

# SHIVAJI UNIVERSITY, KOLHAPUR.

Circular No. 622 Exam. March/April 2016

Academic Flexibility  
Final Programme  
M. Sc. II , Sem III & IV, MCA  
Sci. Sem III,IV, V & VI  
March/April 2016 Exam

**Final Programme** for the university Examination of M. Sc. II , Sem III & IV, MCA Sci. Sem III,IV, V & VI ( Zoology, Computer Sci, Chemistry (All Branches, Botany, Electronics, Applied Chemistry, Industrial-Chemistry, Horizontal Mobility(Bio-tech, Bio-chem, Micro, Env-Biotech)AGPM, (M. C. A. (Sci) Sem III,IV, V, VI Academic Flexibility Examination to be held in March/April 2016

**1. The Written Examination will be held at :-**

| Sr. No | Center   | College/Dept. Code                                    | Exam  | Places  |
|--------|----------|---|---|---|
| 01     | KOLHAPUR | 541 to 546,<br>548,552,<br>553,<br>555 to 557,<br>578 | H. M., Biochemistry, Biotechnology, Microbiology, Env. Biotechnology, Computer Science, M.C.A., Chemistry , Inorganic Chemistry, Organic Chemistry, Physical Chemistry, Analytical Chemistry, Applied Chemistry, Industrial Chemistry, Botany, Zoology, Electronics, AGPM | University Teaching concern Department.<br>Shivaji University Campus.<br>KOLHAPUR |

**N. B.**

1. Candidates are requested to be present at their respective places of Examination 15 MINUTES before the time scheduled for the starting of the First Paper.
2. The Practical examination will be held after written examination. The Information regarding place, date and time of the Practical examination will be notified in the practical programme of the subject. Those who fail to present themselves at the practical examination on the scheduled date and time will not be examined in practical. The practical programme will be displayed on the notice board of the Department.
3. The Examination Programme is subject to change. The candidates are advised to check the **Final Examination programme**. If there is any change in the examination programme the university is not responsible for the loss or inconvenience caused to the candidates.
4. The external candidates are requested to see their examination seat numbers as well as place of examination on the notice board of the University Office at least two days before the date of examination.
5. Cellular phone, Programmable Scientific Calculators, Digital Diary or any means which can be used for unfair practice are not allowed in the Exam.Hall.
6. Examinee should confirm the customized time table printed on his/her hall ticket with the **Final Programme** of examination sent to his/her Department.
7. The Written Examination will be conducted in the following order.

Vidyanagar,  
Kolhapur-416004  
Date :- 25-02-2016

Shri. M.A. Kakade  
Controller of Examinations

1. ZOOLOGY (A.F.)

CENTER :- KOLHAPUR

| Branch Code - M.Sc. ZOOLOGY (A.F.) |            |   |                        |                               |
|------------------------------------|------------|---|------------------------|-------------------------------|
| Part II :- Sem.-III                |            |   |                        |                               |
| PAPER NO.                          | PAPER CODE | PAPER NAME                                      | DAY & DATE             | PAPER TIME                    |
| IX                                 | 43969      | Genetics  | Monday-21.3.2016       | From 3.00 PM<br>To<br>6.00 PM |
| X                                  | 43970      | Enzymology                                      | Wednesday<br>23.3.2016 |                               |
|                                    | 43973      | Computational Molecular Biology                 | Monday-<br>28.3.2016   |                               |
|                                    | 48318      | Endocrinology                                   |                        |                               |
|                                    | 43975      | Basic Entomology                                |                        |                               |
|                                    | 43976      | Fisheries Recourses : Inland & Marine Fisheries |                        |                               |
|                                    | 60848      | General Sericulture & Morticulture              |                        |                               |

| Branch Code - M.Sc. ZOOLOGY (A.F.)                     |                  |   |                        |                               |  |
|--|------------------|---|------------------------|-------------------------------|--|
| Part II :- Sem.-IV                                     |                  |   |                        |                               |  |
| PAPER NO.  | PAPER CODE       | PAPER NAME  | DAY & DATE             | PAPER TIME                    |  |
| XIII   | 46488 /<br>45392 | * Animal Cell in Biotechnology                            | Monday-21.3.2016       | From 11.00 AM<br>To<br>2.00PM |  |
| XIV  | 46489            | Toxicology and Immunology                                 | Wednesday<br>23.3.2016 |                               |  |
| <b>PAPER NO. XV – CHOOSE ANY ONE OF THE FOLLOWING</b>  |                  |   |                        |                               |  |
|  | 46493            | Cell in Differentiation, Development<br>Specialization    | Monday-<br>28.3.2016   |                               |  |
|  | 46494            | Animal Physiology   |                        |                               |  |
|  | 46495            | Insect Anatomy and Physiology                             |                        |                               |  |
|  | 46496            | Aquaculture Practices                                     |                        |                               |  |
|  | 61744            | Cytology, Genetics of Silkworm and Their<br>Host Plants   |                        |                               |  |
| <b>PAPER NO. XVI – CHOOSE ANY ONE OF THE FOLLOWING</b> |                  |   |                        |                               |  |
|  | 46497            | Cell Pathology  | Wednesday<br>30.3.2016 |                               |  |
|  | 46498            | Applied Physiology  |                        |                               |  |
|  | 46499            | Pest Management Concepts                                  |                        |                               |  |
|  | 46500            | Fishery Technology  |                        |                               |  |
|  | 61745            | Seeds and Silk Technology and Economics<br>of Sericulture |                        |                               |  |
|  |                  | Practical 7   |                        |                               |  |
|  |                  | Practical 8   |                        |                               |  |

NOTE : { Sem IV - \* Common Paper with Biotechnology }

3. COMPUTER SCIENCE (A.F.)

CENTER :- KOLHAPUR

| Branch Code - M.Sc. COMPUTER SCIENCE (A.F.) |            |   |                         |                               |
|---|------------|---|-------------------------|-------------------------------|
| Part II :- Sem.-III                         |            |   |                         |                               |
| PAPER NO.                                   | PAPER CODE | PAPER NAME                                | DAY & DATE              | PAPER TIME                    |
| IX  | 43885      | Dot Net                                   | Tuesday 22.3..2016      | From 3.00 PM<br>To<br>6.00 PM |
| X   | 48698      | Parallel Computing                        | Saturday 26.3..2016     |                               |
| XI  | 43887      | Artificial Intelligence                   | Tuesday-29.3.2016       |                               |
| XII   | 50106      | Data Warehousing and Data Mining<br>(NEW) | Thursday -<br>31.3.2016 |                               |
| XII   | 43888      | Advanced Java Programming ( Old )         |                         |                               |

| Branch Code - M.Sc. COMPUTER SCIENCE (A.F.) |            |   |               |            |
|---|------------|---|---------------|------------|
| Part II :- Sem.-IV                          |            |   |               |            |
| PAPER NO.                                   | PAPER CODE | PAPER NAME                                      | DAY & DATE    | PAPER TIME |
|   | 46207      | Research/Industrial Project &<br>Comprehensive. | Internal Exam |            |

1. PHYSICAL CHEMISTRY (A.F.)

CENTER :- KOLHAPUR, ISLAMPUR

|           |            | Branch Name :- Physical Chemistry (A.F.)    |                          |                               |
|-----------|------------|---|--------------------------|-------------------------------|
|           |            | Course – Part II Sem III                    |                          |                               |
| PAPER NO. | PAPER CODE | PAPER NAME                                  | DAY & DATE               | PAPER TIME                    |
| IX        | 44028      | Quantum Chemistry                           | Wednesday<br>30.3.2016   | From 3.00 PM<br>To<br>6.00 PM |
| X         | 44029      | Electrochemistry                            | Saturday 02.4.2016       |                               |
| XI        | 44030      | Molecular Structure – I                     | Wednesday-<br>06.4-.2016 |                               |
| XII       | 44033      | Solid State Chemistry                       | Monday 11.4.2016         |                               |
|           | 44034      | Advanced Chemical Kinetics                  |                          |                               |
|           | 44035      | Radiation & Photochemistry                  |                          |                               |
|           |            | PRACTICAL V                                 |                          |                               |
|           |            | PRACTICAL VI                                |                          |                               |
|           |            | Branch Code PHYSICAL CHEMISTRY (A.F.)       |                          |                               |
|           |            | Course Part No. - M.Sc. Part No – 2 (Sem-4) |                          |                               |
| PAPER NO. | PAPER CODE | PAPER NAME                                  | DAY & DATE               | PAPER TIME                    |
| XIII      | 46296      | Statistical Mechanics and Thermodynamics    | Friday-1.4.2016          | From 11.00 AM<br>To<br>2.00PM |
| XIV       | 46297      | Chemical Kinetics                           | Tuesday 5.4.2016         |                               |
| XV        | 46298      | Molecular Structure – II                    | Saturday-9.4.2016        |                               |
| XVI       | 46299      | Surface Chemistry                           | Wednesday<br>13.4.2016   |                               |
|           |            | PRACTICAL V                                 |                          |                               |
|           |            | PRACTICAL VI                                |                          |                               |

8. ANALYTICAL CHEMISTRY (A.F.)

CENTER :- KOLHAPUR, JAYSINGPUR, SANGLI, SATARA, PATAN, KARAD

|           |            | Branch Name :- Analytical Chemistry (A.F.)  |                          |                               |
|-----------|------------|---|--------------------------|-------------------------------|
|           |            | Course – Part II Sem III                    |                          |                               |
| PAPER NO. | PAPER CODE | PAPER NAME                                  | DAY & DATE               | PAPER TIME                    |
| IX        | 44036      | General Analytical Techniques               | Wednesday<br>30.3.2016   | From 3.00 PM<br>To<br>6.00 PM |
| X         | 44037      | Organo Analytical Chemistry                 | Saturday 02.4.2016       |                               |
| XI        | 44038      | Electro-Analytical Techniques in Chemistry  | Wednesday-<br>06.4-.2016 |                               |
| XII       | 44041      | Environmental chemical Analysis & Control   | Monday 11.4.2016         |                               |
| XII       | 44042      | Recent Advance in Analytical                |                          |                               |
|           |            | PRACTICAL V                                 |                          |                               |
|           |            | PRACTICAL VI                                |                          |                               |
|           |            | Branch Code ANALYTICAL CHEMISTRY (A.F.)     |                          |                               |
|           |            | Course Part No. - M.Sc. Part No – 2 (Sem-4) |                          |                               |
| PAPER NO. | PAPER CODE | PAPER NAME                                  | DAY & DATE               | PAPER TIME                    |
| XIII      | 46302      | Modern Separation Methods in Analysis       | Friday-1.4.2016          | From 11.00 AM<br>To<br>2.00PM |
| XIV       | 46303      | Organic Industrial Analysis                 | Tuesday 5.4.2016         |                               |
| XV        | 46304      | Advanced Methods in Chemical Analysis       | Saturday-9.4.2016        |                               |
| XVI       | 46305      | Applied Analysis Chemistry                  | Wednesday<br>13.4.2016   |                               |
|           |            | PRACTICAL V                                 |                          |                               |
|           |            | PRACTICAL VI                                |                          |                               |

**1. INORGANIC CHEMISTRY (A.F.)**

CENTER :- KOLHAPUR, SANGLI, VITA, SATARA,

|           |            | Branch Name :- INORGANIC CHEMISTRY (A.F.)   |                          |                               |
|-----------|------------|---|--------------------------|-------------------------------|
|           |            | Course – Part II Sem III                    |                          |                               |
| PAPER NO. | PAPER CODE | PAPER NAME                                  | DAY & DATE               | PAPER TIME                    |
| IX        | 44043      | Inorganic Chemical Spectroscopy             | Wednesday<br>30.3.2016   | From 3.00 PM<br>To<br>6.00 PM |
| X         | 44044      | Coordination Chemistry-I                    | Saturday 02.4.2016       |                               |
| XI        | 44045      | Nuclear Chemistry                           | Wednesday-<br>06.4-.2016 |                               |
| XII       | 44048      | Environmental Pollution                     | Monday 11.4.2016         |                               |
| XII       | 44049      | Bio-Inorganic Chemistry                     |                          |                               |
| XII       | 44050      | Selected Topics in Inorganic Chemistry      |                          |                               |
|           |            | PRACTICAL V                                 |                          |                               |
|           |            | PRACTICAL VI                                |                          |                               |
|           |            | Branch Code INORGANIC CHEMISTRY (A.F.)      |                          |                               |
|           |            | Course Part No. - M.Sc. Part No – 2 (Sem-4) |                          |                               |
| PAPER NO. | PAPER CODE | PAPER NAME                                  | DAY & DATE               | PAPER TIME                    |
| XIII      | 46308      | Instrumental Techniques                     | Friday-1.4.2016          | From 11.00 AM To<br>2.00PM    |
| XIV       | 46309      | Co-Ordination Chemistry – II                | Tuesday 5.4.2016         |                               |
| XV        | 46310      | Chemistry of Inorganic Materials            | Saturday-9.4.2016        |                               |
| XVI       | 46311      | Separation Science                          | Wednesday<br>13.4.2016   |                               |
|           |            | PRACTICAL V                                 |                          |                               |
|           |            | PRACTICAL VI                                |                          |                               |

**2. ORGANIC CHEMISTRY (A.F.)**

CENTER :- KOLHAPURTASGAON, ISLAMPUR, SANGLI, SATARA, WAI, DAHIWADI, KARAD.

|           |            | Branch Name :- ORGANIC CHEMISTRY (A.F.)     |                          |                               |
|-----------|------------|---|--------------------------|-------------------------------|
|           |            | Course – Part II Sem III                    |                          |                               |
| PAPER NO. | PAPER CODE | PAPER NAME                                  | DAY & DATE               | PAPER TIME                    |
| IX        | 44051      | Organic Reaction Mechanism                  | Wednesday<br>30.3.2016   | From 3.00 PM<br>To<br>6.00 PM |
| X         | 44052      | Advanced Spectroscopic Methods              | Saturday 02.4.2016       |                               |
| XI        | 44053      | Advanced Synthetic Methods                  | Wednesday-<br>06.4-.2016 |                               |
| XII       | 44056      | Drugs and Heterocycles                      | Monday 11.4.2016         |                               |
| XII       | 44057      | Heterocyclic                                |                          |                               |
|           |            | PRACTICAL V                                 |                          |                               |
|           |            | PRACTICAL VI                                |                          |                               |
|           |            | Branch Code INORGANIC CHEMISTRY (A.F.)      |                          |                               |
|           |            | Course Part No. - M.Sc. Part No – 2 (Sem-4) |                          |                               |
| PAPER NO. | PAPER CODE | PAPER NAME                                  | DAY & DATE               | PAPER TIME                    |
| XIII      | 46314      | Theoretical Organic Chemistry               | Friday-1.4.2016          | From 11.00 AM<br>To<br>2.00PM |
| XIV       | 46315      | Stereochemistry                             | Tuesday 5.4.2016         |                               |
| XV        | 46316      | Chemistry of Natural Products               | Saturday-9.4.2016        |                               |
| XVI       | 46317      | Applied Organic Chemistry                   | Wednesday<br>13.4.2016   |                               |
|           |            | PRACTICAL V                                 |                          |                               |
|           |            | PRACTICAL VI                                |                          |                               |

12. BOTANY (A.F.)

CENTER :- KOLHAPUR

|           |            | Branch Code<br>(A.F.)                          | BOTANY |                    |                               |
|-----------|------------|--|--------|--------------------|-------------------------------|
|           |            | Course Part No. - M.Sc. Part No -<br>2 (Sem-3) |        |                    |                               |
| PAPER NO. | PAPER CODE | PAPER NAME                                     |        | DAY & DATE         | PAPER TIME                    |
| IX        | 43985      | Cytogenetic & Crop Improvement                 |        | Tuesday-29.3.2016  | From 3.00 PM<br>To<br>6.00 PM |
| X         | 43986      | Biotechnology and Genetic Engineering          |        | Thursday 31.3.2016 |                               |
|           | 43991      | Plant Physiology – I                           |        | Saturday-2.4.2016  |                               |
|           | 43992      | Mycology & Plant Pathology – I                 |        |                    |                               |
|           | 43993      | Cytogenetics & Plant Breeding – I              |        |                    |                               |
|           | 43994      | Energy Ecology & Environment – I               |        |                    |                               |
|           | 43995      | Angiosperm Taxonomy – I                        |        |                    |                               |
|           | 43996      | Marine Botany – I                              |        |                    |                               |
|           | 43997      | Plant Biotechnology – I                        |        |                    |                               |
|           | 43998      | Plant Physiology – II                          |        | Tuesday 5.4.2016   |                               |
|           | 43999      | Mycology & Plant Pathology – II                |        |                    |                               |
|           | 44000      | Cytogenetics & Plant Breeding – II             |        |                    |                               |
|           | 44001      | Energy Ecology & Environment – II              |        |                    |                               |
|           | 44002      | Angiosperms Taxonomy - II                      |        |                    |                               |
|           | 44003      | Marine Botany - II                             |        |                    |                               |
|           | 44004      | Plant Biotechnology - II                       |        |                    |                               |
|           |            |  |        |                    |                               |

12. BOTANY (A.F.)

CENTER :- KOLHAPUR

|           |            | Branch Code<br>(A.F.)                          | BOTANY |                        |                               |
|-----------|------------|--|--------|------------------------|-------------------------------|
|           |            | Course Part No. - M.Sc. Part No -<br>2 (Sem-4) |        |                        |                               |
| PAPER NO. | PAPER CODE | PAPER NAME                                     |        | DAY & DATE             | PAPER TIME                    |
| XIII      | 46249      | Plant Physiology and Metabolism                |        | Monday-28.3.2016       | From 3.00 PM<br>To<br>6.00 PM |
| XIV       | 46250      | Plant Structure, Development and Reproduction  |        | Wednesday<br>30.3.2016 |                               |
|           | 46251      | Plant Physiology – III                         |        | Friday-1.4.2016        |                               |
|           | 46252      | Mycology & Plant Pathology – III               |        |                        |                               |
|           | 46253      | Cytogenetics & Plant Breeding – III            |        |                        |                               |
|           | 46254      | Energy Ecology & Environment – III             |        |                        |                               |
|           | 46255      | Angiosperms Taxonomy - III                     |        |                        |                               |
|           | 46256      | Marine Botany – III                            |        |                        |                               |
|           | 46257      | Plant Biotechnology - III                      |        |                        |                               |
|           | 46258      | Plant Physiology – IV                          |        | Monday 4.4.2016        |                               |
|           | 46259      | Mycology & Plant Pathology – IV                |        |                        |                               |
|           | 46260      | Cytogenetics & Plant Breeding – IV             |        |                        |                               |
|           | 46261      | Energy Ecology & Environment – IV              |        |                        |                               |
|           | 46262      | Angiosperm Taxonomy – IV                       |        |                        |                               |
|           | 46263      | Marine Botany – IV                             |        |                        |                               |
|           | 46264      | Plant Biotechnology – IV                       |        |                        |                               |
|           |            | PRACTICAL V                                    |        |                        |                               |
|           |            | PRACTICAL VI                                   |        |                        |                               |

## 14. ELECTRONICS ( A.F.)

CENTER :- KOLHAPUR

|           |   | Branch Code - ELECTRONICS (A.F.)                       | { NEW }                |                               |
|-----------|---|--|------------------------|-------------------------------|
|           |   | Course Part No. - M.Sc. Part No – 2 (Sem-3)            |                        |                               |
| PAPER NO. | PAPER CODE  | PAPER NAME   | DAY & DATE             | PAPER TIME                    |
| XI        | 55569   | Computer Networking                                    | Wednesday<br>16.3.2016 | From 3.00 PM<br>To<br>6.00 PM |
| XII       | 55570   | Digital Signal Processing                              | Friday-<br>18.3.2016   |                               |
| XIII      | <b>Paper XIII - Choose any One of the Following</b> |  |                        |                               |
|           | 55571   | Digital Communication                                  | Monday<br>21.3.2016    |                               |
|           | 55572   | FPGA Based System                                      |                        |                               |
|           | 55573   | Industrial Automation                                  |                        |                               |
| XIV       | <b>Paper XIV - Choose any One of the Following</b>  |  |                        |                               |
|           | 55574   | Satellite Communication                                | Wednesday<br>23.3.2016 |                               |
|           | 55575   | Microcontroller Based System Design & ARM Architecture |                        |                               |
|           |   | Practical V  |                        |                               |
|           |   | Practical VI   |                        |                               |

## 14. ELECTRONICS ( A.F.)

CENTER :- KOLHAPUR

|           |  | Branch Code - ELECTRONICS (A.F.)                     | { OLD }                |                               |
|-----------|--|--|------------------------|-------------------------------|
|           |  | Course Part No. - M.Sc. Part No – 2 (Sem-4)          | [ Up to Oct. 2015 ]    |                               |
| PAPER NO. | PAPER CODE   | PAPER NAME   | DAY & DATE             | Paper Time                    |
| XV        | 55579  | Mechatronics   | Wednesday<br>16.3.2016 | From 11.00 AM<br>To<br>2.00PM |
| XVI       | 55580  | Advanced Industrial Control                          | Friday-<br>18.3.2016   |                               |
| XVII      | <b>Paper XVII - Choose any One of the Following</b>  |  |                        |                               |
|           | 55583  | Fiber Optics Communications                          | Monday<br>21.3.2016    |                               |
|           | 55584  | ARM Programming and Embedded Communication Protocols |                        |                               |
|           | 55585  | Power Electronics Circuit Analysis & System Design   |                        |                               |
| XVIII     | <b>Paper XVIII - Choose any One of the Following</b> |  |                        |                               |
|           | 55586  | Cellular Mobile Communication                        | Wednesday<br>23.3.2016 |                               |
|           | 55587  | System Design using EDA Tools                        |                        |                               |
|           | 55588  | Advanced Drives and Controls                         |                        |                               |
|           |  | Project Management                                   |                        |                               |
|           | 55581  | Practical Course - IV                                |                        |                               |
|           | 55582  | Project  |                        |                               |

15. APPLIED CHEMISTRY ( A.F.)

Exam Centr- Kolhapur

|           |            | Branch Code - APPLIED CHEMISTRY (A.F.)      |                      |                               |
|-----------|------------|---|----------------------|-------------------------------|
|           |            | Course Part No. - M.Sc. Part No – 2 (Sem-3) |                      |                               |
| PAPER NO. | PAPER CODE | PAPER NAME                                  | DAY & DATE           | PAPER TIME                    |
| IX        | 44070      | Applied Inorganic Chemistry – I             | Wednesday 30.3.2016  | From 3.00 PM<br>To<br>6.00 PM |
| X         | 44071      | Applied Organic Chemistry – I               | Saturday 02.4.2016   |                               |
| XI        | 44072      | Applied Physical Chemistry – I              | Wednesday-06.4-.2016 |                               |
| XII       | 44073      | Advanced Organic Chemistry–I                | Monday 11.4.2016     |                               |
|           |            | Practical V                                 |                      |                               |
|           |            | Practical VI                                |                      |                               |

EXAN CERNTER :- KOLHAPUR

|           |                      | Branch Code - APPLIED CHEMISTRY (A.F.)      |                     |                               |
|-----------|----------------------|---|---------------------|-------------------------------|
|           |                      | Course Part No. - M.Sc. Part No – 2 (Sem-4) |                     |                               |
| PAPER NO. | PAPER CODE           | PAPER NAME                                  | DAY & DATE          | PAPER TIME                    |
| XIII      | 46376                | Applied Inorganic Chemistry – II            | Friday-1.4.2016     | From 11.00 AM<br>To<br>2.00PM |
| XIV       | 46377                | Applied Organic Chemistry – II              | Tuesday 5.4.2016    |                               |
| XV        | 46378                | Advanced Organic Chemistry - II             | Saturday-9.4.2016   |                               |
| XVI       | 46379 / 46432, 58327 | \$ Inorganic Chemical Industries - II       | Wednesday 13.4.2016 |                               |
|           |                      | Practical VII                               |                     |                               |
|           |                      | Practical VIII                              |                     |                               |

**Note :- { \$ Common Paper with Industrial Chemistry**

16. INDUSTRIAL CHEMISTRY ( A.F.)

CENTER :- KOLHAPUR

|           |            | Branch Code - INDUSTRIAL CHEMISTRY (A.F.)   |                      |                               |
|-----------|------------|---|----------------------|-------------------------------|
|           |            | Course Part No. - M.Sc. Part No – 2 (Sem-3) |                      |                               |
| PAPER NO. | PAPER CODE | PAPER NAME                                  | DAY & DATE           | PAPER TIME                    |
| IX        | 56475      | Organic Chemical Industries – I             | Wednesday 30.3.2016  | From 3.00 PM<br>To<br>6.00 PM |
| X         | 56476      | Inorganic Chemical Industries – I           | Saturday 02.4.2016   |                               |
| XI        | 56477      | Methods of Analysis in Industries           | Wednesday-06.4-.2016 |                               |
| XII       | 56478      | Pollution Monitoring and Control- I         | Monday 11.4.2016     |                               |
|           |            | Practical V                                 |                      |                               |
|           |            | Practical VI                                |                      |                               |

|           |                   | Branch Code - INDUSTRIAL CHEMISTRY (A.F.)   |                     |                               |
|-----------|-------------------|---|---------------------|-------------------------------|
|           |                   | Course Part No. - M.Sc. Part No – 2 (Sem-4) |                     |                               |
| PAPER NO. | PAPER CODE        | PAPER NAME                                  | DAY & DATE          | PAPER TIME                    |
| XIII      | 58324             | Organic Chemical Industries – II            | Friday-1.4.2016     | From 11.00 AM<br>To<br>2.00PM |
| XIV       | 58325             | Pollution Monitoring and Control – II       | Tuesday 5.4.2016    |                               |
| XV        | 58326             | Selected Topics in Industrial Chemistry     | Saturday-9.4.2016   |                               |
| XVI       | 58327/46379/46432 | \$ Inorganic Chemical Industries - II       | Wednesday 13.4.2016 |                               |
|           |                   | Practical VII                               |                     |                               |
|           |                   | Practical VIII                              |                     |                               |

**Note :- { \$ Common Paper with Applied Chemistry }**

**18. MICROBIOLOGY ( A.F.)**

|                  |                         | <b>Branch Code - MICROBIOLOGY (A.F.)</b>        | <b>{ OLD }</b>        |                               |
|------------------|-------------------------|---|-----------------------|-------------------------------|
|                  |                         | <b>Course Part No. - M.Sc. Part – 2 (Sem-3)</b> |                       |                               |
| <b>PAPER NO.</b> | <b>PAPER CODE</b>       | <b>PAPER NAME</b>                               | <b>DAY &amp; DATE</b> | <b>PAPER TIME</b>             |
| <b>IX</b>        | 45149/45161/45143/45155 | * Genetic Engineering                           | Saturday<br>2.4.2016  | From 11.00 AM<br>To<br>2.00PM |
| <b>X</b>         | 45150/45163/45156/45146 | * Fermentation Technology – I                   | Wednesday<br>6.4.2016 |                               |
| <b>XI</b>        | 45158/45162             | \$ Immunology                                   | Monday -<br>18.4.2016 |                               |
| <b>XII</b>       | 45157                   | Microbial Diversity and<br>Extremophiles        | Monday-<br>4.4.2016   |                               |
|                  |                         | Laboratory Course V                             |                       |                               |
|                  |                         | Laboratory Course VI                            |                       |                               |

EXAM CENTER :- KOLHAPUR

**Note :- { Sem III - \* Common Paper with Biochemistry, Biotechnology, Env. Biotechnology }**

**{ Sem III - § Common Paper with Biotechnology }**

|                  |                       | <b>Branch Code - MICROBIOLOGY (A.F.)</b>        | <b>{ OLD }</b>          |                               |
|------------------|-----------------------|---|-------------------------|-------------------------------|
|                  |                       | <b>Course Part No. - M.Sc. Part – 2 (Sem-4)</b> |                         |                               |
| <b>PAPER NO.</b> | <b>PAPER CODE</b>     | <b>PAPER NAME</b>                               | <b>DAY &amp; DATE</b>   | <b>PAPER TIME</b>             |
| <b>XIII</b>      | 45375                 | Food and Dairy Microbiology                     | Sunday-10.4.2016        | From 11.00 AM<br>To<br>2.00PM |
| <b>XIV</b>       | 45376/45386/<br>45394 | * Bioinformatics                                | Wednesday-<br>20.4.2016 |                               |
| <b>XV</b>        | 45377/ 45395          | \$ Microbial Fermentation Technology            | Tuesday-<br>12.4.2016   |                               |
| <b>XVI</b>       | 45378                 | Medical Microbiology                            | Saturday-<br>16.4.2016  |                               |
|                  |                       | Laboratory Course VII                           |                         |                               |
|                  |                       | Laboratory Course VIII                          |                         |                               |

**Note :- { Sem IV - \* Common Paper with Biochemistry, Biotechnology }**

**{ Sem IV - § Common Paper with Biotechnology }**



19. BIOCHEMISTRY ( A.F.)

EXAM CENTER :- KOLHAPUR

|           |                         | Branch Code - BIOCHEMISTRY (A.F.)        |                    |                         |
|-----------|-------------------------|--|--------------------|-------------------------|
|           |                         | Course Part No. - M.Sc. Part – 2 (Sem-3) |                    |                         |
| PAPER NO. | PAPER CODE              | PAPER NAME                               | DAY & DATE         | PAPER TIME              |
| IX        | 45149/45161/45143/45155 | * Genetic Engineering                    | Saturday-2.4.2016  | From 11.00 AM To 2.00PM |
| X         | 45150/45163/45156/45146 | * Fermentation Technology- I             | Wednesday 6.4.2016 |                         |
| XI        | 45151/45144             | \$ Immunochemistry                       | Monday-18.4.2016   |                         |
| XII       | 45152                   | Biomembranes & Cytoskeleton              | Monday-4.4.2016    |                         |
|           |                         |  |                    |                         |

**Note :-** { Sem III - \* Common Paper with Biotechnology, Env. Biotechnology & Microbiology }

{ Sem III - \$ Common Paper with Env. Biotechnology }

|           |                   | Branch Code - BIOCHEMISTRY (A.F.)        |                      |                         |
|-----------|-------------------|--|----------------------|-------------------------|
|           |                   | Course Part No. - M.Sc. Part – 2 (Sem-4) |                      |                         |
| PAPER NO. | PAPER CODE        | PAPER NAME                               | DAY & DATE           | PAPER TIME              |
| XIII      | 45387 / 45401     | \$ Fermentation Technology – II          | Saturday - 16.4.2016 | From 11.00 AM To 2.00PM |
| XIV       | 45386/45376/45394 | * Bioinformatics                         | Wednesday 20.4.2016  |                         |
| XV        | 45383             | Neurochemistry                           | Sunday -10.4.2016    |                         |
| XVI       | 45384             | Carcinogenesis and Cell Signaling        | Tuesday-12.4.2016    |                         |

**Note :-** { Sem IV - \* Common Paper with Biotechnology Microbiology }

{ Sem IV - \$ Common Paper with Env. Biotechnology }

20. BIOTECHNOLOGY ( A.F.)

EXAM CENTER :- KOLHAPUR

|           |                         | Branch Code - BIOTECHNOLOGY (A.F.)          |                     |                         |
|-----------|-------------------------|---|---------------------|-------------------------|
|           |                         | Course Part No. - M.Sc. Part No – 2 (Sem-3) |                     |                         |
| PAPER NO. | PAPER CODE              | PAPER NAME                                  | DAY & DATE          | PAPER TIME              |
| IX        | 45149/45161/45143/45155 | * Genetics Engineering                      | Saturday 2.4.2016   | From 11.00AM To 2.00 PM |
| X         | 45150/45163/45156/45146 | * Fermentation Technology – I               | Wednesday- 6.4.2016 |                         |
| XI        | 45158/45162             | \$ Immunology                               | Monday 18.4.2016    |                         |
| XII       | 45164                   | Plant Biotechnology                         | Monday. 4.4.2016    |                         |

**Note :-** { Sem III - \* Common Paper with Biochemistry, Env. Biotechnology & Microbiology }

{ Sem III - \$ Common Paper with Microbiology }

|                  |                   | <b>Branch Code - BIOTECHNOLOGY (A.F.)</b>          |                         |                               |
|------------------|-------------------|--|-------------------------|-------------------------------|
|                  |                   | <b>Course Part No. - M.Sc. Part No – 2 (Sem-4)</b> |                         |                               |
| <b>PAPER NO.</b> | <b>PAPER CODE</b> | <b>PAPER NAME</b>                                  | <b>DAY &amp; DATE</b>   | <b>PAPER TIME</b>             |
| <b>XIII</b>      | 45392/ 46488      | ** Animal Cells in Biotechnology                   | Monday 21.3..2016       | From 11.00 AM<br>To<br>2.00PM |
| <b>XIV</b>       | 45394/45386/45376 | * Bioinformatics                                   | Wednesday<br>20.4.2016  |                               |
| <b>XV</b>        | 45395/45377       | \$ Microbial fermentation Technology               | Tuesday<br>12.4.2016    |                               |
| <b>XVI</b>       | 45393             | Industrial Organization and Management             | Wednesday-<br>20.4.2016 | From 03.00 PM<br>To<br>6.00PM |

**Note :- { Sem IV - \* Common Paper with Biochemistry & Microbiology( A.F.) }**

**{ Sem IV- \*\* Common Paper with Zoology ( A.F.) }**

**{ Sem IV - § Common Paper with Microbiology ( A.F.) }**

#### 21. ENVIRONMENTL BIOTECHNOLOGY ( A.F.)

EXAM CENTER :- KOLHAPUR

|                  |                         | <b>Branch Code - ENV. BIOTECHNOLOGY (A.F.)</b>  |                        |                              |
|------------------|-------------------------|---|------------------------|------------------------------|
|                  |                         | <b>Course Part No. - M.Sc. Part – 2 (Sem-3)</b> |                        |                              |
| <b>PAPER NO.</b> | <b>PAPER CODE</b>       | <b>PAPER NAME</b>                               | <b>DAY &amp; DATE</b>  | <b>PAPER TIME</b>            |
| <b>IX</b>        | 45149/45161/45143/45155 | * Genetic Engineering                           | Saturday-2.4.2016      | From11.00AM<br>To<br>2.00 PM |
| <b>X</b>         | 45150/45163/45156/45146 | * Fermentation Technology- I                    | Wednesday-<br>6.4.2016 |                              |
| <b>XI</b>        | 45151/45144             | \$ Immunochemistry                              | Monday-<br>18.4.2016   |                              |
| <b>XII</b>       | 45145                   | Basics of Ecology, Ecotoxicology & Ecochemistry | Monday-4.4.2016        |                              |

**Note :- { Sem III - \* Common Paper with Biochemistry, Biotechnology & Microbiology } { Sem III - § Common Paper with Biochemistry }**

|                  |                   | <b>Branch Code - ENV. BIOTECHNOLOGY (A.F.)</b>  |                         |                              |
|------------------|-------------------|---|-------------------------|------------------------------|
|                  |                   | <b>Course Part No. - M.Sc. Part – 2 (Sem-4)</b> |                         |                              |
| <b>PAPER NO.</b> | <b>PAPER CODE</b> | <b>PAPER NAME</b>                               | <b>DAY &amp; DATE</b>   | <b>PAPER TIME</b>            |
| <b>XIII</b>      | 45401/45387       | \$ Fermentation Technology-II                   | Saturday-<br>16.4.2016  | From11.00AM<br>To<br>2.00 PM |
| <b>XIV</b>       | 45398             | Environmental Pollution & Control               | Sunday 10.4.2016        |                              |
| <b>XV</b>        | 45399             | Environmental Biotechnology                     | Tuesday<br>12.4.2016    |                              |
| <b>XVI</b>       | 45400             | Biodiversity IPR, Biosafety, Biotechnology      | Wednesday-<br>20.4.2016 |                              |
|                  |                   |   |                         |                              |

**Note :- { Sem IV - § Common Paper with Biochemistry }**

## EXAM CENTER :- KOLHAPUR

|           |            | Branch Code - A.G.P.M. ( Agrochemical & Pest Management ) | { NEW }            |                         |
|-----------|------------|---|--------------------|-------------------------|
|           |            | Course Part No.- M.Sc. Part No – 2(Sem-3) (A.F.)          |                    |                         |
| PAPER NO. | PAPER CODE | PAPER NAME  | DAY & DATE         | PAPER TIME              |
| IX        | 55539      | Pesticide Residues and Toxicology                         | Friday-18.3.2016   | From 3.00 PM To 6.00 PM |
| X         | 55536      | Pest of Crop Plants & bear Control - I                    | Saturday-19.3.2016 |                         |
| XI        | 55537      | Analysis of Agrochemicals                                 | Monday-21.3.2016   |                         |
| XII       | 55538      | Diseases of Crop Plants – I                               | Tuesday-22.3.2016  |                         |

|           |            | Branch Code - A.G.P.M. ( Agrochemical & Pest Management ) | [ Up to Oct. 2015 ] |                         |
|-----------|------------|---|---------------------|-------------------------|
|           |            | Course Part No. - M.Sc. Part No – 2(Sem-4) (A.F.)         |                     |                         |
| PAPER NO. | PAPER CODE | PAPER NAME  | DAY & DATE          | PAPER TIME              |
| XIII      | 55542      | Agro Based Marketing Management                           | Monday 14.3.2016    | From 3.00 PM To 6.00 PM |
| XIV       | 55543      | Pests of Crop Plants – II                                 | Tuesday-15.3.2016   |                         |
| XV        | 55544      | Manufacture of Agrochemicals                              | Wednesday 16.3.2016 |                         |
| XVI       | 55545      | Diseases of Crop Plants and Their Control - II            | Thursday-17.3.2016  |                         |
|           | 55546      | Practical VII   |                     |                         |
|           | 55547      | Practical VIII  |                     |                         |

## 26. MASTER OF COMPUTER APPLICATION [ SCIENCE ] ( A.F.)

## EXAM CENTER :- KOLHAPUR

|           |            | Branch Code – MCA (A.F.)  |                     |                          |
|-----------|------------|---|---------------------|--------------------------|
|           |            | Course Part No. - M.Sc. Part No – 2 ( Sem- 3 )                  |                     |                          |
| PAPER NO. | PAPER CODE | PAPER NAME  | DAY & DATE          | PAPER TIME               |
| XI        | 48689      | Computer Communication Networks                                 | Monday-21.3.2016    | From 11.00 AM To 2.00 PM |
| XII       | 45105      | Object Oriented Technologies                                    | Wednesday-23.3.2016 |                          |
| XIII      | 48690      | Computer Oriented Numerical Methods and Optimization Techniques | Monday-28.3.2016    |                          |
| XIV       | 48691      | Advanced Computer Architecture                                  | Wednesday 30.3.2016 |                          |
| XV        | 45108      | Advanced Topics In Database Theory and Applications             | Friday-1.4.2016     |                          |

|           |            | Branch Code - MCA (A.F.)                       |                    |                         |
|-----------|------------|--|--------------------|-------------------------|
|           |            | Course Part No. - M.Sc. Part No – 2 ( Sem- 4 ) |                    |                         |
| PAPER NO. | PAPER CODE | PAPER NAME                                     | DAY & DATE         | PAPER TIME              |
| XVI       | 46236      | Distribution Operating System                  | Tuesday-22.3.2016  | From 3.00 PM To 6.00 PM |
| XVII      | 46237      | Visual Programming                             | Saturday-26.3.2016 |                         |
| XVIII     | 46238      | Java Programming                               | Tuesday-29.3.2016  |                         |
| XIX       | 46239      | Theory Of Computation                          | Thursday-31.3.2016 |                         |
| XX        | 46240      | Data Warehousing and Data Mining               | Saturday-2.4.2016  |                         |

26. MASTER OF COMPUTER APPLICATION [ SCIENCE ] ( A.F.)

EXAM CENTER :- KOLHAPUR

|                  |                   | <b>Branch Code - MCA (A.F.)</b>                       |                        |                             |  |
|------------------|-------------------|---|------------------------|-----------------------------|--|
|                  |                   | <b>Course Part No. - M.Sc. Part No – 3 ( Sem- 5 )</b> |                        |                             |  |
| <b>PAPER NO.</b> | <b>PAPER CODE</b> | <b>PAPER NAME</b>                                     | <b>DAY &amp; DATE</b>  | <b>PAPER TIME</b>           |  |
| XXI              | 47600             | Artificial Intelligence                               | Monday-<br>4.4.2016    | From 11.00<br>AM To 2.00 PM |  |
| XXII             | 47601             | Parallel Computing                                    | Tuesday-<br>5.4.2016   |                             |  |
| XXIII            | 47602             | Principles of Compiler Construction                   | Wednesday-<br>6.4.2016 |                             |  |
| XXIV             | 47603             | Advanced Java Programming                             | Thursday-<br>7.4.2016  |                             |  |
| XXV              | 47606             | Dot Net   | Saturday-<br>9.4.2016  |                             |  |

|                  |                   | <b>Branch Code - MASTER OF COMPUTE APPLICATION [MCA] (A.F.)</b> |                       |                   |  |
|------------------|-------------------|---|-----------------------|-------------------|--|
|                  |                   | <b>Course Part No. - M.Sc. Part No – 3 ( Sem- 6 )</b>           |                       |                   |  |
| <b>PAPER NO.</b> | <b>PAPER CODE</b> | <b>PAPER NAME</b>   | <b>DAY &amp; DATE</b> | <b>PAPER TIME</b> |  |
|                  | 49611             | PROJECT & VIVA  |                       | Internal Exam     |  |
|                  |                   |   |                       |                   |  |