



केरल केंद्रीय विश्वविद्यालय
CENTRAL UNIVERSITY OF KERALA

(संसद के अधिनियम, वर्ष 2009 द्वारा स्थापित / Established under the Act of Parliament in 2009)

Ref: No.CUK/ACA/IIIrd AC/ACM/872/2019-20/

दिनांक/Date: 26/12/2019

केरल केंद्रीय विश्वविद्यालय में 20.12.2019 को सुबह 10.00 बजे आयोजित तीसरी
शैक्षणिक परिषद की 6 वीं बैठक के कार्यवृत्त

Minutes of the 6th Meeting of the IIIrd Academic Council held at
Central University of Kerala at 10.00 a.m. on 20.12.2019

The Vice Chancellor welcomed all the members to the meeting. After the introductory remarks, agenda items were taken up for consideration.

AC3:06:01 Approval of the minutes of the last Academic Council meeting held on 26.06.2019 - Reg:-

The Minutes of the Academic Council Meeting held on 26th June, 2019 was placed before the Academic Council for approval.

Decision:

The Minutes of the Academic Council held on 26.06.2019 was approved.

AC3:06:02 Approval of the Action Taken Report- Reg:-

The Academic Council considered the ATRs of the last Academic Council Meeting held on 26th June 2019 and approved the same with no comments.

AC3:06:03 Thesis Evaluation Fee of Ph.D. -Reg:-

At present there are about 400 Research Scholars in the University and 120 more are likely to join in the ensuing academic year.

The Controller of Examinations has informed that there exists a huge mismatch between fee collected from the Research Scholars towards Ph.D. thesis evaluation and actual expenditure incurred. In view of this, as per the recommendation of Finance Officer it is proposed to enhance the fee from Rs.4000/- to Rs.15,000/-

Decision:

The Academic Council considered the proposal and decided to propose enhancement of fee to Rs.5000,- Further, the Academic Council authorized the Vice Chancellor to study the fees existing in other Central Universities and

to make a comparative statement to take a considered decision requiring further enhancement of Ph.D Evaluation fee for future.

AC3:06:04

Amendment of Ordinance 28 - Reg:-

Draft amended Ordinance No. 28 of Central University of Kerala (Emoluments, Terms & Conditions of Service of the Controller of Examinations) has been placed before the Academic Council for approval

Decision:

The Academic Council approved the amendment proposed in Ordinance No.28.

AC3:06:05

Counting of Past Service for Direct Recruitment and Promotion for Teachers – Reg.

The counting of past services for direct recruitment and promotion was placed as an item in the AC vide item No. 03:3:03(01.06.2018);

Accordingly, the Academic Council while approving the minutes of the committee have pointed out that the experience of State funded research institutions and Industry experience may also be counted by referring the matter back to the Committee. The Committee was asked to submit its report to the next AC.

This was placed in EC (03.08.30) dated 27th June 2018 for approving the above resolutions of the AC. The EC approved the proposal and decided that the experience in Research /Technical institutions of State Governments in equivalent grade /similar duties also may be counted along with national institutions.

The Committee again met to finalize the aspect based on the EC decisions and submitted its report which is attached here. The experience of the State Funded Research Institutions other centrally funded technical institutions and industrial experience shall be counted provided the respective experience should strictly comply with the stipulations mentioned vide minutes dated 14.3.2018 as placed in AC of 1.6.2018.

Decision:

The Academic Council noted that the matter was already approved by Executive Council. The Academic Council further pointed out that the experiences also are to be in tune with clauses 10 'a' to 'g' of the UGC Regulation 2018.

AC3:06:06

Approval of the BoS Minutes and Syllabus – Reg.

The Academic Council has considered the BoS Meeting Minutes and revised Syllabus of the following Departments and decided to approve the same with decisions mainly as follows:

(i) **Genomic Science**

The Academic Council ratified the syllabus. The Department removed the topic Bio-Physics and added System Biology, Bio Statistics, Bio Informatics and also Lab for all the semesters. Academic Council approved the same. The revised syllabus of M.Sc Genomic Science is being implemented from 2019-20 academic year onwards.

(ii) **Geology**

The Academic Council ratified the syllabus. All Core Courses have 04 credits and electives with 03 credits. Syntax format adopted uniformly. The Department combined a few courses thereby making the courses to 04 or 05 from the earlier 08 & 09. Also adopted new eligibility (Introduction of B.Sc. Triple main from the existing B.Sc. Geology (only)). The revised syllabus of M.Sc. Geology is being implemented from 2019 academic year onwards.

(iii) **English and Comparative Literature**

The Academic Council approved the syllabus revision which took place after 02 years. Comprising of 15 core courses and 22 electives. Besides there is an addition of one innovative programme for 120 hours. All are now inclusive of Dalit courses. This is made effective from 2019-20 onwards.

(iv) **Management Studies**

The Academic Council ratified modified syllabus and scheme of Evaluation for MBA (General) which is effective from 2019 onwards.

(v) **BA International Relations**

The Academic Council ratified the revised syllabus of the BA (International Relations) commencing from the academic year 2019-20 with the following decisions;

- i) The core courses of BA International Relations has changed.
- ii) Change of Dissertation from 100 marks to CA (40 marks) and ESA (60 marks) has been approved
- iii) There is no change in credits.
- iv) There is an introduction of new paper titled 'Issues in international Politics' in 6th semester.

(vi) **Tourism Studies**

The Department in order to meet industry requirements has included Audit Courses (NIL credits) (Core course). There shall be 03 field visits in Core courses. Sustainable Tourism Management Course also added besides inclusion of One MOOC Course by replacing Viva-Voce.

4 Elective Courses towards industrial requirements were also made. Total 20 Core Courses, 12 electives, 3 Audit Courses (NIL Credits).

The Academic Council authorized Dr. Mustafa to coordinate with Department of Tourism to make necessary changes in the course on personality and Life Skills. With this change the Academic Council approved the syllabus.

A. Online MOOC Courses proposed by the Board of Studies of Dept. of English and Comparative Literature approved by the Vice-Chancellor as Elective Courses of PG were placed for ratification by the Academic Council;

Sl. No.	Course Code	Course Title	Credits
1	LEC5023	Shakespeare Across Cultures (MOOC)	4 credit
2.	LEC5024	Film Studies (MOOC)	4 credit

B. Swayam MOOC Course on Biomass Characterization – Elective Course of PG.

Prof. (Dr.) Arun Kumar, Head, Dept. of Plant Science has been proposed a PG elective course under SWAYAM platform “Biomass Characterization” as recommended by the BoS held on 04.09.2019. It is 4 credit elective course for Botany, Zoology, EVS BCMB, Biology, Agriculture, chemistry and Physics.

Decision:-

Ratified by the Academic Council.

The Academic Coordinator, Dept. of Kannada has informed that in the Syllabus of MA Kannada prepared by the Consultative Committee, there are no text books prescribed for Drama part of the paper course 4 for Modern Kannada Literature: Drama and Autobiography. This was occurred due to a typographical error from the consultative committee. Accordingly, the syllabus of MA - Kannada (Paper Course 4 - Modern Kannada Literature: Drama and Autobiography) has been rectified and implemented from the academic year 2019-20. This is placed in the Academic Council for ratification.

Decision:-

The Academic Council approved the syllabus of MA Kannada.

There existed very less intake of students for the newly opened Kannada Programme at the initial few months of academic year 2019-2020. Considering the paucity of students of MA Kannada in the Dept. of Kannada, the following modifications to the admission rules approved by the Vice Chancellor as a onetime measure.

- i. Age relaxation up to 35 year
- ii. A relaxation in Marks 45% to General, OBC, EWS and up to 40% in respect of SC &ST category.

The above subjects were placed in Academic Council for ratification.

Decision:-

The Academic council ratified the same subject to the condition that the relaxation is applicable only for 2019 -20 admissions.

AC3:06:10 | Fee Structure for Master of PHCM Programme – Reg.

The Head i/c, Dept. of Public Health and Community Medicine has been informed that the Department does not offer Lab Facility to the MPH students as there are no inhouse Laboratory courses. Therefore, she has requested to exempt the Laboratory Fees from the fee structure of the MPH programme.

The Lab fee for MPH was introduced since its inception. The fee for M.Sc sciences were made applicable to MPHCM also vide Notification dated 19.06.2017. Thereafter, the fee structure for all courses 2018-19 was placed before the AC, FC and EC and accordingly approved the fee structure for PHCM. On this particular aspect of Lab fee, Dean Cominted that the MPH programme is a multi-disciplinary in nature and the Faculty members of the Department may be encouraged to introduce both wet and dry Lab based on courses in the curriculum in consultation with BoS. Based on the above fact and as per clause 14 (d) of statute, the matter were discussed in the Academic Council meeting before changing the current fee structure of MPH programme.

Decision:-

The Academic Council has resolved to create more Labs in future rather than attempting for a fee reduction. The Dean and Head of the Department concerned may submit appropriate proposal for the Lab.

AC3:06:11 | Fee Structure for LLM Programme –Reg.

The LLM students have informed that they are under equipped satellite campus located at Thiruvalla. They do not have the basic college amenities and facilities. The Students of Law neither have a Laboratory nor require a Laboratory. Therefore, the students of LLM, Thiruvalla Campus has requested to waive the following fees.

- a. Lab Fee
- b. Training and Placement Fee
- c. Students amenities Fee
- d. Medical Examination Fee

In this context, the Dept. of Law, Thiruvalla Campus is provided with a Computer Lab with Internet facilities. Also, one medical examination is being conducted yearly by Medical Officer, CUK. Basic amenities are also provided.

Decision:

The Academic Council remarked that the Department is going to be get 10 acres of land soon. As such fee reduction on account of the reported reasons like infrastructure need not be acceded to.

AC3:06:12 Mr. Shijomon (LCL071308) - Extension of Ph.D. Registration

As per University order No. CUK/ACA/PhD/ECL-4/2014/Vol III/2018-19 dated 20.12.2018, based on the recommendations of the Departmental Research Committee, Department of English & Comparative Literature, the PhD registration of **Mr. Shijomon K V** has been extended up to 11.08.2019. During this period he was not entitled for any fellowship. The date of Ph.D Registration of Mr. Shijomon is 12.08.2013.

Now after completing his pre- submission seminar and submission of synopsis (09.08.2019) he has requested to extend his period of research for a further period of six more months to complete the thesis (i.e. from 11.08.2019 to 10.02.2020).

As per UGC regulation 2016, the maximum duration of Ph.D. is six years which are extendable by one year for male and 2 years for female. Extension beyond the above limits will be governed by the relevant clauses as stipulated in the statute/Ordinance of the University.

As per CUK Ordinance 12, clause 2, Extension beyond the above limits will be decided by the Academic Council/Executive Council of the University on the basis of the recommendations of the Research Advisory Committee. As per Clause 30 (iii), the DRC shall be competent to recommend to the Director Research to extend the period of Registration for one more year on the recommendations of the RAC based on satisfactory progress made by the research students.

Accordingly, the Registration of Research of above scholar is proposed for extension by six months subject to the approval of EC.

Decision:-

The Academic Council has approved the same. However, no further extension is permissible beyond 10.02.2020. The Academic Council also authorized the Vice Chancellor to send a Circular to all HoDs to complete the respective thesis within the deadlines.

AC3:06:13AA External Examiners and External Question Paper Setters -
Reg:-

The I/c HoD, Dept. of English and Comparative Literature has informed that at present only professor and Associate Professors are approved as External Examiners or External Question Paper Setters by CUK for PG Examinations. AS most of the External Professors and Associate Professor are involved in various Administrative duties in their respective Universities, it has become very difficult to get the question paper and complete the External evaluation of answer scripts in time.

Therefore, he has proposed that a regular faculty member with a Ph.D. degree and minimum five years of teaching experience and working in an Indian University may be designated as External Examiner and External Question Paper setter of PH Examinations.

Decision:

The Academic Council agreed to invite Assistant Professors' with minimum 08 years' regular service for external evaluation.

AC3:06:14AA	M.Tech in Bioresource Biotechnology and Management-proposal -Reg:-
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The Department of Biotechnology, Government of India is supporting postgraduate teaching programme in multidisciplinary areas of Biotechnology since 1985-86 for imparting quality education in various areas of Biotechnology for generation of critical mass of trained manpower in the country. The Department is already supporting academic programmes in about 61 Universities across the country on diverse area of Biotechnology leading to M.Sc./M.Tech degree. The Department of Biotechnology has recently notified call for proposals to start postgraduate teaching programme in Biotechnology. In this regard, the Hon'ble Vice Chancellor have been constituted a committee to propose suitable academic programme. The Committee has recommended two year M.Tech in Bio resource Biotechnology and Management. The faculty from the School of Biological Sciences, School of Physical Sciences and School of Earth Science Systems, who are interested and with their consent, will be faculty to this multidisciplinary academic programme. The Coordinator of the proposed programme will be Dr. Padmesh .P. Pillai, Associate Professor, Department of Genomic Science.

The programme, if sanctioned will be supported by the Department of Biotechnology initially for a period of 5 years covering both recurring and non-recurring expenditure, without any financial liability to the Central University of Kerala.

Decision:-

The Academic Council approved the matter and recommend the same to be placed before Executive Council.

AC3:06:15AA	Approval of the Application Summery Sheets for recruitment of vacant teaching positions in University -Reg:-
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As per the University Notification No.CUK/RC/Faculty/2019 Dated,5th August,2019, a committee with Prof(Dr.) K P Suresh, Dept of Education, Prof(Dr.) Prathapa Chandra Kurup, Dept of Chemistry, Prof(Dr) Sudha Balakrishnan, Dept of Hindi and Prof (Dr) M N Mohamedunni Alias Musthafa, Dept of Education was constituted by the Vice Chancellor to prepare application Summary sheets for

appointment of teaching faculty against advertisement No.T/1/2019 and T/3/2019 as per UGC Regulations 2018.

After going through the UGC Regulations 2018, the committee has finalized the following formats for recruitment of faculty positions

- a) Format for Shortlisting of candidates for Direct Recruitment of Professor by Screening Committee
- b) Format for Selection Committee Assessment for Direct Recruitment of Professor
- c) Format for Shortlisting of candidates for Direct Recruitment of Associate Professor by Screening Committee
- d) Format for Selection Committee Assessment for Direct Recruitment of Associate Professor
- e) Format for Shortlisting of candidates for Direct Recruitment of Assistant Professor by Screening Committee
- f) Format for selection Committee for Direct Recruitment of Assistant Professor

Decision:

The Academic Council approved the formats as placed before its consideration. However, considering the UGC publication dated 16 September 2019 (giving effect from 14 June 2019) the clause on UGC CARE LIST also to be incorporated in the concerned columns of the format for short listing candidates

Tabled Agenda	Revised BA International Relations Regulations - Reg
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The approved Revised Regulations for BA programme received from the committee constituted were placed before Academic Council for ratification with the following modifications;

Sl No.	Existing Regulation	Revised Regulation	Proposed modifications
1	Title- Regulations for BA programme	Title- Regulations for BA programme	May be renamed as UG Regulations for Central University of Kerala so that it can be made applicable to all UG courses which may be started in future.
2	4.3. Minimum credits required for successful	4.2. mentioned "as decided by BoS"	Minimum credits required for successful completion of the Programme should be specified as

	completion of the Programme is 128		128. It is required for publication of results, grade card printing etc.
3	9.3. Dissertation work – weightage is 40-60	9.3 mentioned “as decided by BoS”	Should be specified as 40:60 since it is required for checking of results
4	-	11. First class with Distinction- for CGPA 8 and above	For only those who have no additional examinations-(to be inserted)
5	-	15.1: Repeat semester with subsequent batch within 4 semester duration	If a student has to repeat I semester he will have to do it along with his III semester which is not possible. May be amended as 8 semesters.
6	-	16.1: Two chances are given for writing additional exam for failed/absent students	One chance should be immediately after publication of the result and the other along with subsequent batch.

Decision:

The Academic Council ratified. Academic Council also appointed a Committee to review BA regulations with the following members;

1	Prof. (Dr.) M.R. Prathapachandra Kurup, Director of Research – Chairman
2	Prof. (Dr.) K.C. Baiju, Dean, School of Economics
3	Dr. Rajendra Pilankatta, Head, Biochemistry and Molecular Biology
4	Dr. Vellikkeel Raghavan, HoD i/c, Dept. of English and Comparative Literature.
5	Dr. Arunkumar, Head, Dept. of Plant Science
6	Dr. Mohan A.K, Head, Dept. of Social Work
7	Dr. Balachandran, Academic Coordinator, MBA (G)
8.	Dr.P.C. Prasannakumar, Associate Professor & Head i/c, Capital Centre - Convener

Items with the permission of the chair:-

1. Vice chancellor has pointed out that a section of the media and few people in social media has raised allegation against the University that, CUK authorities have denied permission to Dept. of English and Comparative Literature to take up Dalit studies as an elective course in the Department though the students are willing to take up the same as their elective. VC has clarified that the selection of elective comes for a particular semester is the decision of Faculty Council of the particular Department and University has not and will not interfere in the matter. The news widely circulated in print and social media are misleading and derogatory inclined to defame the reputation of the University. Vice-Chancellor further told that it is very sad to note that few faculties of the University are also included in this smear campaign. During the discussion, HoD (i/c) Dept. of English has pointed out that the decision regarding allowing the elective courses and other schedules were discussed and approved by the Faculty Council. Moreover there are several units and Texts on Dalit Literature were included in the Syllabus of MA Course of the Department and the allegation raised by few is unfounded and misleading. He urged the Academic Council to pass resolution to condemn this and to issue a press release explaining facts to the press for wide circulation. Several members supported the opinion of HoD (i/c). As such Academic Council unanimously adopted the resolution as follows.

“ The Academic Council of Central University of Kerala unanimously condemn the smear campaign against the University alleging that upper caste lobby of the University has denied permission to the Dept. of English and Comparative Literature to run the elective course on Dalit Studies in the University, ~~with~~^{by} the intention of maligning the reputation of the University when University has no role in the decision of the Faculty Council and the Faculty Council of the Department of English has not decided against Dalit Studies and included various units on Dalit Studies and incorporated several texts pertaining to Dalit Literature in the Syllabus, thereby the Dalit Literature becoming mandatory study for all students’. The Academic Council further resolved to issue a detailed press note depicting the reality for wider coverage and called up on the academic community to desist from any such smear campaign defaming the reputation of the institution.

2. With the permission of the Chairman, Dr. A Radhakrishnan Nair, Registrar has pointed out that the term of Office of Vice-Chancellor has completed as on 07.08.2019 and he is on extension as per MHRD orders till a new Vice-Chancellor is appointed. He has further informed that since the Vice-Chancellor may demit the Office as and when new Vice-Chancellor comes and before that next Academic Council meeting may not happens during the tenure of present VC. Hence, he requested members that it is an opportunity

to a acknowledge the yeoman services rendered by Vice-Chancellor to the University especially in conducting Academic Council meeting in regular intervals and leading the University to great glory. Subsequently the Academic Council members has highlighted the contribution of the Prof. (Dr.) G Gopa kumar, Vice-Chancellor to developing the CU Kerala in to a pioneer institution in the Country. His academic excellence and administrative dexterity has helped the University to move in right direction both academically and in developing infrastructure. His simplicity and discipline is a role model to other academicians in the University. All the Academic Council members placed on record their appreciation of Prof. (Dr.) G Gopa kumar for his tremendous contributions to developing Central University of Kerala to greater heights and wished him and family all the very best in his future endeavors.

The meeting ended with the vote of thanks from and to the Chair at 1.00 p.m.


REGISTRAR

14/11

MBG5203 OPERATIONS RESEARCH

Course Code	MBG5203	Semester	II
Course Title	OPERATIONS RESEARCH		
Credits	3	Type	Core

This is a practice-oriented, aptitude-focused, problem-solving, and employability-based course.

Course Description

The course will expose students to various scientific tools and techniques with the aid of software changes in the operations of a business.

Course Outcome

By the end of the course, students will obtain the following course/learning outcome:

Knowledge gained:

- Understand the development of Operations Research and Linear Programming.
- Acquire know-how on Dynamic Programming, Capital Budgeting, and Game Theory.

Skills Gained:

- Learn various analytical algorithms and Project Evaluation Techniques.
- Get introduced to Queuing theory, Simulation, and Replacement Analysis of an asset.

Competency Gained:

- Examine the operational activities of an organization with the help of various models.

Course Structure

Module -I:

Stages of Development of Operations Research, Applications of Operations Research, Limitations of Operations, Introduction to Linear Programming, Graphical Method, Simple Method, Duality.

Module -II:

Transportation Problem, Assignment Problem, Inventory Control – Introduction to Inventory Management, Basic Deterministic Models, Purchase Models, Manufacturing Models without Shortages and with Shortages.

Module -III:

Shortest Path Problem, Floyd's Algorithm, Minimum Spanning Tree Problem, CPM/PERT, Crashing of a Project network. 24

Module -IV:

Dynamic Programming, Capital Budgeting Problem, Shortest Path Problem, Reliability Problem, Optimal subdividing problems. Game Theory: Two Person Zero-sum Games, Graphical Solution of $(2 \times n)$ and $(m \times 2)$ Games.

Module -V

Introduction to Queuing Theory, Basic Waiting Line Models: $(M/M/1):(GD/\alpha/\alpha)$, $(M/M/1):(GD/N/\alpha)$, $(M/M/C):(GD/\alpha/\alpha)$, $(M/M/C):(GD/N/\alpha)$, Introduction to queuing system simulation – Introduction to Basic Replacement Analysis: Economic Life of an Asset.

Testing & Evaluation (if any)

- Assignments
- Case analysis/ Problems
- Seminar/Project
- Discussions/ Group activity
- Internal Tests

References

1. Hamdy A. Taha, OPERATIONS RESEARCH – AN INTRODUCTION, Prentice Hall of India, New Delhi, 2004.
2. Frank S. Budrick, Dennis McLeavy & Richard Mojena, PRINCIPLES OF OPERATIONS RESEARCH FOR MANAGEMENT; II Ed., Richard D. Irwin Inc., 1988.
3. Hillier and Hillier, Introduction to Management Science, McGraw Hill International, New York, 2005. (2nd Edition)
4. Wagner, Harvey M. Principles of Operations Research, Prentice Hall of India, New Delhi, 2004. (2nd Edition)
5. KantiSwarup, et al, Operations Research, Sultan Chand and Sons, New Delhi.