



SHIVAJI UNIVERSITY, KOLHAPUR
M.Phil. / Pre.Ph.D. Examination to held in Jun. 2019.
Circular No. 306 Exam

THE FINAL PROGRAMME

Final Programme of the M.Phil. / **Pre.Ph.D.** Examination to held in **Jun. 2019.**

1. Students should see their Seat No. and Name in the Name list and mistakes if any should be communicated to this office immediately. All candidates are requested to confirm their Examination Seat No. as well as place of examination on the Notice Board of the University /College mentioned below at least Two days before the date of Examination. The candidate should write correct Seat No. on each answer book. If candidate writes, wrong, Seat No. on answer book the performance of such subject will not be considered.
2. Candidates are requested to be present at their respective places of Examination **FIFTEEN MINUTES** before the time of starting of the first paper and **TEN MINUTES** before the time of starting of each subsequent paper. Candidates are forbidden to take any book or paper into the Examination Hall.
3. **The Examination Centre:** 1) Humanities Building, Shivaji University, Kolhapur,
2) Concern University Department
3) Department of Technology Shivaji University, Kolhapur.
4. The written examination will be conducted in the following order

M.Phil. / Pre.Ph.D. New Syllabus

| M. Phil. / Pre. Ph. D. New Syllabus Paper | | | | | |
|---|---|----------|---|------------------------|---------|
| Faculty Of Humanities | | | | | |
| Time – 11.00a.m to 2.00p.m | | | | | |
| SR NO | SUBJECT | PAPER NO | PAPER NAME | DAY&DATE | CODE NO |
| | 1) Paper I-Research Methodology(Theory) (Marathi) | | | Tuesday 25/06/2019 | 65146 |
| | Marathi(Revised) | 2) | साहित्य आणि इतर सामाजिक भास्त्रे | Thursday 27/06/2019 | 65147 |
| | | 3A) | मध्ययुगीन साहित्य : प्रेरणा आणि स्वरूप | Saturday 29/06/2019 | 65148 |
| | | 3 B) | एकोणिसावे भातक:समाज,संस्कृती आणि साहित्य :प्रेरणा आणि स्तित्यंतरे | | 65149 |
| | | 3 C) | आधुनिक साहित्य : प्रेरणा आणि स्वरूप | | 65150 |
| 1 | 1) Paper I-Research Methodology (Theory) (Marathi) | | | Tuesday 25/06/2019 | 54420 |
| | Marathi | 2) | साहित्याभ्यासातील आधुनिक प्रवाह | Thursday 27/06/2019 | 54864 |
| | | 3 A) | प्राचीन मराठी साहित्य : प्रेरणा व स्वरूप | Saturday 29/06/2019 | 54421 |
| | | 3 B) | स्वातंत्र्यपूर्व मराठी साहित्य : प्रेरणा व स्वरूप | | 54422 |
| | | 3 C) | स्वातंत्र्यानंतरचे मराठी साहित्य : प्रेरणा व स्वरूप | | 54423 |

| | | | | | |
|---|---|------|---|------------------------|-------|
| 2 | 1) Common Paper I-Research Methodology (Theory) (English, Sanskrit and Urdu) | | | Tuesday 25/06/2019 | 54420 |
| | Hindi | 2 | हिंदी साहित्य अध्ययन के अधुनातन आयाम | Thursday 27/06/2019 | 54424 |
| | | 3 A) | प्राचीन एवं मध्ययुगीन काव्य | Saturday 29/06/2019 | 54425 |
| | | 3 B) | आधुनिक हिंदी कविता | | 54426 |
| | | 3 C) | राजभाषा हिंदी | | 54427 |
| | | 3 D) | उपन्यास विधा | | 54428 |
| | | 3 E) | कहानी विधा | | 54429 |
| | | 3 F) | नाटक विधा | | 54430 |
| | | 3 G) | कथेतर साहित्य | | 54431 |
| 3 | English | 2 | Recent Trends in English Studies | Thursday 27/06/2019 | 54432 |
| | | 3 A) | Modern British Literature (1900-2000) | Saturday 29/06/2019 | 54433 |
| | | 3 B) | Modern American Literature (1900-2000) | | 54434 |
| | | 3 C) | Applied Linguistics and Second Language Teaching | | 54435 |
| | | 3 D) | New Literatures in English | | 54436 |
| 4 | Sanskrit | 2 | संस्कृत अध्ययनातील आधुनिक प्रवाह | Thursday 27/06/2019 | 54437 |
| | | 3 A) | संस्कृत साहित्याचा इतिहास (वैदिक काल) | Saturday 29/06/2019 | 54438 |
| | | 3 B) | संस्कृत साहित्याचा इतिहास (अभिजात वाङ्मय) | | 54439 |
| | | 3 C) | अर्वाचीन संस्कृत साहित्य (इ. स.17 व्या शतकापासून पुढे) | | 54440 |
| | | 3 D) | संस्कृतातील ज्ञानविज्ञान व तंत्रशास्त्र | | 54441 |
| 5 | Urdu | 2 | Recent Trends in Urdu - Urdu ke Asari Rujhanat | Thursday 27/06/2019 | 54442 |
| | | 3 A) | URDU FICTION. | Saturday 29/06/2019 | 54443 |
| | | 3 B) | URDU GHAIK AFSANAVI ADAB. | | 54444 |
| | | 3 C) | JADEED URDU SHAIERY. | | 54445 |
| 6 | Music (Faculty of Inter-Disciplinary Studies) | 1 | संशोधन पध्दती (Research Methdology) | Tuesday 25/06/2019 | 54446 |
| | | 2 | संगीत व इतर विद्याशाखा परस्परसंबंध (Interdisciplinary Subjects) | Thursday 27/06/2019 | 54447 |
| | | 3 | बुजुर्ग कलाकारांचा अभ्यास – गायक किंवा वादक | Saturday 29/06/2019 | 54448 |
| 7 | Dramatics (Faculty of Inter-Disciplinary Studies) | 1 | संशोधन पध्दती (Research Methdology) | Tuesday 25/06/2019 | 54449 |
| | | 2 | नाटयशास्त्र वा इतर विद्याशाखा परस्पर संबंध | Thursday 27/06/2019 | 54450 |
| | | 3 A) | दिग्दर्शन | Saturday 29/06/2019 | 61738 |
| | | 3 B) | अभिनय | | 61739 |

M. Phil. / Pre. Ph. D. New Syllabus Paper

Faculty of Humanities

Time – 11.00a.m to 2.00p.m

| SR. NO. | SUBJECT | PAPER NO. | PAPER NAME | DATE | CODE NO. |
|---------|--------------------|-----------|--|------------------------|----------|
| | | 1 | Research Methodology Quantitative Techniques, and Computer Application. Compulsory Paper - COMMON SYLLABUS FOR Faculty of Humanities, Faculty of commerce and management and Faculty of Inter-Disciplinary Studies (ECONOMICS, SOCIOLOGY, POLITICAL SCIENCE, JOURNALISM, MASS COMMUNICATION), COMMERCE AND MANAGEMENT, EDUCATION, LAW, AND WOMEN STUDIES | Tuesday 25/06/2019 | 54454 |
| 9 | Economics | 2 | ADVANCED THEORIES IN ECONOMICS | Thursday 27/06/2019 | 54455 |
| | | 3 A) | ECONOMICS OF AGRICULTURE AND CO-OPERATION | Saturday 29/06/2019 | 54456 |
| | | 3 B) | DEMOGRAPHY AND GENDER STUDIES | | 54457 |
| | | 3 C) | ENVIRONMENTAL AND RESOURCE ECONOMICS | | 54458 |
| | | 3 D) | ECONOMICS OF INDUSTRY & LABOUR | | 54459 |
| | | 3 E) | INTERNATIONAL TRADE AND FINANCE | | 54460 |
| | | 3 F) | ECONOMICS OF MONEY, BANKING AND FINANCIAL INSTITUTIONS | | 54461 |
| | | 3 G) | PUBLIC ECONOMICS | | 54462 |
| 3 H) | REGIONAL ECONOMICS | 54463 | | | |
| 10 | History | 2 | Recent Trends in History | Thursday 27/06/2019 | 54464 |
| | | 3 A) | Ancient Indian History Up to 1000 A.D. | Saturday 29/06/2019 | 54465 |
| | | 3 B) | Medieval India 1000 A.D.-1757A.D. | | 54466 |
| | | 3 C) | Maratha History | | 54467 |
| | | 3 D) | Modern India | | 54468 |
| 11 | Political Science | 2 | Recent Trends in Political Science | Thursday 27/06/2019 | 54469 |
| | | 3 A) | Studies in Indian Politics | Saturday 29/06/2019 | 54470 |
| | | 3 B) | Advances in Public Administration | 54471 | |
| | | 3 C) | Modern Political Analysis | 54472 | |
| 12 | Sociology | 2 | RECENT TRENDS IN SOCIOLOGICAL THEORY | Thursday 27/06/2019 | 54473 |
| | | 3 A) | INDUSTRY AND SOCIETY | Saturday 29/06/2019 | 54474 |
| | | 3 B) | INDIAN SOCIETY : POVERTY AND SOCIAL INEQUALITIES | | 54475 |
| | | 3 C) | ENVIRONMENTAL SOCIOLOGY | | 54476 |
| | | 3 D) | SOCIOLOGY OF MASS COMMUNICATION AND INFORMATION SOCIETY | | 54477 |
| | | 3 E) | SOCIAL DEMOGRAPHY | | 54478 |
| | | 3 F) | SOCIOLOGY OF MIGRATION | | 54479 |
| | | 3 G) | SOCIAL MOVEMENT IN INDIA | | 54480 |
| 3 H) | GENDER AND SOCIETY | 54481 | | | |

| | | | | | |
|----|---|------|--|------------------------|-------|
| 13 | Psychology | 2 | Recent Trends in Psychology | Thursday 27/06/2019 | 54482 |
| | | 3 A | COUNSELLING PSYCHOLOGY | Saturday 29/06/2019 | 54483 |
| | | 3 B | CLINICAL PSYCHOLOGY | | 54484 |
| | | 3 C | INDUSTRIAL PSYCHOLOGY | | 54485 |
| 14 | Social Work (Faculty of Inter-Disciplinary Studies) | 2 | PRINCIPLES AND PRACTICE OF SOCIAL WORK | Thursday 27/06/2019 | 54486 |
| | | 3 A) | HUMAN RESOURCE MANAGEMENT AND LABOUR WELFARE | Saturday 29/06/2019 | 54487 |
| | | 3 B) | COMMUNITY DEVELOPMENT | | 54488 |
| | | 3 C) | MEDICAL AND PSYCHIATRIC SOCIAL WORK | | 54489 |
| | | 3 D) | FAMILY AND CHILD WELFARE | | 54490 |
| | | 3 E) | CRIMINOLOGY AND CORRECTIONAL ADMINISTRATION | | 54491 |
| 15 | Philosophy | 2 | Recent Trends in Philosophy | Thursday 27/06/2019 | 54492 |
| | | 3 A) | Modern Topics in Philosophy | Saturday 29/06/2019 | 54493 |
| | | 3 B) | Advanced Development in Philosophy | | 54494 |
| | | 3 C) | Anasakti Yoga : By M. K. Gandhi | | 54495 |
| 16 | Library & Information Science (Faculty of Inter-Disciplinary Studies) | 2 | RECENT TRENDS IN LIBRARY AND INFORMATION SCIENCE | Thursday 27/06/2019 | 54496 |
| | | 3 A) | MANAGEMENT OF ACADAMEC LIBRARY SYSTEM | Saturday 29/06/2019 | 54497 |
| | | 3 B) | MANAGEMENT OF SPECIAL LIBRARY SYSTEM. | | 54498 |
| | | 3 C) | MANAGEMENT OF PUBLIC LIBRARY SYSTEM | | 54499 |
| 17 | Mass Communication (Faculty of Inter-Disciplinary Studies) | 2 | Mass Communication Theory | Thursday 27/06/2019 | 54500 |
| | | 3 | Advances in Media Studies | Saturday 29/06/2019 | 54501 |
| 18 | Commerce & Management (Faculty of Commerce & Management) | 2 A) | RECENT TRENDS IN COMMERCE & MANAGEMENT | Thursday 27/06/2019 | 54502 |
| | | 2 B) | Recent Trends in Information Technology | | 54503 |
| | | 3 A) | Marketing Management | Saturday 29/06/2019 | 54504 |
| | | 3 B) | Financial Management | | 54505 |
| | | 3 C) | Human Resource Management | | 54506 |
| | | 3 D) | Cooperative Management | | 54507 |
| | | 3 E) | Industrial Structure of India | | 54508 |
| | | 3 F) | Indian Economic Environment | | 54509 |
| | | 3 G) | Applied Statistics and Quantitative Techniques | | 54510 |
| | | 3 H) | Taxation of India | | 54511 |
| | | 3 I) | Management Accounting | | 54512 |
| | | 3 J) | Advanced Cost Accountancy | | 54513 |
| | | 3 K) | Business Administration | | 54514 |
| | | 3 L) | Organization of Trade and Logistic Management | | 54515 |
| | | 3 M) | International Business | | 54516 |
| | | 3 N) | System Management | | 54517 |
| | | 3 O) | Strategic Management | | 54518 |
| | | 3 P) | Computer Application | | 61749 |

| | | | | | |
|----|-----|---|----------------------|------------------------|-------|
| 19 | Law | 2 | Recent Trends in Law | Thursday 27/06/2019 | 54519 |
| | | 3 | The General Laws | Saturday 29/06/2019 | 71106 |

| M. Phil. / Pre. Ph. D. New Syllabus Paper | | | | | |
|--|------------------------------------|------|--|------------------------|-----------------------|
| Faculty of Inter- Disciplinary Studies | | | | | |
| Time – 11.00a.m to 2.00p.m | | | | | |
| 20 | Education | 2 | RECENT TRENDS AND ADVANCES IN EDUCATION | Thursday 27/06/2019 | 54520 |
| | | 3 A) | Special Field in Education: Educational Management | Saturday 29/06/2019 | 54521 |
| | | 3 B) | Special Field in Education: Educational Psychology | | 54522 |
| | | 3 C) | Special Field in Education : Environmental Education | | 54523 |
| | | 3 D) | Special Field in Education : Information Technology and Educational Technology | | 54524 |
| | | 3 E) | Special Fields in Education : Teacher Education | | 54525 |
| 21 | Physical Education | 1 | Research In Physical Education & Sports | | Tuesday 25/06/2019 |
| | | 2 | Recent Trends in Physical Education and Sports | Thursday 27/06/2019 | 54527 |
| | | 3 A) | Sports Medicine | Saturday 29/06/2019 | 54528 |
| | | 3 B) | Sports Physiology | | 54529 |
| | | 3 C) | Psychology of Sports | | 54530 |
| | | 3 D) | Yoga and Sports Science | | 54531 |
| | | 3 E) | Scientific Approach to Techniques in Advance coaching and Training | | 54532 |
| | | 3 F) | Tests, Measurement and Evaluation in Physical Education and sports sciences | | 54533 |
| 22 | Journalism & Communication Science | 1 | Research Methodology | Tuesday 25/06/2019 | 58380 |
| | | 2 | Advances in Communication and Mass Communication Theories | Thursday 27/06/2019 | 58381 |
| | | 3 A) | Development Communication | Saturday 29/06/2019 | 58382 |
| | | 3 B) | Print Media | | 58383 |
| | | 3 C) | Electronic Media (Radio & Television) | | 58384 |
| | | 3 D) | Film Studies | | 58385 |
| | | 3 E) | Public relations and advertising | | 58386 |
| | | 3 F) | ICT (Information & Communication Technology) and New Media | | 58387 |

M. Phil. / Pre. Ph. D. New Syllabus Paper

Faculty of Science and Technology

Time – 11.00a.m to 2.00p.m

| SR. NO. | SUBJECT | PAPER NO. | PAPER NAME | DATE | CODE NO. |
|---------|----------------------|-----------|---|------------------------|----------|
| 23 | AGPM | 1 | Research Methodology in Agrochemicals and Pest Management | Tuesday 25/06/2019 | 54534 |
| | | 2 | Recent Trends in Agrochemicals and Pest Management | Thursday 27/06/2019 | 54535 |
| | | 3 A) | Recent advances in Agro chemistry. | Saturday 29/06/2019 | 54536 |
| | | 3 B) | Recent Advances in Pest Management | | 54537 |
| | | 3 C) | Recent Advances in plant protection. | | 54538 |
| 24 | Botany | 1 | Research Methodology in Botany | Tuesday 25/06/2019 | 54539 |
| | | 2 | Recent Trends in Botany | Thursday 27/06/2019 | 54540 |
| | | 3 A) | Recent Advances in Plant Physiology | Saturday 29/06/2019 | 54541 |
| | | 3 B) | Recent Advances in Mycology and Plant Pathology | | 54542 |
| | | 3 C) | A Recent Advances in plant Protection | | 54543 |
| | | 3 D) | TAXONOMY, BIODIVERSITY AND CONSERVATION | | 54544 |
| | | 3 E) | Recent Advance in Plant Ecology | | 54545 |
| | | 3 F) | RECENT ADVANCES IN MARINE BOTANY | | 54546 |
| | | 3 G) | Recent Trends in Biotechnology | | 54547 |
| | | 3 H) | Recent Advances in Bryology and Pteridology | | 58352 |
| | | 3 I) | Cytogenetics and Plant Breeding | | 65198 |
| | | 3J) | Recent Advances in Phycology | | 65758 |
| 25 | Food- Science | 1 | Research methodology and scientific report writing | Tuesday 25/06/2019 | 54658 |
| | | 2 | Recent trends in food processing and preservation | Thursday 27/06/2019 | 54659 |
| | | 3 A) | Advances in Food Science and Nutrition | Saturday 29/06/2019 | 54660 |
| | | 3 B) | Advances in Food Bio-technology | | 54661 |
| 26 | Chemistry | 1 | Research Methodology and Computer Applications in Chemistry | Tuesday 25/06/2019 | 54548 |
| | | 2 | Recent Trends in Chemistry | Thursday 27/06/2019 | 54549 |
| | | 3 A) | Selected Topics in Organic Chemistry | Saturday 29/06/2019 | 54550 |
| | | 3 B) | Selected Topics in Inorganic Chemistry | | 54551 |
| | | 3 C) | Selected Topics in Physical Chemistry | | 54552 |
| 27 | Geology | 1 | Research methodology | Tuesday 25/06/2019 | 54553 |
| | | 2 | Recent trends in Geology | Thursday 27/06/2019 | 54554 |
| | | 3 A) | Prospecting and Utilization of Groundwater Resources | Saturday 29/06/2019 | 54555 |
| | | 3 B) | Environmental Pollution and Management | | 54556 |
| | | 3 C) | Sedimentary Environments | | 54557 |
| | | 3 D) | Deccan basalts | | 54558 |

| | | | | | |
|-----|--|-------|--|------------------------|-------|
| 28 | Mathematics | 1 | Research Methodology | Tuesday 25/06/2019 | 71655 |
| | | 2 A) | Recent Trends in Mathematics | Thursday 27/06/2019 | 71656 |
| | | 3 A) | Theory of Fractional Dynamic Systems | Saturday 29/06/2019 | 71657 |
| | | 3 B) | Differential and Integral Inequalities | | 71658 |
| | | 3 C) | Delay Differential Equations | | 71659 |
| | | 3 D) | Iterative Methods | | 71660 |
| | | 3 E) | Atomistic and Multiplicative Lattices | | 71661 |
| | | 3 F) | Generalized Integral Transformations | | 71662 |
| | | 3 G) | Trellis Theory | | 71663 |
| | | 3 H) | Commutative Algebra | | 71664 |
| | | 3 I) | Theory of Near Rings | | 71665 |
| | | 3 J) | Topics in General Relativity | | 71666 |
| | | 3 K) | Theory of Choice | | 71667 |
| | | 3 L) | Theory of Fuzzy Computation | | 71668 |
| | | 3 M) | Lattices Theory | | 71669 |
| | | 3 N) | Topics in Geometric Function Theory | | 71670 |
| | | 3 O) | Fluid Dynamics | | 71671 |
| | | 3P) | Fuzzy Measures and Integrals | | 71672 |
| | | 3Q) | Numerical Analysis III | | 71673 |
| | | 3R) | Group Analysis of Differential Equations | | 71674 |
| 3S) | Mathematical Modeling | 71675 | | | |
| 29 | Home Science (Faculty of Inter-Disciplinary Studies) | 1 | Research Methodology | Tuesday 25/06/2019 | 54833 |
| | | 2 | Recent Trends in Home Science | Thursday 27/06/2019 | 54834 |
| | | 3 A) | Thrust areas for Research in Food and Nutrition | Saturday 29/06/2019 | 54835 |
| | | 3 B) | Trust Areas for Research in Family Resource Management | | 54836 |
| | | 3 C) | Trust Areas for Research in Human Development | | 54837 |
| | | 3 D) | Trust Areas for Research in Textile and Clothing | | 54838 |
| | | 3 E) | Trust Areas for Research in Home Science Extension Education | | 54839 |
| 30 | Statistics | 1 | Research Methodology | Tuesday 25/06/2019 | 54559 |
| | | 2 | Recent Trends in Statistics | Thursday 27/06/2019 | 54560 |
| | | 3 A) | Topics in Statistics - Statistical Analysis of Circular Data. | Saturday 29/06/2019 | 54561 |
| | | 3 B) | Topics in Statistics - Topic in Asymptotic Inference. | | 54562 |
| | | 3 C) | Topics in Statistics - Topic in Distribution Theory. | | 54563 |
| | | 3 D) | Topics in Statistics - Applied Regression Analysis. | | 54564 |
| | | 3 E) | Topics in Statistics - Topic in Discrete Multivariate Analysis. | | 54565 |
| | | 3 F) | Topics in Statistics - Advanced Topics in Sampling Theory. | | 54566 |
| | | 3 G) | Topics in Statistics - Advanced Design of Experiments | | 54567 |
| | | 3 H) | Topics in Statistics - Topic in Reliability Analysis | | 54568 |
| | | 3 I) | Topics in Statistics - Statistical Quality Control. | | 54569 |
| | | 3 J) | Topics in Statistics - Advanced Inference. | | 54570 |
| | | 3 K) | Topics in Statistics - Reliability Theory and Survival Analysis. | | 54571 |

| | | | | | |
|------|---|-------|--|------------------------|-------|
| 31 | Zoology | 1 | Research Methodology in Zoology | Tuesday 25/06/2019 | 54572 |
| | | 2 | Research Advances in Zoology | Thursday 27/06/2019 | 54573 |
| | | 3 A) | ADVANCES IN PEST MANAGEMENT | Saturday 29/06/2019 | 54574 |
| | | 3 B) | BIOLOGICAL INSECT PEST CONTROL | | 54575 |
| | | 3 C) | INSECT PARASITOIDS | | 54576 |
| | | 3 D) | Biopesticides | | 54577 |
| | | 3 E) | BIODIVERSITY | | 54578 |
| | | 3 F) | EXERCISE AND OCCUPATIONAL PHYSIOLOGY | | 54579 |
| | | 3 G) | PHYSIOLOGY OF REPRODUCTION | | 54580 |
| | | 3 H) | Toxicology | | 54581 |
| | | 3 I) | Biology of Aging | | 54582 |
| | | 3 J) | Secretory Cells | | 54583 |
| | | 3 K) | Cell Biology | | 54584 |
| | | 3 L) | Advances in Fisheries and Aquaculture | | 54585 |
| | | 3 M) | Fish Physiology | | 54586 |
| | | 3 N) | Environmental Biology | | 54587 |
| 3 O) | Trends in sericulture | 54588 | | | |
| 32 | Environmental Science | 1 | RESEARCH METHODOLOGY | Tuesday 25/06/2019 | 54589 |
| | | 2 | RECENT ADVANCE IN ENVIRONMENTAL SCIENCE | Thursday 27/06/2019 | 54590 |
| | | 3 A) | BIODIVERSITY AND CONSERVATION | Saturday 29/06/2019 | 54591 |
| | | 3 B) | WILD LIFE STUDIES | | 54592 |
| | | 3 C) | ECO - PHYSIOLOGY AND BIOMONITORING | | 54593 |
| | | 3 D) | ECOTOXICOLOGY | | 54594 |
| | | 3 E) | ENVIRONMENT AND HEALTH | | 54595 |
| | | 3 F) | ENVIRONMENTAL MANAGEMENT | | 54596 |
| | | 3 G) | INDUSTRIAL POLLUTION | | 54597 |
| 3 H) | ENVIRONMENTAL MUTAGENESIS AND CARCINOGENESIS | 54598 | | | |
| 33 | Electronics | 1 | Research Methodology and Computer Application | Tuesday 25/06/2019 | 63191 |
| | | 2 | Recent Trends in Electronics | Thursday 27/06/2019 | 63192 |
| | | 3 A) | Digital Image Processing | Saturday 29/06/2019 | 63193 |
| | | 3 B) | Antenna Design and Measurements | | 63194 |
| | | 3 C) | Wireless Sensor Networks | | 63195 |
| | | 3 D) | Biomedical Engineering | | 63196 |
| | | 3 E) | Modern Communication System | | 63197 |
| | | 3F) | Advances in Power Electronics | | 63198 |
| | | 3G) | Advances In Embedded Systems and VLSI Design | | 63199 |
| 3H) | Problem Solving With Soft Computing | 63200 | | | |

| | | | | | |
|------|--|-------|---|------------------------|-------|
| 34 | Geography | 1 | RESEARCH METHODOLOGY, QUANTITATIVE TECHNIQUES, COMPUTER APPLICATION | Tuesday 25/06/2019 | 54605 |
| | | 2 | RECENT TRENDS IN GEOGRAPHY | Thursday 27/06/2019 | 54606 |
| | | 3 A) | Recent Trends in Agricultural Geography | Saturday 29/06/2019 | 54607 |
| | | 3 B) | Recent Trends in Economic Geography | | 54608 |
| | | 3 C) | Recent Trends in Settlement Geography | | 54609 |
| | | 3 D) | Recent Trends in Population Geography | | 54610 |
| | | 3 E) | Recent Trends in Tourism Geography | | 54611 |
| | | 3 F) | Recent Trends in Medical Geography | | 54612 |
| | | 3 G) | Recent Trends in physical Geography | | 54613 |
| 35 | Microbiology | 1 | Research Methodology | Tuesday 25/06/2019 | 54614 |
| | | 2 | Recent Trends in Biological Sciences | Thursday 27/06/2019 | 54615 |
| | | 3 A) | Bioinformatics | Saturday 29/06/2019 | 54616 |
| | | 3 B) | Bioremediation and Waste Water Treatment Technologies. | | 54617 |
| | | 3 C) | Advanced Techniques in Cell Culture | | 54618 |
| | | 3 D) | Agricultural Microbiology and Microbial Ecology | | 54619 |
| | | 3 E) | Applied and Environmental Microbiology | | 54620 |
| | | 3 F) | Immunology and Medical Microbiology | | 54621 |
| | | 3 G) | Fermentation Technology | | 54622 |
| 3 H) | Clinical Biochemistry | 54623 | | | |
| 36 | Bio-chemistry | 1 | Research Methodology | Tuesday 25/06/2019 | 54624 |
| | | 2 | Recent Trends in Biological Sciences | Thursday 27/06/2019 | 54625 |
| | | 3 A) | Bioinformatics | Saturday 29/06/2019 | 54626 |
| | | 3 B) | Bioremediation and Waste Water Treatment Technologies. | | 54627 |
| | | 3 C) | Advanced Techniques in Cell Culture | | 54628 |
| | | 3 D) | Agricultural Microbiology and Microbial Ecology | | 54629 |
| | | 3 E) | Applied and Environmental Microbiology | | 54630 |
| | | 3 F) | Immunology and Medical Microbiology | | 54631 |
| | | 3 G) | Fermentation Technology | | 54632 |
| 3 H) | Clinical Biochemistry | 54633 | | | |
| 37 | Biotechnology & Environmental Biotechnology | 1 | Research Methodology | Tuesday 25/06/2019 | 54648 |
| | | 2 | Recent Trends in Biological Sciences | Thursday 27/06/2019 | 54649 |
| | | 3 A) | Bioinformatics | Saturday 29/06/2019 | 54650 |
| | | 3 B) | Bioremediation and Waste Water Treatment Technologies. | | 54651 |
| | | 3 C) | Advanced Techniques in Cell Culture | | 54652 |
| | | 3 D) | Agricultural Microbiology and Microbial Ecology | | 54653 |
| | | 3 E) | Applied and Environmental Microbiology | | 54654 |
| | | 3 F) | Immunology and Medical Microbiology | | 54655 |
| | | 3 G) | Fermentation Technology | | 54656 |
| 3 H) | Clinical Biochemistry | 54657 | | | |

| | | | | | |
|------|-----------------------------|-------|--|------------------------|-------|
| 38 | Computer Science | 1 | Research Methodology | Tuesday 25/06/2019 | 54634 |
| | | 2 | Recent Trends in Computer Science | Thursday 27/06/2019 | 54635 |
| | | 3 A) | Research Trends In Computer Science | Saturday 29/06/2019 | 54636 |
| 39 | Physics | 1 | Research Methodology and Computer Applications in Physical And Chemical Sciences | Tuesday 25/06/2019 | 54637 |
| | | 2 | Frontiers in Physics | Thursday 27/06/2019 | 54638 |
| | | 3 A) | SOL GEL PROCESSING IN SOLID STATE MATERIALS | Saturday 29/06/2019 | 54639 |
| | | 3 B) | Deposition of films and their applications | | 54640 |
| | | 3 C) | Fuel Cell Technology | | 54641 |
| | | 3 D) | Holography and its Applications | | 54642 |
| | | 3 E) | THICK AND THIN FILM MICROSTRIP COMPONENT TECHNOLOGY | | 54643 |
| | | 3 F) | Photo catalysis | | 54644 |
| | | 3 G) | Solar cell: Fundamentals and Applied aspects | | 54645 |
| | | 3 H) | Vacuum techniques and Thin films. | | 54646 |
| 3 J) | Space Science and Astronomy | 58733 | | | |

M. Phil. / Pre. Ph. D. New Syllabus Paper

Faculty of Science and Technology

Time – 11.00a.m to 2.00p.m

| SR. NO. | SUBJECT | PAPER NO. | PAPER NAME | DATE | CODE NO. |
|---------|--|-----------|---|------------------------|----------|
| 40 | Pharmacy | 1 | RESEARCH METHODOLOGY (Common for Engineering / Technology / Pharmacy) | Tuesday 25/06/2019 | 54662 |
| | | 2 A) | Advances in Pharmaceutical Sciences (Pharmacological Screening and Assays) | Thursday 27/06/2019 | 54663 |
| | | 2 B) | Advances in Pharmaceutical Sciences (Separation Techniques) | | 54664 |
| | | 2 C) | Advances in Pharmaceutical Sciences (Molecular modelling) | | 54665 |
| | | 2 D) | Advances in Pharmaceutical Sciences (Isolation And Characterization Of Phytoconstituents) | | 54666 |
| | | 2 E) | Advances in Pharmaceutical Sciences (Optimization Technology) | | 54667 |
| | | 2 F) | Advances in Pharmaceutical Sciences (Biopharmaceuticals) | | 54668 |
| | | 3 A) | Open elective (Polymorphs And Salts In The Pharmaceutical Industry) | Saturday 29/06/2019 | 54669 |
| | | 3 B) | Open elective (Chemotherapy of Parasitic and Microbial Infections) | | 54670 |
| | | 3 C) | Open elective (Synthetic strategies in synthesis of complex organic molecules) | | 54671 |
| | | 3 D) | Open elective (Clinical Research) | | 54672 |
| | | 3 E) | Open elective (Spectral Analysis) | | 54673 |
| | | 3 F) | Open elective (Drug Regulatory affairs) | | 54674 |
| | | 3 G) | Open elective (Quality Assurance & Quality Control) | | 54675 |
| | | 3 H) | Open elective (Process Analytical Technology) | | 54676 |
| 3 I) | Open elective (Industrial Pharmacognosy) | 54677 | | | |

Faculty of Science and Technology

| | | | | | |
|------|--|-------|--|------------------------|-------|
| 41 | Biotechnology Engineering | 2 | ADVANCES IN BIOTECHNOLOGY ENGINEERING | Thursday 27/06/2019 | 54678 |
| | | 3 A | Advanced Transport Phenomena | Saturday 29/06/2019 | 54679 |
| | | 3 B) | Bioprocess modeling and simulations | | 54680 |
| | | 3 C) | FOOD BIOTECHNOLOGY | | 54681 |
| 42 | Civil Engineering | 2 A) | Advances in Structural Engineering | Thursday 27/06/2019 | 54682 |
| | | 2 B) | Advances in Environmental Engineering | | 54683 |
| | | 2 C) | Advances in Geotechnical Engineering | | 54684 |
| | | 2 D) | Advances in Water Recourse Engineering | | 54685 |
| | | 2 E) | Advances in Construction & Management | | 54686 |
| | | 2 F) | Advances in Transportation Engineering | | 54687 |
| | | 2 G) | Advances in Town & country planning | | 54688 |
| | | 3 A) | New Construction Materials | Saturday 29/06/2019 | 54689 |
| | | 3 B) | Project Risk Analysis and Mitigation Techniques | | 54690 |
| | | 3 C) | Soil Structure Interaction | | 54691 |
| | | 3 D) | Geotechnical Earthquake Engineering | | 54692 |
| | | 3 E) | Systems Techniques in water Resource Engineering | | 54693 |
| | | 3 F) | Design of Composite Construction | | 54694 |
| 3 G) | Non-linear Analysis of Structures | 54695 | | | |
| 3 H) | Project economics & financial management | 54696 | | | |
| 3 I) | Environmental Auditing & EMS | 54697 | | | |
| 43 | Computer Sci. Eng. | 2 | Advances in Computer Sci. & Engineering | Thursday 27/06/2019 | 54698 |
| | | 3 A) | CLOUD COMPUTING | Saturday 29/06/2019 | 54699 |
| | | 3 B) | USER INTERFACE DESIGN | | 54700 |
| | | 3 C) | REAL - TIME AND EMBEDDED SYSTEMS | | 54701 |
| | | 3 D) | CONVERGENCE TECHNOLOGIES | | 54702 |
| 44 | E & T. C Engg. | 2 | ADVANCES IN E&TC ENGINEERING | Thursday 27/06/2019 | 54703 |
| | | 3 A) | REAL TIME EMBEDDED SYSTEMS | Saturday 29/06/2019 | 54704 |
| | | 3 B) | CRYPTOGRAPHY & NETWORK SECURITY | | 54705 |
| | | 3 C) | SPEECH & AUDIO PROCESSING | | 54706 |
| | | 3 D) | MOBILE COMPUTING | | 54707 |
| | | 3 E) | STOCHASTIC MODELS & QUEUING THEORY | | 54708 |
| | | 3 F) | COMMUNICATION SYSTEM DESIGN | | 54709 |
| | | 3 G) | OPTICAL NETWORKS | | 54710 |
| | | 3 H) | DIGITAL DATA COMPRESSION | | 54711 |
| | | 3 I) | OPTIMIZATION TECHNIQUES | | 54712 |
| | | 3 J) | MULTIRATE SYSTEMS AND FILTER BANKS | | 54713 |

M. Phil. / Pre. Ph. D. New Syllabus Paper

Faculty of Science and Technology

Time – 11.00a.m to 2.00p.m

| SR. NO. | SUBJECT | PAPER NO. | PAPER NAME | DATE | CODE NO. |
|---------|------------------------------------|-----------|--|------------------------|----------|
| 45 | Electrical Engineering | 2 | Advances in Electrical Engineering | Thursday 27/06/2019 | 54714 |
| | | 3 A) | Restructured Power Systems | Saturday 29/06/2019 | 54715 |
| | | 3 B) | Flexible AC Transmission Systems | | 54716 |
| | | 3 C) | Computational Electromagnetic | | 54717 |
| | | 3 D) | Modeling and Identification of Dynamical Systems | | 54718 |
| | | 3 E) | Optimization | | 54719 |
| | | 3 F) | Computer aided Power System Analysis | | 54720 |
| | | 3 G) | Artificial Neural Networks | | 54721 |
| | | 3 H) | Power System Protection | | 54722 |
| | | 3 I) | Numerical Methods for Linear Control Systems | | 54723 |
| 46 | Electronics Engineering | 2 A) | Advances in Electronics Engineering-I | Thursday 27/06/2019 | 54724 |
| | | 2 B) | Advances in Electronics Engineering-II | 54725 | |
| | | 3 A) | Mathematical Methods and Algorithms | Saturday 29/06/2019 | 54726 |
| | | 3 B) | MICROELECTRONICS DESIGN | | 54727 |
| | | 3 C) | ADVANCED DIGITAL SYSTEM DESIGN | | 54728 |
| | | 3 D) | WIRELESS AND MOBILE TECHNOLOGIES | | 54729 |
| | | 3 E) | MACHINE INTELLIGENCE | | 54730 |
| | | 3 F) | ADVANCED COMPUTING ARCHITECTURES | | 54731 |
| | | 3 G) | MEMORY TECHNOLOGIES | | 54732 |
| | | 3 H) | BIOMEDICAL SIGNALS AND SYSTEMS | | 54733 |
| | | 3 I) | EMBEDDED VIDEO PROCESSING | | 54734 |
| | | 3 J) | RECONFIGURABLE COMPUTING | | 54735 |
| | | 3 K) | EMBEDDED AUTOMOTIVE SYSTEMS | | 54736 |
| | | 3 L) | DIGITAL SIGNAL COMPRESSION | | 54737 |
| | | 3 M) | SOFTWARE DEFINED RADIO | | 54738 |
| 47 | Instrumentation Engineering | 2 | Instrumentation & Measurement Technology | Thursday 27/06/2019 | 54740 |
| | | 3 A) | Biomedical Instrumentation | Saturday 29/06/2019 | 54741 |
| | | 3 B) | Advanced Process Control & Instrumentation | | 54742 |

| | | | | | |
|------|--|-------|---|------------------------|-------|
| 48 | Mechanical / Production Engineering | 2 A) | Advances in Mechanical Engineering (CAD/ CAM/CAE- I) | Thursday 27/06/2019 | 54743 |
| | | 2 B) | Advances in Mechanical Engineering (CAD/CAM/CAE-II) | | 54744 |
| | | 2 C) | Advances in Mechanical Engineering (Design-I) | | 54745 |
| | | 2 D) | Advances in Mechanical Engineering (Design-II) | | 54746 |
| | | 2 E) | Advances in Mechanical Engineering (Heat Power-I) | | 54747 |
| | | 2 F) | Advances in Mechanical Engineering (Heat Power-II) | | 54748 |
| | | 2 G) | Advances in Mechanical Engineering (Production-I) | | 54749 |
| | | 2 H) | Advances in Mechanical Engineering (Production-II) | | 54750 |
| | | 2 I) | Advances In Mechanical Engineering (Production Engineering) | | 54751 |
| | | 2 J) | Advances In Mechanical Engineering (Cad/Cam/Cae) | | 54752 |
| | | 2 K) | Advances In Mechanical Engineering (Industrial Engineering) | | 54753 |
| | | 3 A) | Numerical Computation of Fluid and Heat Flow | Saturday 29/06/2019 | 54754 |
| | | 3 B) | Energy Analysis of Thermal Systems | | 54755 |
| | | 3 C) | Design of Heat Transfer Equipments | | 54756 |
| | | 3 D) | Mathematical Modeling and Design Optimization | | 54757 |
| | | 3 E) | Advanced theory of vibration | | 54758 |
| | | 3 F) | Analysis and Synthesis of Mechanisms | | 54759 |
| | | 3 G) | Advanced Finite Element Analysis | | 54760 |
| | | 3 H) | Noise and Vibration Harshness(NVH) | | 54761 |
| | | 3 I) | Optimization Techniques | | 54762 |
| | | 3 J) | Mechatronics system design | | 54763 |
| | | 3 K) | MEMS & Nanotechnology | | 54764 |
| | | 3 L) | Supply chain management & Logistics | | 54765 |
| | | 3 M) | Automatic Control Engineering | | 54766 |
| | | 3 N) | Decision Making in Manufacturing Environment | | 54767 |
| | | 3 O) | Metal Forming Technology | | 54768 |
| | | 3 P) | Mechatronics | | 54769 |
| | | 3 Q) | Advanced casting technology | | 54770 |
| | | 3 R) | Manufacturing Systems | | 54771 |
| | | 3 S) | Precision Engineering | | 54772 |
| | | 3 T) | Computer Aided Manufacturing | 54773 | |
| | | 3 U) | Advanced Materials & Processing | 54774 | |
| 3 V) | Tribology | 54775 | | | |
| 3 W) | Technology Management | 54776 | | | |
| 3 X) | Database Management | 54777 | | | |
| 3 Y) | Modern manufacturing systems | 54778 | | | |
| 3 Z) | Low Cost Automation | 54779 | | | |

| | | | | | |
|----|----------------------------|------|---|------------------------|-------|
| 49 | TEXTILE ENGINEERING | 2 | ADVANCES IN TEXTILE ENGINEERING | Thursday 27/06/2019 | 54780 |
| | | 3 A) | High Performance Fibres | Saturday 29/06/2019 | 54781 |
| | | 3 B) | Technical Textiles | | 54782 |
| | | 3 C) | Textile For Protection | | 54783 |
| | | 3 D) | Textile for Sports Application | | 54784 |
| | | 3 E) | Textile in Automobile Engineering | | 54785 |
| | | 3 F) | Intelligent Textiles & Clothing | | 54786 |
| | | 3 G) | Physical Methods of Analysis & Eco-Testing | | 54787 |
| | | 3 H) | Nanotechnology in Textiles | | 54788 |
| | | 3 I) | Project Preparation, Appraisal & Implementation | | 54789 |
| | | 3 J) | Management of Textile Production | | 54790 |

| | | | | | |
|----|---------------------------------|------|---|------------------------|-------|
| 50 | Architecture Engineering | 2 | Land and Regulations for Development (Land Development and Buildings) | Thursday 27/06/2019 | 72994 |
| | | 3 A) | Architectural Heritage and Conservation | Saturday 29/06/2019 | 72995 |
| | | 3 B) | Environmental Architecture & Planning | | 72996 |

M. Phil. / Pre. Ph. D. New Syllabus Paper

Faculty of Science and Technology

M. Phil. / Pre. Ph. D. New Syllabus Paper

| | | | | | |
|----|-----------------------------|---|-------------------------------|------------------------|-------|
| 51 | Nano science and Technology | 1 | Research Methodology | Tuesday 25/06/2019 | 72997 |
| | | 2 | Nano-characterization Methods | Thursday 27/06/2019 | 72998 |
| | | 3 | Nanostructure Synthesis | Saturday 29/06/2019 | 72999 |

- 1 Examinee should confirm the customized Time-Table printed on his/her hall ticket with the final programme of examination sent to College / Department and also available on University website www.unishivaji.ac.in
- 2 The students are allowed to use the non programmable calculator for Numerical calculations at their own cost. University will not supply such calculators.
- 3 Cellular Phone (Mobile), Programmable Scientific Calculator & Digital Diary or any other means which can be used for unfair practice is not allowed in the Examination Hall.

Note: The Examination Programme is subject to change; if there is any change the University is not responsible for the loss or inconvenience caused to the candidates.

Sd/---

Shri. M. A. Kakade

Director

Board of Examinations and Evaluation

Vidyanagari,

Kolhapur-416 004,

SU/EXAM/B.Sc/M.Phil/Appointment Section/ Circular No. 306

Date- 22 /05/2019