions of the garden?
a. 7 m, 21 m
b. 9 m, 27 m
c. 8 m, 24 m
d. None of the above

116. Sanjay spends 20%, 30% and 25% of his salary on rent, food and travel. He saves the rest. If his rent is ₹15000 per month, what are his annual savings?
- ₹75000
 - ₹150000
 - ₹37500
 - ₹450000
117. A can do half of a work in 9 days. B can do $\frac{1}{3}$ rd of the same work in 6 days. In how many days can they complete the work by working together?
- 11 days
 - 9 days
 - 14 days
 - 7 days
118. Two circles of radius 12 cm are intersecting each other such that each circle is passing through the center of the other. What is the length of the common chord of the circles?
- 6
 - $6\sqrt{3}$
 - $12\sqrt{3}$
 - 12
119. The base of a right prism is an equilateral triangle of side 6 cm. What is the height of the prism given that the volume of glass that was required to build it was 81 cm^3 ?
- 6
 - $3\sqrt{3}$
 - $6\sqrt{3}$
 - 3
120. A train of length 300 meters took 22 seconds to cross a platform. If the train was travelling at a uniform speed of 90 kmph, what is the length of the platform?
- 150 meters
 - 200 meters
 - 250 meters
 - cannot be determined
121. How many spherical balls of 1cm radius can be produced by melting a cube with surface area 96 cm^2 ?
- 15
 - 16
 - 18
 - 17
122. $\sqrt[3]{N}$ lies between 5 and 6. How many values can N take given it is an integer?
- 89
 - 91
 - 107
 - None of the above
123. Raju went shopping and picked up a pair of jeans. The cashier offered him two discount options, A. flat 66% off or B. 40%+40% off. Which discount should he pick to maximize savings?

- a. A
 - b. B
 - c. either
 - d. neither
124. Rita and Gita started running on a 400m circular track together. Rita completes a lap in 75 seconds and sees Gita 45meters behind her. On which lap will Rita cross Gita again?
- a. 6th
 - b. 8th
 - c. 9th
 - d. 10th
125. What is the radius of the largest circle that can be fit inside a square of side 6 cm?
- a. 6
 - b. 3
 - c. $3\sqrt{2}$
 - d. $6\sqrt{2}$
126. How many 2 mm thick coins of diameter 3 cm can be made from a solid cylinder of height 10 cm and radius of the base 1.5 cm?
- a. 30
 - b. 40
 - c. 45
 - d. 50
127. What is the value of $4\sin^2 60^\circ + 4\cos^2 60^\circ + 4\tan^2 45^\circ$?
- a. 4
 - b. 8
 - c. 16
 - d. $4(1+\sqrt{3})$
128. What is the value of $x^3+y^3+3xy(x+y)$ if $(x+y)$ is 3?
- a. 9
 - b. 27
 - c. 81
 - d. cannot be determined
129. In a group of 4 boys and 6 girls, four children are to be selected. In how many different ways can they be selected such that at least one girl should be there?
- a. 219
 - b. 209
 - c. 215
 - d. 210
130. If the mean of a population is greater than its median, the population histogram will be
- a. Skewed to the right
 - b. Skewed to the left
 - c. Symmetrical
 - d. Bell-shaped

131. What is variance of the six observations as 6, 6, 6, 6, 6, 6.
- 6
 - 3
 - 1
 - 0
132. If you add 4 with each observation, the arithmetic mean will be changed by
- 1
 - 2
 - 3
 - 4
133. If you add 81 with each observation, the standard deviation will be changed by
- 1
 - 81
 - 0
 - 9....
134. **A, B and C can complete a piece of work in 14, 6 and 12 days respectively. Working together, they will complete the work in**
- 19/9 days
 - 27 days
 - 28/9 days
 - 25/8 days
135. What will be geometric mean of 3, 9, 27
- 3
 - 9
 - 27
 - 13
136. The mean of following distribution would be
- | | | | | |
|-----------|---|---|----|----|
| Value | 5 | 4 | 10 | 11 |
| Frequency | 5 | 5 | 5 | 5 |
- 7.5
 - 7.25
 - 7.75
 - 5
137. Harmonic mean of 4, 10 and 20 is
- 5
 - 7.75
 - 7.50
 - 7.25
138. In the series, 1, 3, 7, 15, 31, X., 127; what is X?
- 58
 - 63
 - 127
 - 94

139. The probability that an electronic device produced by a company does not function properly is equal to 0.1. If 10 devices are bought, then the probability, to the nearest thousandth, that 7 devices function properly is
- 0.057
 - 0.478
 - 0.001
 - 0
140. Power set of empty set has exactly _____ subset.
- One
 - Two
 - Zero
 - Three
141. What is full form of UPI in banking?
- Uniform Payment Interface
 - Uniform Pay Interest
 - Unified Payment Interface
 - Unified Pay Interest
142. Portuguese were the first European to come to India. When did the Portuguese leave India?
- 1995
 - 1947
 - 1981
 - 1961
143. Who was said to be the last viceroy of India?
- Lord Louis Mountbatten
 - Lord Linlithgow
 - Lord Curzon
 - Lord Irwin
144. Where is the headquarters of the World Economic Forum?
- Geneva
 - Switzerland
 - New York
 - Mumbai
145. Which country won the Men's Hockey World Cup 2023 in Bhubaneswar?
- France
 - Australia
 - Belgium
 - Germany
146. *Hibbertopterus lamsdelli*, which was discovered, belongs to which species?
- Scorpio
 - Turtle
 - Spider
 - Snake

147. What is the currency of Iraq?
a. Iraqi Shilling
b. Iraqi Riyal
c. Iraqi Dinar
d. Iraqi Pound
148. Lake Tanganyika is the world's longest freshwater lake located in?
a. Europe
b. South Asia
c. South America
d. Africa
149. Where is the Keshopur Ramsar Site situated?
a. Haryana
b. Punjab
c. Chhattisgarh
d. Uttarakhand
150. What is the total number of members in BIMSTEC?
a. 7
b. 8
c. 9
d. 10
151. Which of this is not a cryptocurrency?
a. Ethereum
b. Bitcoin
c. Polkadot
d. Matrix
152. Who are the beneficiaries of the PM-VIKAS scheme announced in the Union Budget 2023?
a. Teachers
b. MSMEs
c. Artisans
d. Students
153. Where is City Birds Wildlife Sanctuary?
a. Delhi
b. Mathura
c. Chennai
d. Chandigarh
154. Which mountains serve as the boundary between Europe and Asia?
a. Ural Mountains
b. Andes Mountains
c. Atlas Mountains
d. Alps Mountains

155. Which country has found the radioactive capsule that went missing in January?
a. USA
b. Australia
c. Russia
d. Ukraine
156. When is the 'International Day of Human Fraternity' observed?
a. February 2
b. February 4
c. February 6
d. February 8
157. Yaya Tso' is a bio-diversity site located in which state/UT?
a. Arunachal Pradesh
b. Assam
c. Sikkim
d. Ladakh
158. ISRO commenced the training for crew module recovery for its Gaganyaan Mission, along with which Armed Force?
a. Indian Army
b. Indian Navy
c. Indian Air Force
d. Indian Coast Guard
159. Which strait lies between the Andaman Sea and the South China Sea?
a. The Malacca Strait
b. Bali Strait
c. Clearance Strait
d. Strait of Gibraltar
160. The deficiency of which nutrient causes plants to grow slowly and produce smaller flowers and fruits, with its leaves turning yellowish?
a. Zinc
b. Nitrogen
c. Phosphorous
d. Potassium
161. "The Story of My Deportation" is authored by?
a. Lal Bahadur Shastri
b. Mahatma Gandhi
c. Indira Gandhi
d. Lala Lajpat Rai
162. India signed a MoU with which country for reintroduction of cheetah and wildlife conservation?
a. Australia
b. Namibia
c. Kenya
d. Ghana

163. Gahirmatha Marine Sanctuary is located in which state/UT?
- Odisha
 - Andhra Pradesh
 - Kerala
 - Goa
164. National Initiative for Promoting Up skilling of Nirman workers 'NIPUN' is an initiative of which Union Ministry?
- Ministry of Housing & Urban Affairs
 - Ministry of MSME
 - Ministry of Commerce and Industry
 - Ministry of Women and Child Development
165. 'IUCN STAR Score', is associated with which field?
- Power Rating
 - Species Extinction
 - Air Quality
 - Solid Waste Management
166. Which among the following temperature scale is based upon absolute zero?
- Celsius
 - Fahrenheit
 - Kelvin
 - Rankine
167. What happens to the time period of the simple pendulum if the solid bob is replaced by a hollow sphere of same radius but half the mass?
- time period becomes double
 - time period remains unchanged
 - time period becomes half
 - time period becomes four times
168. Which among the following is the largest aluminium plant of India?
- HINDALCO
 - BALCO
 - NALCO
 - MALCO
169. Which Himalayan Peak is also called Sagar Matha?
- Mount Everest
 - Nanga Parbat
 - Kanchenjunga
 - Dhaulagiri
170. What is the full form of ADSL?
- Automatic Digital Subscriber Line
 - Asymmetric Direct Subscriber Line
 - Automatic Direct Subscriber Line
 - Asymmetric Digital Subscriber Line

Q171-Q174. Select the word that is **most similar** in meaning.

171. Ferret
a. Steal
b. Search
c. Forget
d. Fight
172. Evince
a. To learn
b. To exhibit
c. To resist
d. To become infirm
173. Counterfeit
a. Constant
b. Unknown
c. Biased
d. Fake
174. Admonish
a. Warn
b. Escape
c. Worship
d. Distribute warm

Q175-Q178. Choose the one which can be substituted for the given words.

175. Enclosed in a small closed space.
a. Closophobia
b. Clusterophobia
c. Claustrophobia
d. Liftophobia
176. Loss of memory
a. Ambrosia
b. Amnesia
c. Insomnia
d. Forgetting
177. Code of diplomatic etiquette and precedence
a. Statesmanship
b. Diplomacy
c. Hierachy
d. Protocol
178. An object or portion serving as sample
a. Specification
b. Spectre
c. Spectacle
d. Specimen

Q179- Q182. Choose the word **opposite** in meaning to the given words.

179. Augment
a. Increase
b. Defend
c. Supplement
d. Decrease
180. Amateurish
a. Seasoned
b. Trained
c. Skilled
d. Professional
181. Ignominious
a. Valuable
b. Desirable
c. Honourable
d. Clever
182. Disparage
a. Compliment
b. Convince
c. Comfort
d. Connect

Q183- Q184. Below are given alternative to the **bolded sentence/ part of the sentence** at (a), (b), (c), (d) which may improve the sentence. Choose the correct alternative

183. As soon as she noticed the workmen, she asked them **what they have been doing**.
a. Have done
b. Had been
c. Are doing
d. No improvement
184. He has lost **his nearly all many pets**.
a. All his nearly many pets
b. His many pets nearly all of them
c. Nearly all his many pets
d. No improvement

Q185- Q186. Choose the alternative which best expresses the meaning of the **Idioms/Phrase**.

185. Do not **lose your head** in public
a. Get angry
b. Get a headache
c. Be embarrassed
d. Important

186. Just **keep your wig on**. Everything will be alright
- Hold on to your wig, so it won't fall off
 - Get another hair cut
 - Calm down
 - Take off your wig

Q187- Q191. Read the following passage and answer the questions that follow:

The capitalist system of society does not foster healthy relations among human beings. A few people own all the means of production and others- though nominally few have to sell their labour under conditions imposed upon them. The emphasis of capitalism being on the supreme importance of material wealth the intensity of its appeal is to the acquisitive intensity. It promotes worship of economic power with little regard to the means employed for its acquisition and the end that it serves. By its exploitation of human beings to the limits of endurance its concentration is on the largest profit rather than maximum production.

Thus the division of human family is one on the basis of economic circumstance. All this is injurious to division of human dignity. And when the harrowed poor turn to the founder of religion for succor, they rather offer a subtle defence of the established order. They promise future happiness for their present suffering and conjure up visions of paradise to redress the balance to soothe the suffering and the revolt of the tortured men. The system imposes injustice, the religion justifies it.

187. The passage indicates that the capitalist system is
- Fair
 - Ambitious
 - Prosperous
 - Dehumanising
188. The established order is supported by religion to
- Alleviate the suffering of the poor in the capitalist system
 - Perpetuate the injustice imposed by the capitalist system
 - Balance the suffering of the poor with hopes of future rewards
 - Help the tortured men to seek redress
189. In a capitalist system
- The means justify the ends
 - The ends justify the means
 - The means endorsed by religion are strictly followed
 - Means which lead to exploitation are strictly prohibited
190. Capitalism is injurious to human relations because it divides society into two groups , i.e.
- Working and non- working
 - Exploiters and exploited
 - Religious and irreligious
 - Buyers and sellers
191. In a capitalistic system of society each men wishes
- To acquire maximum wealth
 - To produce maximum wealth
 - To have visions of paradise
 - To soothe the sufferings of other

Q192- Q194. Find the correctly spelt word

192. a. Restorent
b. Restaurent
c. Restarent
d. Restaurant
193. a. Sacrifice
b. Sacrifiесе
c. Secrifiece
d. Secrifice
194. a. Auxelary
b. Auxillary
c. Auxileary
d. Auxeliary

Q195- Q197. In the following questions has been given in **direct/ indirect speech**. Out of the four alternatives suggested select the one. Which best expresses the same sentence in indirect/ direct speech.

195. Suresh asked Prasad whether he had watched the cricket match on television the previous night.
a. Suresh asked Prasad, "Have you watched the cricket match on television last night?"
b. Suresh asked to Prasad, "Did you watch the cricket match on television yesterday night?"
c. Suresh asked to Prasad, "Did you watch the cricket match on television last night?"
d. Suresh asked Prasad, "Did you watch the cricket match on television previous night?"
196. She said, "When I was a child, I wasn't afraid of ghosts."
a. She said that when she was a child she wasn't not afraid of ghosts
b. She said that when she was a child she hadn't been afraid of ghosts
c. She said that when she was a child she wasn't afraid of ghosts
d. She said that when she had been a child she wasn't afraid of ghosts
197. He said to the Interviewer, "Could you please repeat the question?"
a. He requested the interviewer if he could please repeat the question
b. He requested the interviewer to please repeat the question
c. He requested the interviewer to repeat the question
d. He requested the interviewer if he could repeat the question

Q198- Q200. Choose the **most suitable** alternative to make the sentence logical in sense.

198. No one is allowed to..... the trees in the forest.
a. Fall
b. Fell
c. Fallen
d. Falling

199. Indian Government is planning tomany changes in the constitution.
- a. Effect
 - b. Affect
 - c. Effected
 - d. Affected
200. When heto reality, all had been lost.
- a. Woke
 - b. Awake
 - c. Awoke
 - d. Awakening

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	Paper making 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 through Bank Demand Draft in favor of “**Registrar, FRI Deemed to be University**” Dehradun, payable at Dehradun only.

M.Sc. Courses:

i) General Seats:

Tuition fee Rs. 108000/- payable in four equal installments of Rs.27,000/- 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.

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 students 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	5000.00
2	Misc. Fee/Sports / Cultural Fee (at the time of admission)	3000.00
3	Degree Fee (at the time of admission)	500.00
4	Tuition Fee per semester	27000.00
5	Hostel charges per semester Double occupancy	4800.00
6	Electricity, Water & Other maintenance per semester	2000.00
7	Library/Teaching aid per semester	1500.00
8	Caution Money (refundable) one time	3000.00
9	Semester Exam Fee M.Sc./PGD/PMD courses	1500.00
10	Study Tour/Field Excursion Fee	1500.00
	Total	49800.00
2nd Semester		
1	Tuition fees per semester	27000.00
2	Hostel charges per semester Double occupancy	4800.00
3	Electricity Water & Other maintenance per semester	2000.00
4	Library/Teaching aid per semester	1500.00
5	Semester Exam Fee M.Sc./PGD/PMD courses	1500.00
6	Study Tour/Field Excursion Fee	1500.00
	Total	38300.00
3rd Semester		
1	Tuition fees per semester	27000.00
2	Hostel charges per semester Double occupancy	4800.00
3	Electricity Water & Other maintenance per semester	2000.00
4	Library/Teaching aid per semester	1500.00
5	Semester Exam Fee M.Sc./PGD/PMD courses	1500.00
6	Study Tour/Field Excursion Fee	8000.00
7	Misc. fee (Extra curricular/sports/Culture Fee)	3000.00
	Total	47800.00
4th Semester		
1	Tuition fees per semester	27000.00
2	Hostel charges per semester Double occupancy	4800.00
3	Electricity Water & Other maintenance per semester	2000.00
4	Library/Teaching aid per semester	1500.00
5	Semester Exam Fee M.Sc./PGD/PMD courses	2000.00
	Total	37300.00

**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	5000.00
2	Misc. Fee/Sports / Cultural Fee (at the time of admission)	3000.00
3	Degree Fee (at the time of admission)	500.00
4	Tuition Fee per semester	27000.00
5	Hostel charges per semester Double occupancy	4800.00
6	Electricity, Water & Other maintenance per semester	2000.00
7	Library/Teaching aid per semester	1500.00
8	Caution Money (refundable) one time	3000.00
9	Semester Exam Fee M.Sc./PGD/PMD courses	1500.00
10	Study Tour/Field Excursion Fee	1500.00
	Total	49800.00

2nd Semester

1	Tuition fees per semester	27000.00
2	Hostel charges per semester Double occupancy	4800.00
3	Electricity Water & Other maintenance per semester	2000.00
4	Library/Teaching aid per semester	1500.00
5	Semester Exam Fee M.Sc./PGD/PMD courses	1500.00
6	Study Tour/Field Excursion Fee	1500.00
	Total	38300.00

3rd Semester

1	Tuition fees per semester	27000.00
2	Hostel charges per semester Double occupancy	4800.00
3	Electricity Water & Other maintenance per semester	2000.00
4	Library/Teaching aid per semester	1500.00
5	Semester Exam Fee M.Sc./PGD/PMD courses	1500.00
6	Study Tour/Field Excursion Fee	1500.00
	Total	38300.00

4th Semester

1	Tuition fees per semester	27000.00
2	Hostel charges per semester Double occupancy	4800.00
3	Electricity Water & Other maintenance per semester	2000.00
4	Library/Teaching aid per semester	1500.00
5	Semester Exam Fee M.Sc./PGD/PMD courses	2000.00
	Total	37300.00

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 of 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.

- 8.1 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.
- 8.2 Students found guilty of misconduct in the Institute are liable to be denied hostel facility.
- 8.3 For act of indiscipline and or misconduct student may be fined by the warden upto a limit of Rs. 200.00.

9 Articles Permitted/Prohibited in the room

9.1 Every border 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
Trousers : 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	10th February, 2025
Last date for issue of application forms by post	10th March, 2025
Last date for issue of application forms from Institute's/ Bank counter at Dehra Dun	10th March, 2025
Last date for receiving completed application forms	31st March, 2025
Date of Entrance test for admission	04th May, 2025
Date of Ist counseling	07th July, 2025
Date of IInd counseling	10th July, 2025
Date of starting new session	16th July, 2025

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.