

**Scheme of Examinations**  
**Master of Computer Applications (MCA)**

**Duration : Three Years**

**Scheme of Examinations**

**FIRST YEAR**

**First Semester**

| <u>Paper No.</u>          | <u>Title of Paper</u>                         | <u>Max.Marks</u> | <u>Exam Duration</u> |
|---------------------------|---|------------------|----------------------|
| MCA-01/M.Sc-01/APGDCA-01  | Foundation Course in IT<br>And MS-Office 2000 | 100              | 3 Hrs. each          |
| MCA-02/M.Sc-02/APGDCA-02  | Computer Networking &<br>Multimedia           | 100              | 3Hrs. each           |
| MCA-03/M.Sc-03/APGDCA-03  | Programming in C and<br>Data Structure        | 100              | 3Hrs. each           |
| MCA-04/M.Sc.-04/APGDCA-04 | Computer Organisation<br>And Architecture     | 100              | 3Hrs. each           |
| MCA-05/M.Sc-05/APGDCA-05  | Practical-1<br>(Based on M.Sc-01 & 03)        | 100              | 4Hrs. each           |

**Second Semester**

|                           |   |     |            |
|---------------------------|---|-----|------------|
| MCA-06/M.Sc-06/APGDCA-06  | Visual C++                                | 100 | 3Hrs. each |
| MCA-07/M.Sc-07/APGDCA-07  | Visual Basic & Oracle                     | 100 | 3Hrs. each |
| MCA-08/M.Sc.-08/APGDCA-08 | System Analysis & Design                  | 100 | 3 Hrs each |
| MCA-09/M.Sc-09/APGDCA-09  | Practical-II<br>(Based on M.Sc.- 06 & 07) | 100 | 4Hrs. each |
| MCA-10/M.Sc-10/APGDCA-10  | Project Work, Report<br>& Viva-Voce       | 100 | 4Hrs. each |

**(Based on any Language, Software Development Tool, etc.)**

**SECOND YEAR**

**Third Semester**

| <u>Paper No.</u> | <u>Title of paper</u>                                       | <u>Max. Marks</u> | <u>Exam. Duration</u> |
|------------------|---|-------------------|-----------------------|
| MCA-11/M.Sc-11   | <b>RDBMS</b>  | <b>100</b>        | <b>3 Hrs. each</b>    |
| MCA-12/M.Sc-12   | <b>Software Engineering</b>                                 | <b>100</b>        | <b>3 Hrs. each</b>    |
| MCA-13/M.Sc.-13  | <b>- Operating System<br/>and Unix</b>                      | <b>100</b>        | <b>3 Hrs. each</b>    |
|                  | <b>- Programming in C<br/>&amp; Data Structure*</b>         | <b>100</b>        | <b>3 Hrs. each</b>    |
| MCA-14/M.Sc-14   | <b>- Internet, Web<br/>Programming &amp; Java</b>           | <b>100</b>        | <b>3 Hrs. each</b>    |
|                  | <b>- Computer<br/>Organisartion &amp;<br/>Architecture*</b> | <b>100</b>        | <b>3 Hrs. each</b>    |
| MCA-15/M.Sc-15   | <b>Practical-III</b>  | <b>100</b>        | <b>4 Hrs. each</b>    |

(Based on M.Sc-11 & 13)  
(Based on M.Sc-11 & 14)\*

**Fourth Semester**

|                 |  |     |             |
|-----------------|--|-----|-------------|
| MCA-16/M.Sc-16  | Artificial Intelligence                | 100 | 3 Hrs. each |
| MCA-17/M.Sc-17  | - Computer Graphics                    | 100 | 3 Hrs. each |
|                 | - System Analysis & Design             | 100 | 3 Hrs. each |
| MCA-18/M.Sc-18  | - Object-oriented Analysis And Design  | 100 | 3 Hrs. each |
|                 | -Microprocessor and Assembly Language* | 100 | 3 Hrs. each |
| MCA-19/M.Sc-19  | Practical-IV                           | 100 | 4 Hrs. each |
|                 | (Based on M.Sc.-17 & 18)               |     |             |
|                 | (Based on M.Sc.-16 & 18)               |     |             |
| MCA-20/M.Sc-20/ | Project Report                         | 100 | 4 Hrs. each |

\* These papers are applicable to those students who have done APGDIT course from M.D.University, Rohtak.

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**Note :** Out of 100 marks for each paper, including Theory, Practicals & Project 25 marks are reserved for internal assessment with the following distribution

Assignments : 15 Marks  
Test(s) : 10 Marks

**THIRD YEAR**

**Fifth Semester**

| <u>Paper No.</u> | <u>Title of paper</u>                  | <u>Max. Marks</u> | <u>Exam. Duration</u> |
|------------------|--|-------------------|-----------------------|
| MCA-21           | Internet Programming using C#          | 100               | 3Hrs. each            |
| MCA-22           | Software Testing and Quality Assurance | 100               | 3Hrs.each.            |
| MCA-23           | Windows Programming                    | 100               | 3 Hrs.each            |
| MCA-24           | IT Management                          | 100               | 3Hrs. each            |
| MCA-25           | Software Lab-Based on MCA-21 & MCA-23  | 100               | 4Hrs. each            |

**Sixth Semester**

**MCA-26**

**Major Project**

**200**

***Distribution of marks : Thesis/Project :***

Viva-voce Examination 50

Internal Assessment 25

**Marks will be awarded on the basis of Viva-voce examination conducted by one examiner (External only)**

**Thesis/Project Report will be submitted in triplicate (Hard Bound) with proper certification by the supervisor concerned who may be a person with five years working experience and must have Master's degree in relevant field or a regular teacher working in Govt./Semi-Govt. Institution/University/Engineering College.**

**Students are advised to come prepared for presentation/demonstration of their Thesis/Project at the time of their final viva-voce examination.**

**Note : Out of 100 marks for each paper, including Theory, Practicals & Project 25 marks are reserved for internal assessment with the following distribution:-**

|                    |          |                 |
|--------------------|----------|-----------------|
| <b>Assignments</b> | <b>:</b> | <b>15 Marks</b> |
| <b>Test(s)</b>     | <b>:</b> | <b>10 Marks</b> |