**1.What is the academic philosophy and vision of IIT Ropar for undergraduate education?**

1.

The academic philosophy of IIT Ropar is rooted in providing a science-based engineering education that fosters innovation, analytical thinking, and problem-solving skills. The undergraduate curriculum is designed to offer a broad foundation in basic sciences and engineering, followed by specialized knowledge in chosen fields. This approach encourages life-long learning and adaptability to technological advancements.

2.

IIT Ropar envisions developing well-rounded engineers who combine technical expertise with ethical responsibility and societal awareness. Its undergraduate program emphasizes a blend of theoretical knowledge and practical application, ensuring students are prepared for diverse career paths. The institute promotes a multidisciplinary approach to education, fostering creativity and collaboration.

3.

The vision of IIT Ropar for undergraduate education is to create a strong foundation in engineering principles while nurturing research and innovation. The curriculum integrates general engineering courses with specialized training, preparing students for leadership roles in academia, industry, and entrepreneurship. The institute encourages curiosity and critical thinking as core aspects of its academic philosophy.

4.

IIT Ropar's academic philosophy focuses on equipping students with a robust understanding of fundamental sciences and engineering concepts. The undergraduate program aims to develop professional competence while instilling values like integrity, teamwork, and a commitment to addressing societal challenges. The institute’s vision includes fostering a global perspective among its students.

5.

The undergraduate education at IIT Ropar is guided by the philosophy of holistic learning, blending technical knowledge with skills like communication, critical thinking, and leadership. The institute strives to create an environment where students can explore interdisciplinary areas and apply their learning to solve real-world problems. Its vision is to prepare graduates for impactful contributions to society and the global community.

**2. What is the two-letter code for the department of Metallurgical and Materials Engineering?**

1. The two-letter code is "MM."

2. Metallurgical and Materials Engineering is represented by the code "MM."

3. The code for Metallurgical and Materials Engineering is MM.

4. It uses "MM" as its departmental code.

5. MM is the official code for the department of Metallurgical and Materials Engineering.

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**3.What are the different ways students can earn scholarships and financial support at IIT Ropar?**

1.

Students at IIT Ropar can avail themselves of the Institute Merit-cum-Means (MCM) Scholarship, which supports those from economically weaker backgrounds. Additionally, national-level scholarships are available through the National Scholarship Portal, catering to various categories such as SC/ST, OBC, and minority students. The institute also provides merit prizes and certificates to high-performing students.

2.

IIT Ropar offers scholarships like the MCM Scholarship, designed to assist meritorious students with financial constraints. SC/ST students receive special provisions for scholarships and free studentships. Furthermore, students can apply for external scholarships through government schemes or private organizations to supplement their educational expenses.

3.

Students can access financial support through several channels at IIT Ropar, including institute-funded scholarships like Merit-cum-Means and free studentships for SC/ST students. The National Scholarship Portal also provides opportunities for need-based and category-specific funding. Additionally, academic excellence is rewarded with merit prizes and certificates.

4.

At IIT Ropar, scholarships such as the Institute MCM Scholarship are available for students demonstrating both merit and financial need. Special provisions exist for SC/ST students, including full tuition fee waivers. External funding sources, such as government-sponsored scholarships and private foundations, further broaden the support network for students.

5.

IIT Ropar facilitates financial aid through institutional scholarships like the MCM Scholarship and free studentships targeted at underprivileged groups. National schemes, accessible through the National Scholarship Portal, add to the array of financial support options. High-performing students are also recognized with awards and incentives to motivate academic excellence.

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**4. What does the grade "NP" represent, and how is it different from "NF"?**

1. "NP" means Audit Pass, while "NF" denotes Audit Fail for elective courses.

2. The grade "NP" signifies a successfully completed audit course; "NF" indicates failure.

3. "NP" is given for passing an audited course, whereas "NF" reflects failure in the same.

4. Audit Pass is awarded as "NP," contrasting with "NF," which marks an Audit Fail.

5. "NP" shows compliance with audit requirements, unlike "NF," which signals non-completion.

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**5. How are credits calculated for a course in terms of lecture, tutorial, and practical hours?**

1. Credits are calculated as \( C = L + P/2 - T \), where \( L \) is lecture hours, \( P \) is practical hours, and \( T \) is tutorial hours.

2. The formula \( C = L + P/2 \) determines course credits, excluding tutorials in most cases.

3. A course's credit is based on lecture hours plus half the practical hours.

4. Lecture, tutorial, and practical hours contribute to the total credit value using the formula \( C = L + P/2 - T \).

5. Weekly lecture and lab hours determine credit, where labs count as half a lecture hour.

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**6. Provide an example of CGPA calculation from the handbook.**

1. A student with 106 and 15 cumulative credits gets \( CGPA = 106 / 15 = 7.067 \).

2. If earned credits are 19 in one semester and cumulative points are 154, then \( SGPA = 154 / 19 = 8.105 \).

3. With cumulative earned credits of 34 and points of 260, \( CGPA = 260 / 34 = 7.647 \).

4. For credits registered as 24 and points secured as 154, \( SGPA = 154 / 19 = 8.105 \).

5. CGPA is calculated by dividing total points by cumulative credits, e.g., \( 260 / 34 = 7.647 \).

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**7. Until when can a student withdraw from a course, and what grade is awarded upon withdrawal?**

1. Withdrawal is allowed until one week after the Mid Semester Examination, earning a "W" grade.

2. A student can opt for a "W" grade by withdrawing before the mid-semester exam deadline.

3. The "W" grade is awarded for withdrawals made within a week post-midterm exams.

4. Students withdrawing one week after midterms receive a "W" grade on their transcripts.

5. A "W" grade is applicable if withdrawal occurs within the specified time after the midterms.

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**8.How does the credit-based academic system work at IIT Ropar, and what are its key benefits?**

1.

The credit-based system at IIT Ropar assigns credits to courses based on lectures, tutorials, practicals, and preparation hours. Students earn credits by successfully completing courses with passing grades, which contributes to their SGPA and CGPA. This system ensures flexibility, allowing students to progress at a pace that suits their capabilities while maintaining academic standards.

2.

IIT Ropar’s credit-based academic framework emphasizes continuous evaluation through assignments, quizzes, and exams. Each course’s credits are determined by its academic workload, and students must achieve a minimum grade to earn those credits. This approach promotes consistent learning, enabling students to explore subjects of interest while managing their overall workload.

3.

In IIT Ropar’s credit system, courses are categorized as core, electives, and audit, with each assigned specific credits. Students must complete the required credits to graduate, with performance measured through SGPA and CGPA. The system fosters academic independence, enabling students to plan their course load and pursue additional certifications like minors or honors.

4.

The credit-based system at IIT Ropar organizes education into a flexible structure where each course is assigned a credit value reflecting its lecture, tutorial, and practical hours. Students earn these credits by passing the course, and their academic performance is tracked semester-wise. This system encourages a balanced academic pace and accommodates diverse learning needs.

5.

IIT Ropar’s credit system operates by associating credits with each course based on the academic effort required. Students accumulate these credits by meeting passing requirements, with their progress tracked through SGPA and CGPA. This structure supports flexibility, enabling students to explore interdisciplinary areas while meeting core academic goals.

**9. What changes in the entry number of a student after a branch change?**

1. The two-letter programme code changes, but the numeric identifier remains the same.

2. Entry numbers reflect the new branch while maintaining the student’s unique identifier.

3. After a branch change, the unique numeric part of the entry number stays constant.

4.Only the department-specific code changes in the entry number.

5.The programme code section of the entry number updates post-branch change.

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**10. What are the guidelines for offering a minor programme to undergraduate students?**

1.

IIT Ropar uses a letter-based grading system where grades range from 'A' (Outstanding) to 'F' (Fail), each assigned specific grade points. Semester Grade Point Average (SGPA) and Cumulative Grade Point Average (CGPA) track academic performance across semesters. Grades are based on a mix of assignments, quizzes, practicals, and exams to ensure holistic evaluation.

2.

The grading system at IIT Ropar assigns grades from 'A' (10 points) to 'F' (0 points), reflecting a student’s proficiency in a course. Evaluations are continuous, including tests, assignments, and projects. CGPA and SGPA serve as indicators of academic progress, calculated from grades earned in all passed courses.

3.

IIT Ropar employs a credit-based grading system with grades like 'A' (Outstanding) and 'D' (Marginal Pass). Performance is assessed through continuous evaluation methods, including exams, lab work, and assignments. The SGPA for each semester and CGPA over all semesters help measure students' cumulative academic standing.

4.

The grading system at IIT Ropar categorizes performance from 'A' (Outstanding) to 'F' (Fail), with numerical grade points assigned. Student evaluation includes continuous assessments and end-semester exams. SGPA and CGPA calculations provide a structured overview of individual academic performance, emphasizing consistency and effort.

5.

Students at IIT Ropar are graded using a 10-point system, with letter grades such as 'A' (Outstanding) and 'E/F' (Fail). Performance evaluation is comprehensive, considering quizzes, assignments, and practicals. The SGPA and CGPA aggregate these grades to reflect semester-wise and cumulative academic achievements.

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