SKIT/OFFICE/2023/96

Dated: 07.11.2023

# MINUTES OF THE MEETING OF ACADEMIC & MANAGEMENT COUNCIL HELD ON SATURDAY, OCTOBER 28, 2023

The meeting of the Academic & Management Council was held on Saturday, October 28, 2023 at 10:30 a.m. in the Birma Board Room (Vikram Sarabhai Block).

# The following members were present

| 1  | Prof. R. K. Jain (Dean)           | 2.  | Prof. Anil Chaudhary (HOD-IT)             |
|----|-----------------------------------|-----|---|
| 3  | Prof. Mukesh Kumar Gupta (HOD-CS) | 4.  | Prof. D. K. Sharma (HOD-CE)               |
| 5  | Prof. Dheeraj Joshi (HOD-ME)      | 6.  | Prof. Amber Srivastava (HOD-Maths)        |
| 7  | Prof. Mukesh Arora (HOD-EC)       | 8.  | Dr. Sarfaraz Nawaz (HOD-EE)               |
| 9. | Prof. Neha Purohit (HOD-English)  | 10. | Dr. Sharda Soni (HOD-Chem.)               |
| 1  | 1. Prof. Ona Ladiwal (HOD-MS)     |     | 20 12 12 12 12 12 12 12 12 12 12 12 12 12 |
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13. Prof. S. L. Surana (Director Academics)

# The following agenda items were discussed and decisions taken-

Agenda Item 1: Creation of Research & Development (R & D cell) to enhance research and development activities in the Institute.

In order to boost the research activities it has been decided to constitute Research and Development cell at the Institute level and Departmental Research Committee (DRC) at Departmental level. The objectives of the R & D cell and its composition and that of DRC are given in **Appendix I**. It was also decided that Prof. (Dr.) Mukesh Gupta, Head Department of Computer Science & Engineering is nominated as the Convener of R & D Cell for a period of 3 years.

Agenda Item 2: Creation of Consultancy Cell to boost Consultancy activities.

To promote consultancy activities in the Institute it was resolved to create the Consultancy cell. The objectives of the Consultancy Cell are given in <u>Appendix II</u>. It was also decided to nominate Prof. (Dr.) Ashish Nayyar as the Convenor and Prof (Dr.) Ambar Srivastava and Mr Anirudh Mathur as the members of the cell for a period of 3 years.

Agenda Item 3: To discuss and finalize the report of subcommittee constituted under the Coordinator IQAC. The report will be presented by the Coordinator IQAC.

The recommendations of the subcommittee covering all four points was presented by Prof. (Dr) Anil Chaudhary, Coordinator IQAC and was approved. The report containing recommendations are given in <u>Appendix III</u>. It was also resolved that these recommendations be implemented at the earliest to strengthen teaching and learning process.

Agenda Item 4: To discuss and finalize guide lines for preparation of assignment questions for the students.

The detailed guidelines for framing questions to be included in the assignments were presented by the Director (Academics) and approved by the members. These guide lines are given in **Appendix IV**. It was also resolved that each subject expert teaching a particular course will prepare a question bank for assignments based on these guidelines.

Agenda Item 5: To discuss and finalize rules for distribution of consultancy amount.

The matter was discussed and it was decided that after deducting the amount corresponding to the expenditure done by the Institute on travel, hiring of external services for any special activity, purchase of raw materials etc., the rest of the consultancy amount may be disbursed as per details given in **Appendix V**.

Agenda Item 6: To report regarding progress made in the submission of SARs for accreditation of B.Tech. (Civil Engg.) and MBA (DMS) Courses.

The Members were informed by the Director (Academics) that SAR for B.Tech. (Civil Engg.) course was ready last week but it was held back due to extension of admission date in B.Tech. I Year by the Supreme Court. The report will be submitted to NBA in the first week of November 2023 after making any minor change if required due to new admissions.

The SAR for MBA (DMS) Course is progressing well and the faculty members are organizing the supporting documents as per the requirement of NBA. Audit of the supporting documents will be carried out in the first week of November 2023.

Agenda Item 7: To frame and finalize scheme to help students to clear the back papers at the earliest.

It has been observed that a few students fail in some subjects in first and second year of B.Tech courses. Some students even after taking multiple attempts are not able to pass in these subjects. The HODs are required to make a list of such failed students and attach them to the subject teacher concerned who will guide them so that they clear all the papers before they enter VII Semester.

Agenda Item 8: To present internal audit reports for the session 2023-24 of engineering, basic sciences, humanities and management departments.

The Office of Faculty Affairs (OFA) and some senior faculty members conducted the academic audit of the various departments and the same have been forwarded to the respective HOD. These audit reports are given in <u>Appendix VI</u>. The HODs are requested to submit the action taken report along with the impact analysis of the previous audit report to OFA at the earliest.

Agenda Item 9: To reintroduce closing of gates of the institute at 8:00 a.m. to curb the tendency of late coming and early leaving.

It was unanimously decided that the gates of the institute be closed at 8:00 a.m. and the names of the late comers be recorded and should be asked to do self-study in the library till 8:50 am. From 9.00 a.m. onwards they should be permitted to attend their regular classes. Similarly no student should be allowed to leave the Institute before 1:30 p.m. However in case of urgency/emergency the student may be allowed to leave early by obtaining permission in writing from the batch counselor/deputy head/head/chief proctor.

It was also resolved that sufficient publicity be done among students before implementing this code of conduct.

Agenda Item 10: Introduction of midterm marks on ERP system by the faculty to make the system more transparent.

The Dean informed the members that the scheme has already been implemented from the academic session 2023-24. The student and his parents also can see the performance of their ward on ERP.

Agenda Item 11: To consider revised departmental budget plans for the financial year 2023-24.

The Director (Academics) informed the HODs about the approval of their departmental budgets by the Management for the financial year 2023-24. These are given in **Appendix VII**.

# Agenda Item 12: Any other item with the permission of the Chair

- (i) Allocation of budget for B.Tech Projects
  - It was decided that HODs can spend about Rs 1.0 lakh out of departmental budget for B.Tech projects. This also bears the approval of the Management.
- (ii) Regarding Centre of Excellence
  - Our Institute has been granted 3 Centres of Excellence by RTU in IT, EC and CE branches of engineering. The Incharges of these CoEs are requested to prepare Vision, Mission and Objectives and also list the activities to be conducted during this academic session.
- (iii) Regarding preparation of model assignment, model laboratory experiment, model project statement.
  - The HODS were requested to get them prepared by the end of November 23. After these are approved the HODs may discuss these models in their respective departmental meetings for further action.
- (iv) Regarding availing of CL by the faculty
  - The HODs were requested to ensure that for planned casual leave the faculty must hold their lecture classes in advance.
- (v) To encourage the faculty members to obtain Ph.D. qualification at the earliest.
  - The Dean informed the members that UGC may make it essential qualification for faculty members in the near future. A good number of faculty members have already been permitted to pursue for Ph.D. degree during the last two years. They are advised to pursue their research work at a fast pace and earn their Ph.D. degree within a period of two years. Also those who have not yet registered for Ph.D. degree must get themselves enrolled at NIT/SKIT either on full time or part-time basis.

Dr. S. L Surana
Director (Academics)

#### Email to-

- 1. Director
- 2. Registrar
- 3. Principal
- 4. Dean
- 5. Head, Faculty Affairs
- 6. All HODs-EC, EE, CS, IT, ME, CE, MS, I/c B.Tech. I Year, Phy., Chem., Maths, English
- 7. File

Appendix-I

### RESEARCH AND DEVELOPMENT POLICY

In order to enhance the research and development activities in the Institute, it has been decided to establish Research and Development Cell at the Institute level and DRC at the departmental level.

#### Objective of R & D Cell-

- 1. To create awareness regarding opportunities in research among the faculty and students.
- 2. To promote interdisciplinary/multidisciplinary/trans disciplinary research as per guidelines of NEP-2020.
- 3. To encourage the faculty to explore outside world for enhancing their research abilities.
- 4. To frame policy. Prescribe rules & regulations and ensure the compliance of all research quality assurance framework and research code.
- 5. To develop Institutional Research Information System.
- 6. To identify the thrust area of research in each department and form related groups.
- 7. To modernize existing laboratories by creating additional facilities for research in emerging. technologies.
- 8. To monitor research progress and optimize research resource and ensure timely completion of research projects.
- 9. To review and monitor the level of projects at UG and PG level.
- 10. To develop ecosystem for increasing research publications in reputed journals.
- 11. To identify research funding agencies/industries and guide researchers in the preparation and submission of research proposals.
- 12. To identify potential collaborators from industries, research organizations, academic institutions etc. for cooperation to undertake joint research projects.

# Composition of R & D Cell:

The composition of R & D cell shall be as follows:

- 1. Convener (To be nominated by AMC)
- 2. DRC member of each department (Engineering, Sciences, Humanities, DMS)
- 3. SPoC of AICTE/DST etc.
- 4. PG Coordinator (Institute Level)

Duration

: Three Years

Frequency of Meeting: Meeting may be held as and when required but it should be at least one per

semester.

### Departmental Research Committee (DRC)

In addition to R & D Cell, each department (Engineering, Sciences, Humanities, Management) shall have DRC of its own.

#### Objectives of DRC

- 1. To function at the departmental level in the light of objectives of the Institutional R & D Cell.
- 2. To Check and appraise to the institutional R & D Cell about the progress regarding research work done by the faculty /research fellows of the department by examining them from time to time.

### Composition of DRC

The composition of DRC shall be as follows:

- 1. Coordinator (One senior faculty of the department of the rank of Professor/Associate Professor to be nominated by AMC)
- 2. All Professors of the department (Members)
- 3. Two Associate Professor of the department (Members)
- 4. P.G. Coordinator (Member)

Duration

: Three Years

Frequency of Meeting: Meeting may be held as and when required but it should be at least two per semester.

# Appendix-II

### CONSULTANCY POLICY

#### Consultancy Cell

In order to encourage the faculty to undertake consultancy/testing/training assignments, a consultancy cell is created at the Institute level.

#### Objective of Consultancy Cell:

- 1. To frame policy, rules and regulations to ensure compliance of consultancy assignments.
- 2. To encourage faculty and staff to improve their skills and knowledge about standard professional practices for adoption.
- 3. To establish linkage with industries, government organizations and institutes for consultancy/testing/training assignments.

### Composition of Consultancy Cell:

- 1. Convener (To be nominated by AMC)
- 2. Training and Placement Head (Ex-officio member)
- 3. One Member (To be nominated by AMC)

Duration

: Three Years

Frequency of Meeting: Meeting may be held as and when required but it should be at least two per

semester.

# Appendix-III

### IQAC Coordinator Report for Improvement in Teaching & Learning Process-

#### 1. Curb mass copying in the submission of laboratory records

- Provide clear guidelines for completing laboratory records. Clearly communicate the consequences of mass copying, such as reduced grades or other academic penalties.
- Regular evaluation of the file work and if some plagiarism is found then concerned faculty members may warn students about his/her disqualification from file submission process. This must be reflected in his/her final marks. Plagiarism can be detected based on personal evaluation of the student during file checking. Master-slave concept can be incorporated where if multiple files with similar pattern are found then only the first file will be considered original and remaining ones are plagiarized.
- Students need to work in their own workspace. Workspace must be created before starting the classes. For all computer labs, a workspace should be created on the college intranet.
- Every group in the lab must be assigned a unique problem which is not part of the RTU syllabus but directly maps with the lab objectives. Students must be asked to come up with the solution to the problem and present their solution in front of other students. This will improve their understanding as well as communication and presentation skills.
- In particular for CS/IT, all experiments must be rewritten in compliance with the software development life cycle (SDLC). For example, in solving an experiment CS/IT students are required first to write algorithms with emphasis on time and space complexity, then visualization through flowchart/UML diagram, code and then testing.
- No internet services in labs. Mobile data service shouldn't be allowed.

#### 2. Curb mass copying in the submission of assignments

Following are some solutions for the assignment submission problem:

- Assignment shouldn't be in the pattern of university examination pattern. Assignment must be case/story based.
- Giving assignments well in advance with a suitable time frame.
- Using a server-based tool(may be through Open source GIT Repository) for assignment submission. Students will have login credentials, where they can submit assignments once or gradually with the save option.
- Tool must be equipped with features such as on the spot plagiarism generation, disabling other applications in background, no copy paste allowed, etc. for genuine submissions.
- IIT Bombay uses SAFE tool for assessment related activities. In addition, tools such as zerogpt
  can be used to detect AI based plagiarism.
- Assignment case studies should be chapter wise
- Assignment must identified before starting the units/chapters

#### 3. How to improve percentage of students passing examinations without backlogs

- It is very important to have the feedback of students during the semester, not at the end of the semester. If during the running semester, students are getting difficulty in certain topics then extra classes on those topics may be arranged.
- Special lectures covering those topics may also be recorded in the studios available in the institute.
- As per the discussion in point 2 improve the level of question bank and maintain the level of class test and on line quizes as per the RTU exam.
- Effective implementation of the concept of flipped classroom teaching and utilizing the feedback from the flipped classroom for enhancing the learning of weaker students through proper monitoring of those students.
- Encourage teachers to engage students through discussions, group activities, and practical examples to enhance understanding.

### 4. How to improve the level of projects?

- Create a project bank from the feedback of faculty members of the Department, experts from the industry and academicians from reputed institutions.
- Ensure that the students have access to the necessary resources, such as laboratories, software, equipment, and research materials. Lack of resources should not limit the quality of projects.
- Making different project-faculty kits (Project kit, Faculty kit, Student kits) based on different technologies from where students can choose technology and related projects of their choice.
- Regular monitoring of the progress with sincere implementation of penalty provision in case of noncompliance of the work.
- Provision of some benefits (marks or any other) to the students converging their project into prototype or a product.
- Encourage students to explore interdisciplinary projects that combine concepts from different engineering fields, and emphasize on the importance of projects that address real-world challenges or industry needs.
- Project monitoring and version control system should be managed through cloud platforms e.g. Gira, Jenkins, Github, Gitlab

### 5. How to improve the level of lab experiments?

- There must be Lab kit, Faculty cum Experiment kit, and Students kit while defining roles and responsibilities of individuals
- Experiments should be designed that require critical thinking, creativity, and individual input.
   Align lab experiments with real-world applications and case studies.
- Mixing the RTU syllabus with some additional complex experimental problems which are more relevant in context of the current industry requirements, or which are more helpful for students to have a deeper understanding of the subject.
- Providing state of art simulation environment facilities like GPU in HD image processing or machine learning.
- After completing an experiment, analyze the results and identify areas for improvement. Use feedback and lessons learned to refine your experimental design for future iterations.

# Appendix-IV

#### ASSIGNMENT

Assignment is a metric used to assess a student's analytical and problem solving abilities. Every student is assigned with course related tasks & assessments to do self-evaluation of their understanding of the courses.

### **Guidelines for Assignment**

- > There must be at least two assignments for each of the course.
- The assignment should contain a sufficient number of questions (at least 2 questions) corresponding to each course outcome (COs).
- Questions must be in tune with higher Bloom's Taxonomy level (at least L3 level). Assignment of higher level in Engineering courses should be based on solving complex engineering problem and encourage students to complete their assignment by making use of relevant materials available in the library. While framing such assignment the faculty must provide relevant references to the students in advance. For the courses related to Humanities or Basic core engineering, the assignment should be prepared in such a way that students can reflect the knowledge of written communication skill in the form of self-explanatory labeled diagram or flow chart.
- Proper mapping of each question should be done with Blooms level and course outcomes.
- > The assignment should be verified by the course coordinator before being notified to students.
- > The assignment should be notified to students at the beginning of the course. Enough time should be given to students to solve the assignment problems.
- Assignment should be prepared with different set of questions for different group of students (maximum 5 students in a group). Some questions may be common for different sets but at least one question corresponding to each course outcome should be unique in each set of the assignment.
  - The following points should be noted for the unique questions:
  - (a) Wherever possible, give the case study in the assignment.
  - (b) Question should be based on to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.
  - (c) Question should be based on the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
- > The assignment should be evaluated and submitted at least one week before the commencement of Mid Term examination. On the basis of evaluation, the attainment level of course outcomes should be evaluated.
- ➤ If attainment is not found satisfactory, find out which level of Bloom's Taxonomy are not attained by students. Corrective measures should be taken in terms of holding extra classes/tutorial classes etc.

# Appendix-V

### **Disbursement of Consultancy Amount**

The consultancy amount after deducting the expenditure done by the Institute may be disbursed as follows.

Institute's Share - 30%

HOD Share - 10%

A.O. - 2%

Rest of the Amount - 58%

will be disbursed among Principal investigator, Co-investigator (if any), Technician and Lab Attendant. It will be decided by the Director (Academics)/Principal on the recommendations of the HOD/Principal Investigator.

The HOD will ensure that the project/testing report prepared by the Principal Investigator meets all the requirements of the customer and countersign it.