



ST. ALOYSIUS' COLLEGE

AUTONOMOUS
JABALPUR- 482001
MADHYA PRADESH, INDIA

CRITERION-1



CURRICULAR ASPECTS

Key Indicator – 1.3

Curriculum Enrichment

Metric No.: 1.3.3

**Percentage of programmes that have components of
Field projects / Research projects / Internships during
the last five years.**

Document Name

**Course Structure of Programmes having element of
Field projects / Research projects / Internships
2019-20**



ST. ALOYSIUS' COLLEGE

(AUTONOMOUS)

1, Ahilya Bai Marg, Sadar, Cantt., Jabalpur - 482 001 (M.P.), India

College with Potential for Excellence by UGC

DST FIST SUPPORTED & Star College Scheme by DBT

Phone: 0761-2620738, 2624631, Fax: 0761-2629655

Email: principal@staloyuscollege.ac.in, staloyuscollege1951@gmail.com, Website: www.staloyuscollege.ac.in



2019-20

Programme and Course structures of Programme having **Components of Field Project/ Research Projects /Internships** duly Approved by Respective Board of Studies, Approved by Academic council duly signed by the chairman of Academic Council.

1. Bachelor of Arts
2. Bachelor of Science
3. Bachelor of Commerce
4. Bachelor of Commerce (Honours)
5. Bachelor of Computer Application
6. Bachelor of Business Administration
7. Master of Arts in Economics
8. Master of Arts in Political science
9. Master of Science in Physics
10. Master of Science in Microbiology
11. Master of Science in Zoology
12. Master of Science in Chemistry
13. Master of Science in Computer Science
14. Masters of Science in Biotechnology
15. Master of Commerce
16. Doctor of Philosophy (PhD) in Physics
17. Doctor of Philosophy (PhD) in Chemistry

PRINCIPAL
St. Aloysius College (Autonomous)
JABALPUR- 482001 (M.P.)
INDIA

Chairman

Academic Council

St. Aloysius' College (Autonomous), Jabalpur

UNDERGRADUATE PROGRAMMES



BACHELOR OF ARTS



SUBJECT CODES - III YEAR (2019-20)

BA			SUBJECT CODES			THEORY MARKS		CCE MARKS		PRACTICAL MARKS	
			TH (1)	CCE(2)	PR(3)	MAX	MIN	MAX	MIN	MAX	MIN
Foundation Course (Compulsory)	1	Hindi Language and Moral Values-I	113011	113032		30	10	15	5		
	2	English Language-II	113021			30	10				
	3	Basics of Computer & Information Technology-III	113031			25	8				
Economics	4	Development and Environmental Economics-I	113041	113052		40	13	20	7		
	5	Statistics-II	113051			40	13				
Political Science	6	Indian Foreign Policy-I	113061	113072		40	13	20	7		
	7	Public Administration-II	113071			40	13				
English Literature	8	Contemporary Literature-I	113081	113092		40	13	20	7		
	9	Indian Writing in English-II	113091			40	13				
Functional English	10	Writing Skills-I	113101	113112	113113	40	13	20	7	50	17
	11	Conversational Skills-II	113111			40	13				
History	12	History of India from 1740 A.D. to 1857 A.D.-I	113121	113132		40	13	20	7		
	13	History of India from 1858 A.D. to 1950 A.D.-II	113131			40	13				
Computer Application	14	Web Technology using ASP.NET-I	113141	113152	113153	40	13	20	7	50	17
	15	Cyber Security and Software Engineering-II	113151			40	13				
Hindi Literature	16	Prayojanmoolak Hindi-I	113161	113172		40	13	20	7		
	17	Hindi Natak, Nibandh Tatha Sphut Gadya Vidhayen Evam Bundeli Bhasha-II	113171			40	13				
Functional Hindi	18	Prasaran evam Udhyaamita ke sidhhant-I	113181	113192		40	13	20	7		
	19	Computer Aur Hindi-II	113191			40	13				
Project Work (CCE)											



BACHELOR OF SCIENCE



BACHELOR OF COMMERCE



SUBJECT CODES - III YEAR (2019-20)											
BCOM			SUBJECT CODES			THEORY MARKS		CCE MARKS		PRACTICAL MARKS	
			TH (1)	CCE(2)	PR(3)	MAX	MIN	MAX	MIN	MAX	MIN
Foundation Course (Compulsory)	1	Hindi Language and Moral Values-I	313011	313032		30	10	15	5		
	2	English Language-II	313021			30	10				
	3	Basics of Computer & Information Technology-III	313031			25	8				
Accounting	4	Income Tax Law and Practice-I	313041	313052		40	13	20	7		
	5	Goods and Services Tax and Custom Duty-II	313051			40	13				
Business Management	6	Auditing-I	313061	313072		40	13	20	7		
	7	Management Accounting-II	313071			40	13				
Computer Application	8	Webpage Designing using PHP-I	313081	313092	313093	40	13	20	7	50	17
	9	Cyber Security and Software Engineering-II	313091			40	13				
Tax Procedure	10	Various Central, Provincial Taxes and Local Taxes-I	313101	313112	313113	40	13	20	7	50	17
	11	Income Tax Planning and Management-II	313111			40	13				
Applied Economics	FINANCE GROUP										
	12	Public Finance-I	313121	313132		40	13	20	7		
	13	Financial Management-II	313131			40	13				
	MARKETING GROUP										
	14	Principles of Marketing-I	313141	313152		40	13	20	7		
15	International Marketing-II	313151			40	13					
Project Work (CCE)											

VIRTUS

IN

ARDUO



**BACHELOR OF
COMMERCE
(HONOURS)**

VIRTUS

IN

ARDUO

SUBJECT CODES - III YEAR (2019-20)											
BCOM [HONOURS]			SUBJECT CODES			MAX	MIN	CCE MARKS		PRACTICAL MARKS	
			TH (1)	CCE(2)	PR(3)			MAX	MIN	MAX	MIN
Foundation Course (Compulsory)	1	Hindi Language and Moral Values-I	323011	323032		30	10	15	5		
	2	English Language-II	323021			30	10				
	3	Basics of Computer & Information Technology-III	323031			25	8				
Accounting	4	Management & Cost Accounting-I	323041	323052		40	13	20	7		
	5	Income Tax Law & Practice-II	323051			40	13				
Management	6	Human Resource Management-I	323061	323072		40	13	20	7		
	7	Research Methodology-II	323071			40	13				
Applied Economics	8	Banking Law & Practices-I	323081	323092		40	13	20	7		
	9	Goods and Services Tax and Custom Duty-II	323091			40	13				
	10	Project and Viva			323103					50	17

VIRTUS

IN

ARDUO



**BACHELOR OF
COMPUTER APPLICATION**

SUBJECT CODES - III YEAR (2019-20)

BCA		SUBJECT CODES			THEORY MARKS		CCE MARKS		PRACTICAL MARKS	
		TH (1)	CCE(2)	PR(3)	MAX	MIN	MAX	MIN	MAX	MIN
1	Hindi Language and Moral Values-I	713011			30	10				
2	English Language-II	713021	713032		30	10	15	5		
3	Basics of Computer & Information Technology-III	713031			25	8				
4	Object Oriented Programming using Java-I	713041	713042		40	13	10	3		
5	Computer Networks-II	713051	713052		40	13	10	3		
6	Web Programming-III	713061	713062		40	13	10	3		
7	Management Information System-IV	713071	713072		40	13	10	3		
8	Computer Graphics and Multimedia-V	713081	713082		40	13	10	3		
9	Cloud Computing-VI	713091	713092		40	13	10	3		
10	Project Work			713103					50	17



BACHELOR OF BUSINESS ADMINISTRATION



SUBJECT CODES - III YEAR (2019-20)								
BBA		SUBJECT CODES			THEORY MARKS		CIA MARKS	
		TH (1)	CCE(2)	PR(3)	MAX	MIN	MAX	MIN
1	Entrepreneurial Development-I	613011	613012		40	16	10	4
2	Management Information System-II	613021	613022		40	16	10	4
3	Business Environment-III	613031	613032		40	16	10	4
4	Business Laws-IV	613041	613042		40	16	10	4
Elective								
5	Marketing							
5.1	Consumer Behaviour-I	613051	613052		40	16	10	4
5.2	Advertising Management and Sales Promotion-II	613061	613062		40	16	10	4
6	Finance							
6.1	Working Capital Management-I	613071	613072		40	16	10	4
6.2	Corporate Taxation-II	613081	613082		40	16	10	4
7	HUMAN RESOURCE							
7.1	Human Resources Development-I	613091	613092		40	16	10	4
7.2	Wages and Salary Administration-II	613101	613102		40	16	10	4
8	Project Work (CCE)							

The crest of the University of Toronto, featuring a shield divided into four quadrants by a red cross. The top-left quadrant contains a golden lamp of knowledge. The top-right quadrant contains a red maple leaf. The bottom-left quadrant contains an open book. The bottom-right quadrant contains a red maple leaf. A red banner at the bottom of the shield contains the Latin motto "VIRTUS IN ARDUO".

POST GRADUATE PROGRAMMES

VIRTUS

IN

ARDUO

The crest of the University of Toronto is a shield divided into four quadrants by a red cross. The top-left quadrant contains a golden lamp of knowledge. The top-right quadrant contains a red eagle with wings spread. The bottom-left quadrant contains an open book. The bottom-right quadrant contains a red maple leaf. The shield is set against a yellow background.

MASTER OF ARTS

VIRTUS

IN

ARDUO

MA IV SEM -POLITICAL SCIENCE

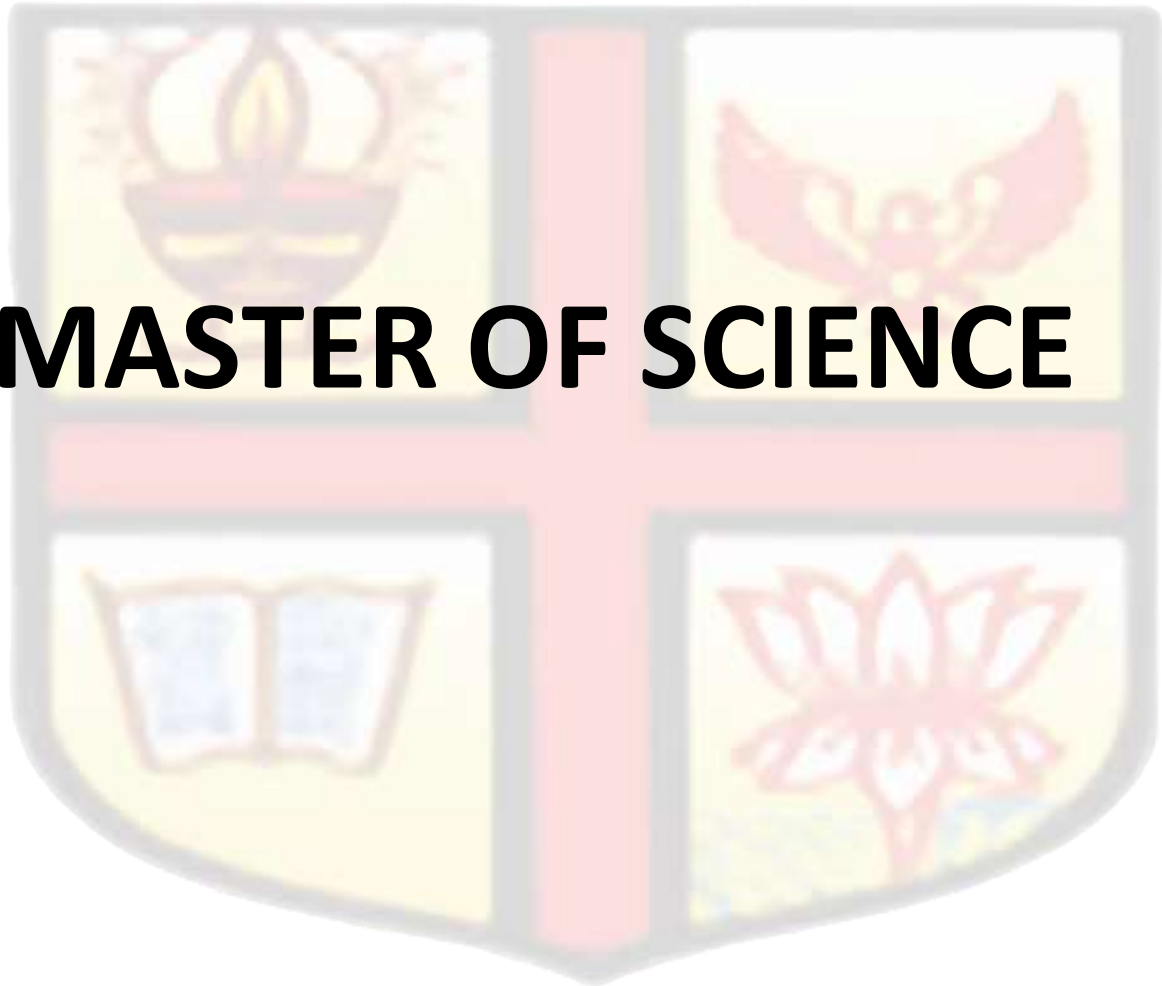
		SUBJECT CODES							
		TH	CCE	PR	P1 MAX	P1 MIN	P2MAX	P2 MIN	CREDITS
1	Political Sociology - I	434011	434012		40	14	10	4	4
2	Government and Politics of Madhya Pradesh - II	434021	434022		40	14	10	4	4
3	Electoral Politics in India - III	434031	434032		40	14	10	4	4
4	Human Rights - IV	434041	434042		40	14	10	4	4
5	Project and Comprehensive Viva			434053	25	9			4
6	Skill Development (Communication Skills)	994002			10	4			1

VIRTUS IN ARDUO

MA IV SEM - ECONOMICS									
		SUBJECT CODES							
		TH	CCE	PR	P1 MAX	P1 MIN	P2MAX	P2 MIN	CREDITS
1	Indian Economy: Structure, Problems and Policy - I	414011	414012		40	14	10	4	4
2	Indian Foreign Trade and International Institutions - II	414021	414022		40	14	10	4	4
3	Financial Institutions and Markets - III	414031	414032		40	14	10	4	4
4	Economics of Gender and Development - IV	414041	414042		40	14	10	4	4
5	Project and Comprehensive Viva			414063	25	9			4
6	Skill Development (Communication Skills)	994002			10	4			1



MASTER OF SCIENCE



VIRTUS IN ARDUO

MSC IV SEM - COMPUTER SCIENCE

		SUBJECT CODES							
		TH	CCE	PR	P1 MAX	P1 MIN	P2MAX	P2 MIN	CREDITS
1	Compiler Design - I	554011	554012		40	14	10	4	4
2	Software Project Management - II	554021	554022		40	14	10	4	4
3	TCP/IP Concepts - III	554031	554032		40	14	10	4	4
4	Data Science with Python - IV	554041	554042		40	14	10	4	4
5	Major Project / Research Project			554053	150	52			6
6	Skill Development (Entrepreneurship Development)	994004			10	4			1



MSC IV SEM - ZOOLOGY

		SUBJECT CODES							
		TH	CCE	PR	P1 MAX	P1 MIN	P2MAX	P2 MIN	CREDITS
1	Animal Behaviour and Neurophysiology - I	534011	534012		40	14	10	4	4
2	Gamete Biology, Development and Differentiation - II	534021	534022		40	14	10	4	4
3	Pure and Applied Fisheries - III	534031	534032		40	14	10	4	4
4	Practical - I			534043	50	18			2
5	Practical - II			534053	50	18			2
6	Dissertation			534063	50	18			4
7	Internship Project			534073	50	18			4
8	Comprehensive Viva-voce			534083	10	4			1
9	Skill Development (Communication Skills)	994002			100	40			4



MSC IV SEM - CHEMISTRY									
		SUBJECT CODES							
		TH	CCE	PR	P1 MAX	P1 MIN	P2MAX	P2 MIN	CREDITS
1	Inorganic Chemistry - I	544011	544012		40	14	10	4	4
2	Organic Synthesis Strategies - II	544021	544022		40	14	10	4	4
3	Environmental Chemistry - III	544031	544032		40	14	10	4	4
4	Bioorganic Chemistry - IV	544041	544042		40	14	10	4	4
5	Minor Project / Internship			544053	100	35			5
6	Seminar			544063	10	4			1
7	Skill Development (Communication Skills)	994002			10	4			1



DEPARTMENT OF BOTANY AND MICROBIOLOGY
M.SC. MICROBIOLOGY SEMESTER IV
SESSION 2019-20

DISSERTATION	CREDITS	MAXIMUM MARKS
A. Valuation		
(i) Language and Presentation	4	50
(ii) Review of Literature	4	50
(iii) Methodology	4	50
(iv) Analysis and Interpretation of Result	2	50
B. Viva Voce Internal	2	25
C. Viva Voce External	2	25
Skill Development	1	Grade Point will be provided by Skill Development Centre

MSC IV SEM - BIOTECHNOLOGY

		SUBJECT CODES							
S.no	Name	TH	CCE	PR	P1 MAX	P1 MIN	P2MAX	P2 MIN	CREDITS
1	Dissertation			564013	200	70			16
2	Comprehensive Viva-Voce			564023	50	18			4
3	Seminar			564033	50	18			4



MSC IV SEM - PHYSICS

		SUBJECT CODES						
		TH	CCE	PR	P1 MAX	P1 MIN	P2MAX	P2 MIN
1	Atomic and Molecular Physics - I	514011	514012		40	14	10	4
2	Concise Study of Non-Linear Systems - II	514021	514022		40	14	10	4
3	Condensed Matter Physics - III	514031	514032		40	14	10	4
4	A Course In Computational Physics using Mathematica(II) - IV	514041	514042		40	14	10	4
5	LAB - A (Condensed Matter Physics)			514053	50	18		
6	LAB - B (Mathematica)			514063	50	18		
7	Research / Industry Based Project			514073	100	40		
8	Skill Development (Communication Skills)	994002			10	4		



MSC III SEM - ZOOLOGY											
		SUBJECT CODES			THEORY		CCE MARKS		PRACTICAL		CREDIT
		TH	CCE	PR	MAX	MIN	MAX	MIN	MAX	MIN	
1	Comparative Anatomy of Vertebrates-I	533011	533012		40	14	10	4			4
2	Limnology-II	533021	533022		40	14	10	4			4
3	Ecotoxicology-III	533031	533032		40	14	10	4			4
4	Aquaculture-IV	533041	533042		40	14	10	4			4
5	Sericulture-V	533051	533052		40	14	10	4			4
6	Animal Biotechnology-V	533061	533062								
7	Practical - I			533063					50	18	2
8	Practical - II			533073					50	18	2
9	Project/Assignment/Seminar			533083					25	9	1
10	Skill Development (Personality Development)	993003			10	4					1



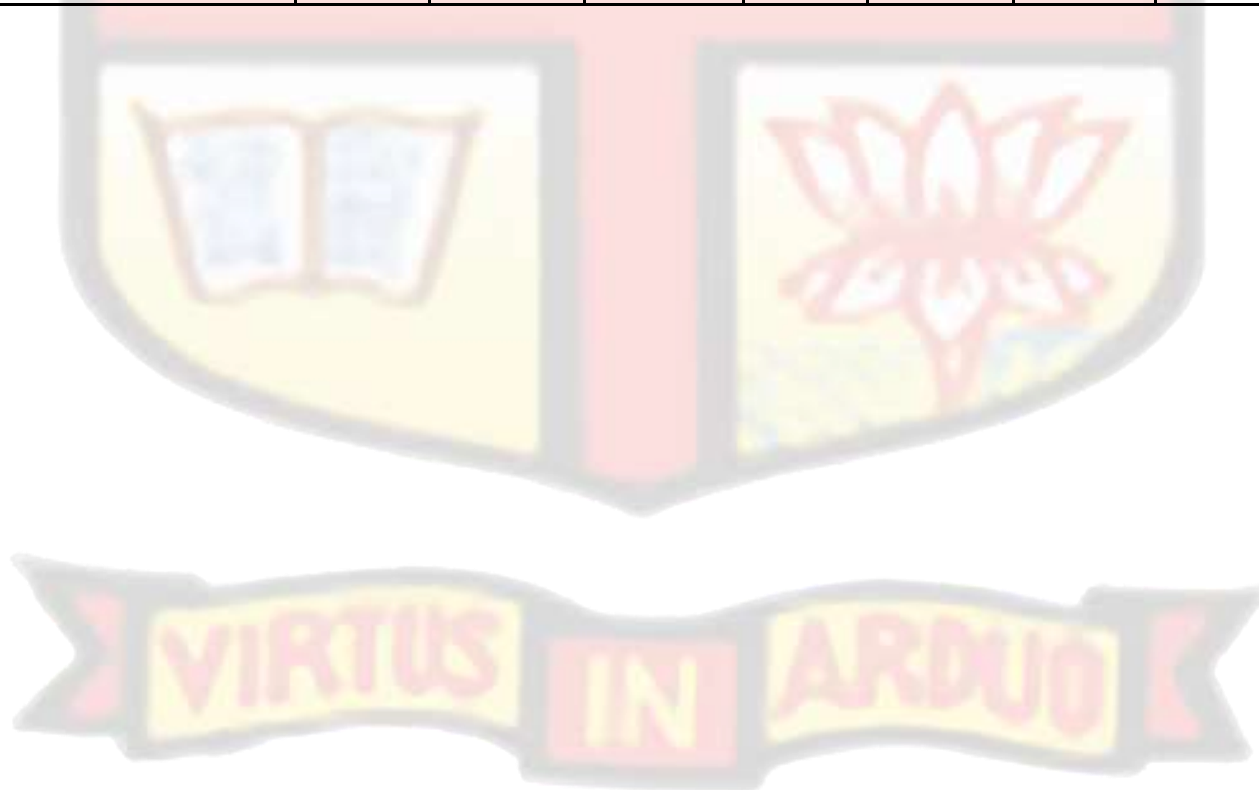
MASTER OF COMMERCE



VIRTUS IN ARDUO

M.COM IV SEM - COMMERCE

		SUBJECT CODES							
		TH	CCE	PR	P1 MAX	P1 MIN	P2MAX	P2 MIN	CREDITS
1	Indirect Tax: Goods and Services Tax - I	914011	914012		40	14	10	4	4
2	Research Methodology - II	914021	914022		40	14	10	4	4
3	International Financial Management - III	914031	914032		40	14	10	4	4
	International Marketing Management- III	914041	914042		40	14	10	4	4
4	Human Resource Development - IV	914051	914052		40	14	10	4	4
	Human Rights - IV	914061	914062		40	14	10	4	4
5	Dissertation / Project and Viva- Voce			914073	25	9			4
6	Skill Development (Communication Skills)	994002			10	4			1





ST. ALOYSIUS' COLLEGE

(AUTONOMOUS), JABALPUR(M.P.)

Reaccredited 'A+' Grade by NAAC (CGPA 3.68/4.00)

College with Potential for Excellence (CPE) by UGC

DST-FIST Supported & Star College Scheme by DBT.

ORDINANCE 11

Rani Durgavati Vishwavidyalaya, Jabalpur

For

Doctor of Philosophy (PhD)

VIRTUS IN ARDUO

ORDINANCE NO. 11

DOCTOR OF PHILOSOPHY

Revised in light of the University Grants Commission (Minimum Standards and Procedure for Awards of M.Phil./Ph.D. Degrees Regulations, 2016 published in the Gazette of India on July 05, 2016)

1. The Ordinance shall come into force with effect from the date of its notification by UGC in Gazette. With the enforcement of this ordinance, existing ordinance shall be repealed.

2. No Ph.D. scholar shall join any other course/study or appear at any other examination leading to a degree, except Certificate course(s), during his/her Ph.D. programme.

3. A candidate for the degree of Doctor of Philosophy must, at the time of application, hold a Master's degree or equivalent in the concerned or allied subject with at least 55% Marks (50% for SC/ST/OBC(non-creamy layer)/Differently-Abled and other categories of candidates as per the decision of the UGC from time to time, or for those who had obtained their Master's degree prior to 19th September, 1991.) of the University, a deemed University or other University incorporated by any law for the time being in force and recognized by the University.

*For Candidates belonging to the following faculties, eligibility of the candidate will be decided as follows:

a. Faculty of Ayurved – As per CCIM norms.

b. Faculty of Medicine –

I. Allopathy subjects – As per MCI norms.

II. Nursing subjects – As per INC norms.

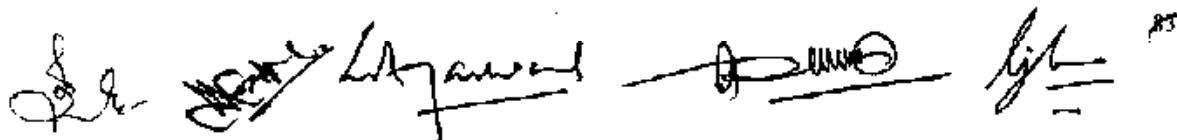
III. Homeopathy subjects – As per CCH norms.

c. Faculty of Dentistry – As per DCI norms.

4. A candidate shall ordinarily be permitted to work for Ph.D. Degree in the subject in which he/she has obtained his/her Master's Degree.

Provided that, research work leads to Ph.D. Degree may be allowed in allied subject of interdisciplinary nature of the same faculty or of allied faculties. In such cases, candidates may be permitted to work under one or two co-supervisors along with the supervisor.

5. Candidates shall be admitted through an entrance test followed by an interview. The students who have qualified UGC-NET with JRF / UGC-CSIR-NET with JRF / teacher fellowship holder or any other Government / Foreign research fellowship holder or have

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Supervisor / Co-supervisor belongs to the Research Laboratory recognized by the University as research centre through MoU then respectively Co-supervisor/ Supervisor will be allotted from the UTD with which Research Laboratory has the MoU.

In case of topics which are of inter-disciplinary nature where the RAC feels that the expertise in the research centre has to be supplemented from outside, the RAC may appoint a Research Supervisor from the research centre, who shall be known as the Research Supervisor, and a Co-Supervisor from outside the Research centre/ Faculty / College/ University on such terms and conditions as may be specified and agreed upon by the consenting Institutions/Colleges.

11. Course Work:-

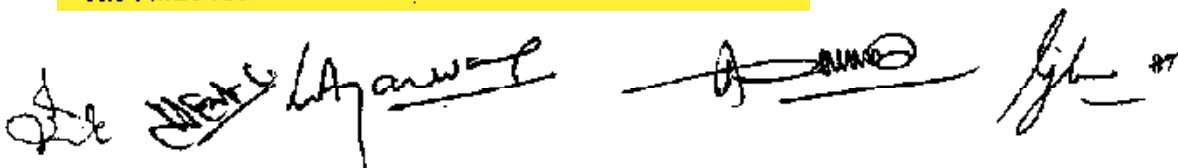
(a) The candidates selected for Ph.D. programme are required to apply for the Ph.D. registration on prescribed proforma downloadable from the university website (Appendix-II). The duly filled registration form along with the necessary documents and certificates shall be forwarded by the research centre after verifying the payments of the following fees:

- (i) Registration fee
- (ii) Ph.D. Course work fee
- (iii) Research Centre fee for six months
- (iv) Research Centre Caution Money (payable once only and refundable)
- (v) University Library fee for six months
- (vi) University Library caution money (payable once only and refundable)
- (vii) IT Infrastructure fee for six months
- (viii) Research Laboratory fee for six months (where laboratory work is involved)
- (ix) Identify card fee
- (x) Any other fee as decided by the university.

Duly forwarded Ph.D. registration form should be submitted to the University and a photocopy of the same form and documents should be submitted to the Research Centre.

The candidates already completed the course work with at least 55% of marks in M.Phil. and admitted to the Ph.D. programme shall be exempted from the Ph.D. course work and its fee. All other candidates admitted to the Ph.D. programme and submitted the Ph.D. registration form shall be required to complete the course work of 16 credits as prescribed by the University/ Research Centre during initial one or two semesters. The course work shall be treated as prerequisite for Ph.D. preparation. All courses prescribed for Ph.D. course work shall be in conformity with the credit hour instructional requirement and shall specify content, instructional and assessment methods. The examination and evaluation scheme for Ph.D. course work shall be as per the examination and evaluation scheme of the University applicable to the other programmes of the UTDs.

The Ph.D. course work shall contain the following courses:



(i) Research Methodology	4 credits
(ii) Review of Published Research in the relevant field	3 credits
(iii) Computer Applications	3 credits
(iv) Advance course in the relevant subject	3 credits
(v) Comprehensive Viva-Voce	3 credits

The course on Research Methodology should cover areas such as statistical research methods, research ethics, research report writing, etc. The course on Review of Published Research in the relevant field will be undertaken under the supervisor or the regular teacher of the centre of course work and the candidate has to consult the library or other resources to carry out the literature review. At the end of the semester the candidate has to submit a brief report on the literature review for evaluation, which will be done by the two examiners. The course on computer applications will include the computer applications helpful in the relevant subject. The advanced course in the relevant field shall comprise the topics related to the subject of research. The syllabus of the courses on research methodology, computer applications, and advanced course shall be decided by the concerned Board of Studies.

The final grades shall be submitted to the University. The University shall issue the certificate of the Ph.D. course work in the prescribed format (Appendix-III).

(b) The course work shall be conducted in the University Teaching Departments/ Research centers as approved by the Vice chancellor.

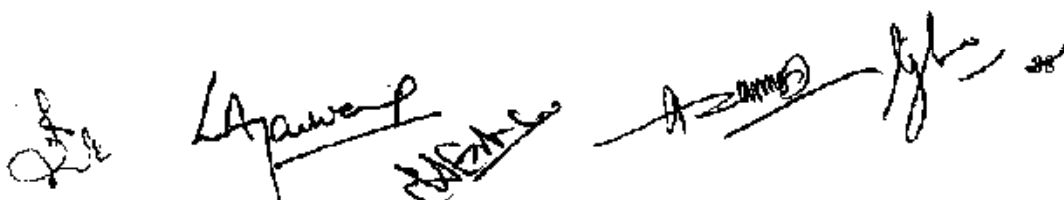
(c) A combined course work for M.Phil. and Ph.D. students may be conducted for a single / group of subjects wherever possible.

(d) If found necessary, course work may be carried out in sister UTD/ Institute within the University for which due credit will be given.

(e) If a student obtains F or Ab Grade in a course/ subject, he /she will be treated to have failed in that course. He / she have to reappear in the examinations of the course as and when conducted or arranged by the UTD in the next semester. Marks obtained earlier in continuous assessment may be carried forward and added to the marks obtained in repeat end-semester examination to decide the grade in the repeat course. The student has to pay the prescribed fee for repeating the course. If he/she further fails in the course, he/she shall not be given another chance and he/ she shall be out of the Ph.D. programme. No student shall be allowed to repeat the course to improve the grade if he/ she pass the course.

(f) The candidate has to obtain a minimum of 55% of marks or its equivalent grade points in aggregate in the course work in order to be eligible to continue in the Ph.D. programme.

12. Registration of the student:



submit his/ her thesis within six calendar years from the date of registration and does not apply for extension in time, his/her registration shall stand automatically cancelled.

The women candidates and Persons with Disability (more than 40% disability) may be allowed a relaxation of two years for Ph.D. in the maximum duration. In addition, the women candidates may be provided Maternity Leave/Child Care Leave once in the entire duration of Ph.D. for up to 240 days.

Provided that the period for submission of thesis can be extended by one year by the Vice Chancellor, if he/she applies for extension at least one month before the expiry of registration period together with a prescribed fee. In case the candidate does not submit his/her thesis within the extended period his/her registration stand automatically cancelled.

Provided also that, Vice Chancellor may permit a candidate to get re-registered on the same topic on payment of re-registration fee. The minimum period of three years and attendance shall not apply to such reregistered candidates.

19. A candidate may be allowed to change the Supervisor by the Vice Chancellor on the recommendation of the RAC or Chairman BOS and Dean of the faculty under special circumstances. No major change in the topic of research will be permitted due to change of supervisor.

20. (a) The University shall obtain every six months a record of attendance, receipt of fees paid and a progress report on a prescribed format (Appendix-V) of the work of the Research Scholar from his supervisor.

(b) If the progress of work is not found satisfactory in two successive reports or no reports are received for a period of one year and the candidate fails to deposit the fee, the Vice Chancellor may order the removal the name of the Scholar from the list of those registered for the Ph.D. Degree.

21. Evaluation and Assessment Methods, minimum standards for award of the degree:

The candidate shall submit a draft dissertation / thesis to the research centre prior submission of the research summary and the scholar shall make a presentation in the research centre open to all faculty members and other research scholars. The feedback and comments obtained from them may be suitably incorporated into the draft dissertation / thesis in consultation with the supervisor/ co-supervisor.

On the advice of the Supervisor and Co-Supervisor (if any) minor changes in the thesis title may be approved by the Research Advisory Committee.

22. Ph.D. scholars must publish at least one (1) research paper in refereed journal and make two paper presentations in conferences / seminars before the submission of the thesis for adjudication, and produce evidence for the same in the form of presentation certificates and/or reprints.

[Handwritten signatures and initials]