

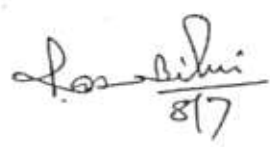
PATNA UNIVERSITY
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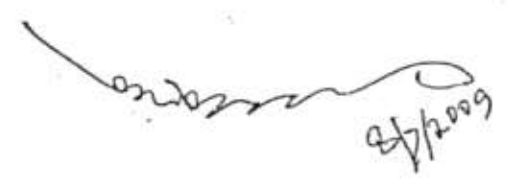
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Ordinance for Admission to M.C.A.
3-Year Full-Time Post Graduate Course

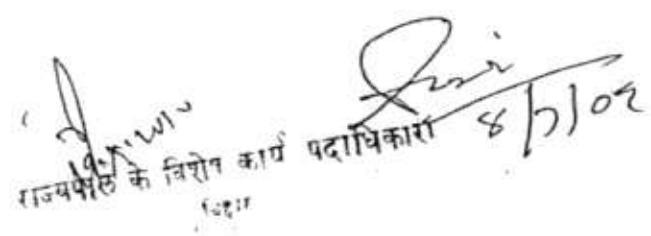
- 1.0 The Post Graduate Degree in Computer Application of three year (six semesters) course shall be designated as Master of Computer Application and abbreviated as M.C.A.
- 2.0 Admission
 - 2.1 A candidate seeking admission to M.C.A. course must be B.C.A. or B.Sc. in Computer Science or Graduate (Honors) in any stream with Mathematics as a subject plus a certificate or equivalent qualification in computing of at least one year duration from a recognized institution. The candidate must have secured atleast 45% marks in the above graduate level qualifying examination.
 - 2.2 A candidate seeking admission to semester-I M.C.A. course shall have to secure a proper place in the merit list prepared on the basis of an entrance examination conducted by Patna University. The written test will be of 100 marks consisting of 85 objective type questions, each question carrying one mark, and 5 subjective type questions, each question carrying three marks.
 - 2.3 Admission to N.R.I. students shall be made on the basis of same entrance examination as in 2.2 above. However, a separate list of N.R.I. candidates will be prepared based on the result of the said entrance examination.
 - 2.4 The reservation of seats for the course shall be as per reservation rules of the Government of Bihar.
 - 2.5 The number of seats for the course shall be 40 (Forty). In addition, there will be five seats for N.R.I. candidates. In case, N.R.I. seats remain unfilled for any reason, the same will be filled by resident Indians on merit from the merit-list prepared on the basis of the entrance examination. No candidate (NRI or RI) will be admitted to M.C.A. Course unless he/she has secured atleast 33% marks in the entrance examination.
 - 2.6 Each candidate shall have to pay Rs. 1000/- for purchase of admission form and for other expenses to be incurred in conducting the entrance examination.
 - 2.7 No applicant shall be admitted to the course who has not applied for admission within the notified time or who being selected for admission does not get himself/herself enrolled within the specified time excepting the institution where delay has been condoned by the Vice-Chancellor.


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2.8 The fee structure for the M.C.A. Course will be as stated in sub-clause A and B below:

A. Fee Structure for Indian Students (RI)

Admission & Registration Fee	Rs. 5,000
Caution Money (Refundable) one time subject to completion of the course	Rs. 5,000
Development Fees in the first semester	Rs. 5,000
Miscellaneous Fee (Misc.) - Rs. 3000 in the first semester	Rs. 3,000
Tuition Fees - Rs. 5000 per semester	Rs. 5,000
Examination Fee	Rs. 1,000
Total Fees payable at the time of first admission	Rs. 24,000

M.C.A. students shall have to pay Rs. 24,000/- for the first semester and thereafter Rs. 6000 per semester (Rs 5000 Tuition Fees and Rs 1000 Examination Fees) from 2nd to 6th semester.

B. Fee Structure for Non-Resident Indian Students (NRI)-

Admission & Registration Fee	\$ 200
Caution Money (Refundable) one time subject to completion of the course	\$ 200
Development Fees in the first semester	\$ 200
Semester Fee (Misc.) - \$ 150 per semester	\$ 150
Tuition Fees - \$ 200 per semester	\$ 200
Examination Fee per semester	\$ 50
Total Fees payable at the time of admission	\$ 1000

NRI M.C.A. students shall have to pay \$ 1000 for first semester and thereafter \$ 400 per semester (\$ 200 Tuition Fee, \$150 Misc. fee and \$50 Examination Fee) from 2nd to 6th semester.

2.9 The fee structure may be revised from time to time by the Vice-Chancellor in consultation with the Course Co-ordinator and a Committee constituted by the Vice-Chancellor for the purpose, after obtaining approval of the Chancellor.

3.0 The Academic Council of the University may introduce teaching of M.C.A. Course in any other educational institution of Patna University on the same terms and conditions as are mentioned in this ordinance.

[Handwritten signatures and dates]
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Regulations for the MCA Course

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1. General :

- 1.1 These regulations shall be called the regulations for the MCA course of Patna University.
- 1.2 These regulations shall come into force from the academic year 2009-10 or such date as notified by the Vice-Chancellor of the University.

2. M.C.A. Course :

- 2.1 The University shall offer MCA course leading to Master's Degree in Computer Application.
- 2.2 The duration of MCA course, leading to the Degree of MCA will be normally of three years. However, no student will be permitted to continue in M.C.A. course if he/she fails to pass all semesters in a maximum period of five years from the date of first admission.

3. Semester System :

- 3.1 The academic programme in the University shall be based on semester system: Two semesters (July – Dec) and (Jan – June) in a year.
- 3.2 The courses offered in a semester shall be continually assessed and evaluated to judge the performance of a student on the basis of internal assessment. The components of the internal assessment shall be : (a) Two Mid-semester Tests, each of 15 marks, and (b) One Home Assignment of ten marks.

4.0 Examinations :

- 4.1 There shall be University Examination at the end of each semester. In lab papers, the semester-end examination will be based on laboratory based practical tests. The examinations, two Mid-semester Tests and practical tests for lab will all be conducted by the University.
- 4.2 These examinations shall be named as follows:

(a)	M.C.A.	First Year	
		- First Semester	- I Semester
		- Second Semester	- II Semester
(b)	M.C.A.	Second Year	
		- Third Semester	- III Semester
		- Fourth Semester	- IV Semester
(c)	M.C.A.	Third Year	
		- Fifth Semester	- V Semester
		- Sixth Semester	- VI Semester
- 4.3 The examination of I, III and V Semesters, called as Odd Semesters, shall be generally held in the month of November – December and that of II, IV and VI Semesters, called Even Semesters, shall be held in the month of May – June.
- 4.4 The VI Semester, being kept for fulfillment of the academic requirement, is entirely devoted to preparation of a major project report. For this purpose, at the end of but before the examination of the Sixth semester, each candidate shall have to undertake

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a major project, at least of 4 months duration, in a reputed organization to be assigned to him/her by the University. After the completion of the project, he/she will submit 4 copies of his/her project report alongwith a certificate from the supervisor, duly countersigned by the head of the organization, to certify that he/she actually worked on the concerned project for the prescribed period of four months.

4.5 A student shall have to pass separately in each paper (Theory & Practical) of each semester before he/she is promoted to the next semester.

5.0 **Passing of Examination:**

In order to pass M.C.A. Examination of any semester, a candidate shall have to secure at least 40% of the maximum marks in each paper.

6.0 **Awards of Divisions:**

6.1 No division shall be awarded up to fifth semester.

6.2 Successful candidates in all the semester examination shall be awarded the division at the end of the final semester examination taking the aggregate of the marks obtained in all the semester, as follows:

- 6.2.a 75% and above First Division with Distinction
- 6.2.b Less than 75% but not less than 60% First Division
- 6.2.c 45% or more but less than 60% Second Division
- 6.2.d Less than 45% Fail

7.0 **Attendance:**

A candidate appearing as regular student for any semester examination shall be required to attend at least 75% of the lectures delivered and of the practical classes held separately in each paper, provided that a short fall in attendance up to 15% can be condoned as per University rule.

0.8 If a candidate clears a semester examination in full he/she shall not be permitted to reappear in that examination for the improvement of marks or for any other purpose.

0.9 **Interpretation of Regulations:**

In case of any dispute, difference of opinion in interpretation of these regulations or any other matter not covered in these regulations, the decision of the University shall be final and binding.

10.0 Each successful candidate shall receive a degree of M.C.A. in the prescribed format.

Note:- Other provisions not covered under the existing regulation shall be governed by the Regulation relating to Post Graduate Degree examination in the Faculty of Science.

11.0 **Syllabus:**

The syllabus of the MCA course shall be as follows:

Course Structure : MCA				
Course Code	Course Title	Practical/Internal Assessment	Semester Exam	Total


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Semester I				
CS101	Introduction to Computing and its Applications	40	60	100
CS102	Mathematical Foundations	40	60	100
CS103	Introduction to Programming Paradigms	40	60	100
CS104	Statistical Techniques	40	60	100
CS105	Business Data Processing and File System	40	60	100
CS106	Lab - I (Programming in C+ Linux OS)	50	100	150
CS107	Lab - II (STAT+BDPFS)	50	100	150
Semester II				
CS201	Computer Architecture	40	60	100
CS202	Data Structures and Program Design	40	60	100
CS203	Object Oriented Programming	40	60	100
CS204	Data Base Management Systems	40	60	100
CS205	Object Oriented Analysis and Design	40	60	100
CS206	Lab - III (OOP+ Core Java)	50	100	150
CS207	Lab - IV (OOAD + DBMS)	50	100	150
Semester III				
CS301	Operating Systems	40	60	100
CS302	Data Communication and Computer Networks	40	60	100
CS303	Analysis and Design of Algorithms	40	60	100
CS304	Software Engineering	40	60	100
CS305	Computer Graphics and Animation	40	60	100
CS306	Lab - V (OS+CN+CG)	50	100	150
CS307	Lab - VI (ADA + SE)	50	100	150
Semester IV				
CS401	Compiler Design	40	60	100
CS402	Internet Applications and Web Programming	40	60	100
CS403	Information Security	40	60	100
CS404	Software Testing and Quality Assurance	40	60	100
CS405	Multimedia Applications	40	60	100
CS406	Lab - VII (Javascript + .NET)	50	100	150
CS407	Lab - VIII (STQA + MA + CD)	50	100	150
Semester V				
CS501	Systems Programming	40	60	100
CS502	Artificial Intelligence	40	60	100
CS503	Elective - I	40	60	100
CS504	Elective - II	40	60	100
CS505	Elective - III	40	60	100
CS506	Lab - I (AI + SP)	50	100	150
CS507	Lab - II (Electives)	50	100	150
Semester VI				
CS601	Project	100*	400**	500
* Mid-term assessment of project progress				
**(Project Report Evaluation : 200 + Comprehensive Viva-Voce : 200)		Grand Total : 4500		

Elective Courses:

Group - I	Data Mining and warehousing	Advance DBMS	Multimedia Databases
Group - II	Network management	Network Programming	Advance Internet Tech.

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Group - III	Soft Computing	Robotics	Knowledge Management
Group - IV	Principles of Wireless LAN	Advanced Java	E-Commerce

Note :-I Every student shall have to select one elective group of three papers from the four elective groups shown in the table above.

Note :-II To accommodate developing knowledge in computers and engineering sciences and take care of emerging technologies therein, the University may, from time to time, make suitable amendments in the above course syllabus with the approval of its Academic Council.

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Ladshani

2/7/2009

Amstia
18/07/09

Jai
08/07/09

19/2/2010

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