

## North Maharashtra University, Jalgaon

DIRECTION NO. 04 /2017

### Direction for Governing the Constitution of Faculties and Board of Studies in the University

*Whereas*, the Maharashtra Public Universities Act, 2016 (Maharashtra Act No. VI of 2017) (hereinafter referred to as "said Act") published in Maharashtra Government Gazette on 11<sup>th</sup> January, 2017 ;

*And*

*Whereas*, in exercise of the powers vested to the State Government by sub-section 2 of Section 1 of the said act came into force on 1<sup>st</sup> March, 2017 by repelling the Maharashtra Universities Act, 1994, (Maharashtra Act No. XXXV of 1994);

*And*

*Whereas*, by virtue of entry No. 8 in the column No.(1) of Part-1 of the SCHEDULE of the "said Act"; read with sub-section 1 of Section 3, of the "said Act"; the North Maharashtra University, Jalgaon (hereinafter referred to as "the University") from 1<sup>st</sup> March, 2017 will be governed by the "said Act";

*And*

*Whereas*, as per sub-section 2 of Section 33 of the Maharashtra Universities Act, 1994, (Maharashtra Act No. XXXV of 1994); the University had the following eight faculties;

1. Arts and Fine Arts
2. Mental, Moral and Social Sciences
3. Science
4. Commerce and Management
5. Pharmacy
6. Engineering and Technology
7. Law
8. Education

*And*

*Whereas*, under sub-section (2) (1) of Section 147 of the "said Act"; all Statutes and Ordinances made under Maharashtra Universities Act, 1994, (Maharashtra Act No. XXXV of 1994); in respect of the University, shall in so far as not inconsistent with the provisions of the "said Act"; continue to be in force and be deemed to have been made under the "said Act" in respect of the University, until they are superseded or modified by the Statutes or Ordinances, as the case may be made under the "said Act".

M. P. Bhat  
24/5/17

*And*

*Whereas*, under sub-section 2 of Section 34 of the “said Act”; the University shall have following four faculties;

1. Science and Technology
2. Commerce and Management
3. Humanities
4. Inter-disciplinary Studies

*And*

*Whereas*, with repeal of Maharashtra Universities Act, 1994, (Maharashtra Act No. XXXV of 1994); having eight faculties in the University are inconsistent with the provision of the “said Act”; and it is imperative to provide information in respect of the departments in University and Colleges under various Faculties, Board of Studies as well as the subjects that come under those departments in conformity with the provision of the “said Act”; there is a need to issue appropriate direction;

*And*

*Whereas*, Statutes for the purpose of constitution of authorities established under the provision of sub-section 3 of Section 34 and sub-section 1 of section 40 of the “said Act” are yet to be framed;

*And*

*Whereas*, under sub-section 1 of Section 62 of the “said Act”; it is the responsibility of the University to constitute the authorities before 1<sup>st</sup> September, 2017;

*And*

*Whereas*, the framing of Statutes under the provision of Section 72 of the “said Act”; requires the approval of various authorities and it is time consuming process;

*And*

*Whereas*, in absence of the said Statutes and having regard to the urgent need of the matter to constitute Faculties and Board of Studies;

*And*

*Whereas*, the recommendation of the Expert Committee constituted for the said purpose has been accepted by the Academic Council of the University vide resolution No.A-45/2017, dated 18.04.2017.

Now, therefore, I **Prof. Pradip Premchand Patil, Vice-Chancellor**, North Maharashtra University, Jalgaon being satisfied about the exigency to issue the direction, in exercise of powers vested in me under sub-section 8 of Section 12 of the “said Act”; do hereby issue the direction to regulate the matter in relation to:

*Pradip Patil*  
24/5/17

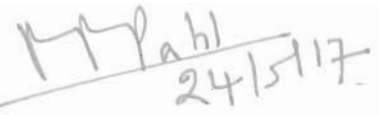
1. Faculties of the University
2. Faculty-wise breakup of the subjects
3. Board of Studies for every subject or group of subjects and
4. Departments in the University and Colleges with the subjects and their corresponding Board of Studies,

as appended in the Annexure 'A', 'B', 'C' and 'D', respectively.

This direction may be called hereinafter as Direction for Governing the Constitution of Faculties and Board of Studies in the North Maharashtra University, Jalgaon.

The direction shall come into force from the date of its issuance and shall remain in force until the relevant Statutes have been made in accordance with the provision of the "said Act" or for a period of six months, whichever is earlier.

Encl. : Annexure 'A', 'B', 'C' and 'D'


  
(Prof. P. P. Patil)  
Vice-Chancellor

Ref. No. : NMU/21/BOS/171 /2017

Date : 24<sup>th</sup> May, 2017

**Copy forwarded with compliments to :**

1. Principals of All Affiliated Colleges/Directors of recognised Institutes, N.M.U., Jalgaon.
2. Director/HoDs of all Schools/Departments, N.M.U., Jalgaon.
3. HoDs/Controlling Officers of all Administrative Departments, N.M.U., Jalgaon.

  
(Prof. A. B. Chaudhari)  
Offg. Registrar

Annexure 'A' of Direction No.04/2017

**NORTH MAHARASHTRA UNIVERSITY, JALGAON**

**[A] Faculties of the University**

(Under Section 34(2) of the Maharashtra Public Universities Act, 2016)

The University shall have the following four Faculties:-

Sr. No.	Name of the Faculty
(i)	Science and Technology;
(ii)	Commerce and Management;
(iii)	Humanities;
(iv)	Inter-disciplinary Studies.

**Annexure 'B' of Direction No.04/2017**

**NORTH MAHARASHTRA UNIVERSITY, JALGAON**

**[B] Facultywise break-up of the subjects**

(Under Section 34(3) of the Maharashtra Public Universities Act, 2016)

The Subjects comprised under each of these faculties shall be as follows :-

**1. Faculty of Science and Technology:-**

Sr. No.	Subjects	Sr. No.	Subjects
1	Mathematics	2	Statistics
3	Actuarial Science	4	Physics
5	Energy Studies	6	Material Science
7	Chemistry	8	Inorganic Chemistry
9	Organic Chemistry	10	Analytical Chemistry
11	Physical Chemistry	12	Drug Chemistry
13	Polymer Chemistry	14	Pesticides and Agrochemicals
15	Industrial Chemistry	16	Botany
17	Computer Science	18	Information Technology
19	Computer Application (MCA)	20	Zoology
21	Geography	22	Applied Geography
23	Microbiology	24	Biochemistry
25	Biotechnology	26	Electronics Science
27	VLSI Technology	28	Environmental Science
29	Geology	30	Applied Geology
31	Geoinformatics	32	Engineering Physics
33	Engineering Chemistry	34	Engineering Mathematics
35	Soft Skills	36	Industrial Economics and Management
37	Industrial Management and Communication Skill	38	Managerial Behaviour, Psychosocial Dimensions
39	Engineering Economics and Costing	40	Chemical Engineering
41	Oil, Oleo chemicals and Surfactants Technology	42	Paint Technology
43	Plastic Technology	44	Polymer Technology
45	Food Technology	46	Pharmaceutical Chemistry and Technology
47	Nano Technology	48	Biotechnology
49	Civil Engineering	50	Building Science and Technology
51	Infrastructure Engineering and Management	52	Environmental Engineering
53	Architecture	54	Computer Engineering
55	Information Technology	56	Computer Science and Engineering

**Annexure 'B' of Direction No.04/2017**

Sr. No.	Subjects	Sr. No.	Subjects
57	Electronics and Telecommunication Engineering	58	Industrial Electronics Engineering
59	Electronics Engineering (Communication Engineering)	60	Electronics
61	Electronics and Communication	62	Digital System
63	Digital Electronics	64	Electrical Engineering
65	Electrical Power System	66	Instrumentation Engineering
67	Mechanical Engineering	68	Computer Aided Design and Analysis
69	Machine Design	70	Thermal Engineering
71	Production Engineering	72	Design Engineering
73	Automobile Engineering	74	Pharmaceutics
75	Pharmaceutical Chemistry	76	Pharmacognocny
77	Pharmacology	78	Cosmetics
79	Public Health Sciences	80	Physiotherapy
81	Nursing	82	Health Care

**2. Faculty of Commerce and Management:-**

Sr. No.	Subjects	Sr. No.	Subjects
1	Accountancy and Costing	2	Commerce and Business Laws
3	Business Administration	4	Business Economics and Banking
5	Management Studies	6	Personnel Management
7	Computer Management		

**3. Faculty of Humanities:-**

Sr. No.	Subjects	Sr. No.	Subjects
1	Marathi	2	Hindi
3	English	4	Sanskrit
5	Pali	6	Ardhmagadhi (Prakrit)
7	Urdu	8	Persian and Arabic Languages
9	History	10	History of Civilization
11	Political Science	12	Public Administration
13	Psychology	14	Yoga Studies
15	Defence and Strategic Studies	16	Economics
17	Philosophy	18	Logic
19	Sociology	20	Social Work
21	Law	22	Taxation Law
23	Labour Law	24	Bioforensic and Bioterrorism Law
25	Intellectual Property Rights	26	Medical Jurisprudence and Toxicology

Annexure 'B' of Direction No.04/2017

**4. Faculty of Inter-disciplinary Studies:-**

<b>Sr. No.</b>	<b>Subjects</b>	<b>Sr. No.</b>	<b>Subjects</b>
1	Education	2	Educational Psychology
3	Educational Administration and Evaluation	4	Physical Education
5	Music	6	Dancing
7	Dramatics	8	Drawing and Painting
9	Sculpture	10	Applied Art
11	Printing Art	12	Print Making
13	Art History	14	Visual Communication
15	Library and Information Science	16	Mass Communication and Journalism
17	Agricultural and Natural Resource Management Skill	18	Agriculture
19	Soil and Water Conservation	20	Animation and Web Designing
21	Software Development	22	Printing and Publishing
23	Beauty Therapy	24	Fashion Designing
25	Dr.Ambedkar Thought	26	Gandhian Thought
27	Buddhist Heritage Studies and Tourism	28	Community Education and Vocational Courses
29	Women's Studies	30	Nanotechnology

**NORTH MAHARASHTRA UNIVERSITY, JALGAON**

**[C):- The Board of Studies for every subject or Group of subjects**

(Under Section 40(1) of the Maharashtra Public Universities Act, 2016)

The University shall have the following four Faculties vide section 34(2) of the Maharashtra Public Universities Act 2016. The Subjects/Group of subjects comprised under each of the Board of Studies shall be as follows :-

Sr.	Faculty	Name of Board of Studies	Subject	Group of Subject/ Subjects		
1	<i>Science and Technology</i>	1	Mathematics	I. Mathematics	1	Mathematics
		2	Statistics	I. Statistics	1	Statistics
				II. Actuarial Science	2	Actuarial Science
		3	Physics	I. Physics	1	Physics
				II. Energy Studies	2	Energy Studies
				III. Material Science	3	Material Science
		4	Chemistry	I. Chemistry	1	Chemistry
				II. Inorganic Chemistry	2	Inorganic Chemistry
				III. Organic Chemistry	3	Organic Chemistry
				IV. Analytical Chemistry	4	Analytical Chemistry
				V. Physical Chemistry	5	Physical Chemistry
				VI. Drug Chemistry	6	Drug Chemistry
		5	Botany	I. Botany	1	Botany



**Annexure 'C' of Direction No.04/2017**

Sr.	Faculty	Name of Board of Studies	Subject	Group of Subject/ Subjects		
1	<b>Science and Technology</b>	6	<b>Computer Science</b>	I. Computer Science	1	Computer Science
				II. Information Technology	2	Information Technology
				III. Computer Application (MCA)	3	Computer Application (MCA)
		7	<b>Zoology</b>	I. Zoology	1	Zoology
		8	<b>Geography</b>	I. Geography	1	Geography
				II. Applied Geography	2	Applied Geography
		9	<b>Life Sciences</b>	I. Microbiology	1	Microbiology
				II. Biochemistry	2	Biochemistry
				III. Biotechnology	3	Biotechnology
		10	<b>Electronics and Instrumentation</b>	I. Electronic Science	1	Electronic Science
				II. VLSI Technology	2	VLSI Technology
		11	<b>Environmental Science</b>	I. Environmental Science	1	Environmental Science
		12	<b>Chemical Sciences</b>	I. Polymer Chemistry	1	Polymer Chemistry
				II. Pesticides and Agrochemicals	2	Pesticides and Agrochemicals
				III. Industrial Chemistry	3	Industrial Chemistry
				IV. Organic Chemistry	4	Organic Chemistry
				V. Analytical Chemistry	5	Analytical Chemistry
				VI. Physical Chemistry	6	Physical Chemistry
		13	<b>Geosciences</b>	I. Geology	1	Geology
				II. Applied Geology	2	Applied Geology
				III. Geoinformatics	3	Geoinformatics

**Annexure 'C' of Direction No.04/2017**

Sr.	Faculty	Name of Board of Studies		Subject	Group of Subject/ Subjects	
1	<b>Science and Technology</b>	14	<b>Applied Sciences and Humanities</b>	I. Applied Sciences and Humanities	1	Applied Inorganic Chemistry
					2	Applied Mathematics
					3	Applied Organic Chemistry
					4	Applied Physical Chemistry
					5	Bioprocess Industrial Economics and Management
					6	Communication and Soft Skill
					7	Computer Programming
					8	Computer Science and Application
					9	Engineering Chemistry
					10	Process Engineering and Economics Costing/ Plant Design and economics costing
					11	Engineering Mathematics
					12	Engineering Physics
					13	Entrepreneurship
					14	Entrepreneurship and Business Planning
					15	Entrepreneurship Development
					16	Environmental Sciences/ Studies
					17	Financial Management
					18	Industrial Economics and Management
					19	Industrial Management
					20	Industrial Management and Communication Skill
					21	Industrial Organization and Management
					22	Inorganic Chemistry
					23	Intellectual Property Rights
					24	IPR and Entrepreneurship

**Annexure 'C' of Direction No.04/2017**

Sr.	Faculty	Name of Board of Studies		Subject	Group of Subject/ Subjects	
1.	<b>Science and Technology</b>	14	<b>Applied Sciences and Humanities</b>	I. Applied Sciences and Humanities	25	Managerial Behaviour: Psychosocial Dimensions
					26	Marketing Management
					27	Mathematics
					28	Organic Chemistry
					29	Physical Chemistry
					30	Physics
					31	Plant Design, Economics and Costing
					32	Process Engineering Economics and Costing
					33	Professional Communication
					34	Soft and Entrepreneurship Skill
					35	Soft Skills
		15	<b>Chemical Engineering, Chemical Technology and Bio Technology (Engineering)</b>	I. Chemical Engineering II. Oil, Oleo chemicals and Surfactants Technology III. Paint Technology IV. Plastic Technology V. Polymer Technology VI. Food Technology VII. Pharmaceutical Chemistry and Technology VIII. Nano Technology IX. Biotechnology	1	Applied and Structural Mechanics
					2	Advance Catalysis
					3	Advanced Bakery and Confectionary Technology
					4	Advanced Biomaterials
					5	Advanced Separation Techniques
					6	Advanced Technology in Food Packaging
					7	Advances in Food Nutritions
					8	Advances in Technology of Oil and Fats Product
					9	Advanced Food Processing Technology
					10	Animal Biotechnology
11	Application Techniques and Paints Defect					

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Sr.	Faculty	Name of Board of Studies	Subject	Group of Subject/ Subjects		
1	<b>Science and Technology</b>	15	<b>Chemical Engineering, Chemical Technology and Bio Technology (Engineering)</b>	I. Chemical Engineering	12	Applications of Nano Science and Technology in Electronics
				II. Oil, Oleo chemicals and Surfactants Technology	13	Applications of Nano Science and Technology in Material Technology
				III. Paint Technology	14	Applied Colloid and Surface Chemistry
				IV. Plastic Technology	15	Applied Genetic Engineering
				V. Polymer Technology	16	Automotive and Insulation Coatings
				VI. Food Technology	17	Bio Polymers
				VII. Pharmaceutical Chemistry and Technology	18	Biochemical Engineering
				VIII. Nano Technology	19	Biochemistry
				IX. Biotechnology	20	Biofuel and Alcohol Technology
					21	Bioinformatics
					22	Biological Thermodynamics
					23	Biomechanics
					24	Biomedical Fluid Dynamics
					25	Biomedical Instrumentation
					26	Bioprocess Calculation
					27	Bioprocess Engineering
					28	Bioprocess Engineering and Economics
					29	Bioprocess Equipment Design
					30	Bioprocess Industries
					31	Bioprocess Instrumentation and Analysis
	32	Bioprocess Modelling and Simulation				
	33	Bioprocess Principles				
	34	Biosafety and Bioethics				

**Annexure 'C' of Direction No.04/2017**

Sr.	Faculty	Name of Board of Studies	Subject	Group of Subject/ Subjects	
1	<b>Science and Technology</b>	15 <b>Chemical Engineering, Chemical Technology and Bio Technology (Engineering)</b>	I. Chemical Engineering II. Oil, Oleo chemicals and Surfactants Technology III. Paint Technology IV. Plastic Technology V. Polymer Technology VI. Food Technology VII. Pharmaceutical Chemistry and Technology VIII. Nano Technology IX. Biotechnology	35	Biostatistics
				36	Biotechnology and Waste Treatment
				37	Chemical Engineering Materials
				38	Chemical Engineering Modelling and Optimization
				39	Chemical Engineering Process
				40	Chemical Engineering Thermodynamics
				41	Chemical Equipment Design
				42	Chemical Plant Design and Project Engineering
				43	Chemical Process Technology
				44	Chemical Reaction Engineering
				45	Chemistry and Technology of Oils and Fats
				46	Chemistry and Technology of Polymers
				47	Chemistry and Technology of Powder Coatings
				48	Chemistry and Technology /Technology of Polymers.
				49	Chemistry of Surfactants and Oleo Chemicals
				50	Computational Fluid Dynamics
				51	Computer Aided Process Equipment Design, Modelling and Simulation
				52	Concept in Biotechnology
				53	Down Stream Processing
				54	Eco-friendly Coating Technologies
				55	Elements of Mechanics and Workshop Technology
				56	Energy Engineering
				57	Engineering Graphics
				58	Engineering of Pigmented Dispersion

**Annexure 'C' of Direction No.04/2017**

Sr.	Faculty	Name of Board of Studies	Subject	Group of Subject/ Subjects		
1	<b>Science and Technology</b>	15	<b>Chemical Engineering, Chemical Technology and Bio Technology (Engineering)</b>	I. Chemical Engineering	59	Environmental Biotechnology
				II. Oil, Oleo chemicals and Surfactants Technology	60	Enzyme Engineering
				III. Paint Technology	61	Fermentation Biotechnology
				IV. Plastic Technology	62	Fermentation Technology
				V. Polymer Technology	63	Fluid Flow Operation
				VI. Food Technology	64	Food Biochemistry and Nutrition
				VII. Pharmaceutical Chemistry and Technology	65	Food Biotechnology
				VIII. Nano Technology	66	Food Chemistry
				IX. Biotechnology	67	Food Engineering
					68	Food Processing
					69	Food Quality
					70	Food Toxicity, Quality and Safety
					71	Generation and Transmission of Mechanical Power
					72	Genetic Engineering
					73	Genomics and Proteomics
					74	Good Manufacturing Practices
					75	Heat Transfer
					76	Heat, Mass and Momentum Transfer
					77	High Fats Products and Hydrogenation
					78	Immunology
	79	Industrial Fermentation Technology				
	80	Industrial Hazards and Safety				
	81	Industrial Pollution and Control				
	82	Instrumentation and Instrumental Analysis				
	83	Instrumentation and Process Control				
	84	Introduction to Chemical Engineering				

**Annexure 'C' of Direction No.04/2017**

Sr.	Faculty	Name of Board of Studies	Subject	Group of Subject/ Subjects	
1	<b>Science and Technology</b>	15	<b>Chemical Engineering, Chemical Technology and Bio Technology (Engineering)</b> I. Chemical Engineering II. Oil, Oleo chemicals and Surfactants Technology III. Paint Technology IV. Plastic Technology V. Polymer Technology VI. Food Technology VII. Pharmaceutical Chemistry and Technology VIII. Nano Technology IX. Biotechnology	85	Introduction to Polymer Technology
				86	Machine Design and Drawing
				87	Mass Transfer
				88	Mass Transfer Operations
				89	Mass Transfer with Multiphase System
				90	Material Technology
				91	Mathematical Methods in Chemical Engineering
				92	Mechanical Operation
				93	Medicinal Chemistry and Drug Discovery
				94	Metabolic Engineering
				95	Microbiology
				96	Microbiology and Molecular Biology
				97	Modelling Simulation and CAD
				98	Modern Methods of Extraction
				99	Modern Methods of Instrumental Analysis
				100	Modified and Tailor Made Oils
				101	Molecular Biology
				102	Molecular Modelling and Drug Design
				103	Mould and Die Design
				104	Nano Biotechnology
				105	Nano Particles in Energy Production
				106	Newer Separation Techniques
				107	Newer Techniques of Synthesis and Curing of Polymers
				108	Non Traditional Oil and Non Triglyceride Constituents

**Annexure 'C' of Direction No.04/2017**

Sr.	Faculty	Name of Board of Studies	Subject	Group of Subject/ Subjects		
1	<b>Science and Technology</b>	15	<b>Chemical Engineering, Chemical Technology and Bio Technology (Engineering)</b>	I. Chemical Engineering	109	Oil Technology
				II. Oil, Oleo chemicals and Surfactants Technology	110	Petrochemical Technology
				III. Paint Technology	111	Petrochemicals
				IV. Plastic Technology	112	Petroleum Refining Engineering
				V. Polymer Technology	113	Pharmaceutical Biotechnology
				VI. Food Technology	114	Piping Design
				VII. Pharmaceutical Chemistry and Technology	115	Plant Biotechnology
				VIII. Nano Technology	116	Plant Design Economics and Costing
				IX. Biotechnology	117	Plant Tissue Culture and Plant Biotechnology
					118	Plant Utility
					119	Plastic Waste Management
					120	Pollution Control In Chemical Industries
					121	Polymer Blends and Composites
					122	Polymer Reaction Engineering
					123	Polymer Recycling and Waste Management
	124	Polymer Technology				
	125	Polymer Testing				
	126	Polymerization Kinetics				
	127	Post Harvest Technology of Oil Bearing Materials				
	128	Principles of Food Preservation				
	129	Process Calculations				
	130	Process Dynamic and Control				
	131	Process Engineering Economics and Costing				
	132	Process Equipment Design				
	133	Process Heat Transfer				
	134	Processing of Plastics				



**Annexure 'C' of Direction No.04/2017**

Sr.	Faculty	Name of Board of Studies	Subject	Group of Subject/ Subjects	
1	<b>Science and Technology</b>	15	<b>Chemical Engineering, Chemical Technology and Bio Technology (Engineering)</b> I. Chemical Engineering II. Oil, Oleo chemicals and Surfactants Technology III. Paint Technology IV. Plastic Technology V. Polymer Technology VI. Food Technology VII. Pharmaceutical Chemistry and Technology VIII. Nano Technology IX. Biotechnology	135	Project Engineering and Economics
				136	Protein Engineering
				137	Quality Assurance and Analysis of Surface Coating
				138	Quality Control Techniques in Oil and Fats
				139	Quantum Mechanics
				140	Radiation Curing Coating
				141	Reaction Engineering
				142	Reaction Engineering and Nano Catalysis
				143	Refining of Oils and Fats
				144	Science and Technology of Nano Medicines
				145	Science and Technology of Nano Composites and Nano Pigments
				146	Special Purpose and Effect Coatings
				147	Speciality Pigments and Additives in Coatings
				148	Stem Cell Technology
				149	System Biology
				150	Techniques for Synthesis of Nano Particles
				151	Technological Advances in Perfumery and Cosmetics
				152	Technology of Anionic Surfactants and Detergents
				153	Technology of Cationic and Amphoteric Surfactants
				154	Technology of Elastomers and Additives
				155	Technology of Fats Slitting and Soaps

**Annexure 'C' of Direction No.04/2017**

Sr.	Faculty	Name of Board of Studies	Subject	Group of Subject/ Subjects		
1	<b>Science and Technology</b>	15	<b>Chemical Engineering, Chemical Technology and Bio Technology (Engineering)</b>	I. Chemical Engineering	156	Technology of Fatty Acids and Soaps
				II. Oil, Oleo chemicals and Surfactants Technology	157	Technology of Oral, Hair and Skin Care Products
				III. Paint Technology	158	Technology of Pigment
				IV. Plastic Technology	159	Technology of Printing Inks
				V. Polymer Technology	160	Theory of Colour and Architectural Coatings
				VI. Food Technology	161	Theory of Corrosion and Marine and Maintenance Coatings
				VII. Pharmaceutical Chemistry and Technology	162	Trade Sale Paint
				VIII. Nano Technology	163	Transport Phenomena
				IX. Biotechnology	164	Treatment and Disposal of Food Industrial Waste
					165	Unit Operation
					166	Waterborne Polymers and Coatings
					167	Workshop Technology
		16	<b>Civil Engineering</b>	I. Civil Engineering	1	Advance Construction Equipment's
				II. Building Science and Technology	2	Advance Construction Technology
				III. Infrastructure Engineering and Management	3	Advance Design of Concrete Structures
				IV. Environmental Engineering	4	Advance RCC Structure
					5	Advanced Concrete Technology
					6	Advanced Structural Design
					7	Advanced Waste Water Treatment Technology
					8	Advanced Water Treatment Technology
					9	Air pollution
					10	Architecture and Town Planning
					11	Building Construction Techniques and Materials
					12	Building Design and Drawing

**Annexure 'C' of Direction No.04/2017**

Sr.	Faculty	Name of Board of Studies		Subject	Group of Subject/ Subjects	
1	<b>Science and Technology</b>	16	Civil Engineering	I. Civil Engineering II. Building Science and Technology III. Infrastructure Engineering and Management IV. Environmental Engineering	13	Building Environment and Services
					14	Concrete Technology
					15	Construction and Project Management
					16	Construction Contract Administration and Management
					17	Construction Cost and Quality Management
					18	Construction Cost Dynamics
					19	Construction Disaster Management
					20	Construction Economics and Finance
					21	Construction Management
					22	Construction Methods and Equipment Management
					23	Construction Planning, Scheduling and Management
					24	Construction Safety
					25	Construction Safety and Disaster Management
					26	Construction Techniques and Equipment's
					27	Contracts and Valuation
					28	Contracts, Administration and Arbitration
					29	Design of Water Supply and Waste Water structure
					30	Design Operation and Maintenance of Water Supply and Sewerage System
					31	Earthquake Engineering
					32	Earthquake Resistance Design of Building
					33	Elements of Civil Engineering

**Annexure 'C' of Direction No.04/2017**

Sr.	Faculty	Name of Board of Studies	Subject	Group of Subject/ Subjects	
1	<b>Science and Technology</b>	16	<b>Civil Engineering</b>  I. Civil Engineering II. Building Science and Technology III. Infrastructure Engineering and Management IV. Environmental Engineering	34	Elements of Civil Engineering and Engineering Mechanics
				35	Engineering Geology
				36	Environment and Energy Management.
				37	Environmental Engineering
				38	Environmental Engineering Chemistry
				39	Environmental Engineering Microbiology
				40	Environmental Impact Assessment
				41	Environmental Risk Assessment and Hazard Management
				42	Environmental Sanitation
				43	Estimating and Costing
				44	Finite Element Methods
				45	Fluid Mechanics
				46	Geographical Information systems
				47	Geotechnical Engineering
				48	Geotechniques for Infrastructure.
				49	Highway Projects Planning, Designing and Economic Evaluation
				50	Industrial Pollution and Control
				51	Industrial Water and Waste Water Management
				52	Industrial Water Pollution and Control
				53	Infrastructural Engineering
54	Infrastructure Development				
55	Irrigation Water Distribution Systems				
56	Low Cost Housing				
57	Management and Project Planning in Construction				

**Annexure 'C' of Direction No.04/2017**

Sr.	Faculty	Name of Board of Studies		Subject	Group of Subject/ Subjects	
1	<b>Science and Technology</b>	16	Civil Engineering	I. Civil Engineering II. Building Science and Technology III. Infrastructure Engineering and Management IV. Environmental Engineering	58	New Construction Material and Techniques
					59	Numerical Methods in Civil Engineering
					60	Open Channel and Conduit Flow
					61	Operation Research
					62	Ports and Harbour Structures
					63	Probability, Statistics and Optimization Technique
					64	Remote Sensing GIS and Its Environmental Application
					65	Repairs, Rehabilitation, Retrofitting of Structure
					66	Resource Management
					67	Retrofitting and Rehabilitation of Structures
					68	Retrofitting of Structures
					69	Rural Water Supply and Sanitation
					70	Safety Management in Construction
					71	Solid Waste and Management
					72	Strength of Materials
					73	Structural Design
					74	Structural Design and Drawing
					75	Surveying
					76	Sustainable Building Technology
					77	System Approach in Civil Engineering
					78	Theory of Structures
					79	Urban Hydrology and Storm Water Management.
					80	Water Power engineering
					81	Water Resources Engineering
					82	Watershed Management

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Sr.	Faculty	Name of Board of Studies		Subject	Group of Subject/ Subjects	
1	<b>Science and Technology</b>	16	Civil Engineering		83	Work study and Incentive Management
					84	Life Cycle Costing of Infrastructure
		17	Architecture	I. Architecture	1	Architectural Design
					2	Graphics
					3	Building Technology (Materials & Construction)
					4	Building Services
					5	Climatology
					6	History of Architecture and Human Settlements
					7	Quantity Surveying and Estimating
					8	Structure
					9	Estimating & Specifications
					10	Professional Practice & Building Byelaws
					11	Landscape Design
					12	Town Planning & Urban Design
					13	Rural Architecture
					14	Acoustics
					15	Architectural Conservation
					16	Computer Applications
					17	Interior Design
					18	Housing
					19	Working Drawing
					20	Workshop & Visual Arts, Photography
					21	Surveying and Levelling
22	Contract Document					
23	Application of Non-conventional Energy in Architecture					

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Sr.	Faculty	Name of Board of Studies		Subject	Group of Subject/ Subjects		
1	<b>Science and Technology</b>	17	Architecture	I. Architecture	24	Barrier free Architecture	
					25	Project and Construction Management	
					26	Sustainable Architecture	
					27	GIS Applications in Architecture	
					28	Industrial Architecture	
					29	Traffic and Transportation	
		30	Product Design				
		18	Computer Engineering and Information Technology		I. Computer Engineering and Information Technology II. Computer Science and Engineering	1	Advanced Computer Architecture
						2	Advanced Computer Network
						3	Advanced Database Management Systems
						4	Advanced Software Engineering
						5	Advanced Unix Programming
						6	Analog and Digital Electronics
						7	Analog Electronics
						8	Analysis and Design of Algorithms
						9	Android Programming
						10	Applied Algorithms
						11	Artificial Intelligence
						12	Artificial Intelligence and Expert System
13	Artificial Intelligence and Neural Network						
14	Bio-Informatics						
15	Cloud Computing						
16	Compiler Construction						
17	Compiler Design						
18	Computer Graphics						
19	Computer Graphics and Multimedia						

Sr.	Faculty	Name of Board of Studies		Subject	Group of Subject/ Subjects	
1	<i>Science and Technology</i>	18	<b>Computer Engineering and Information Technology</b>	I. Computer Engineering and Information Technology II. Computer Science and Engineering	20	Computer Network
					21	Computer Organization
					22	Computer Programming
					23	Cryptography and Network Security
					24	Data Communication
					25	Data Structures
					26	Data Warehousing and Mining
					27	Database Management System
					28	Database Management
					29	Digital Image and Video Processing
					30	Digital System and Microprocessor
					31	Digital System Design
					32	Discrete Structure and Graph Theory
					33	Distributed System
					34	E-Commerce
					35	Embedded Software Design
					36	Embedded Systems
					37	Enterprise Resource Planning
					38	Enterprise Resource Planning and SAP
					39	Formal Language and Automata Theory
					40	Fuzzy Logic and Neural Networks
					41	Human Computer Interaction
					42	Image Processing
					43	Information Retrieval
					44	Information Theory
					45	Internet Security



**Annexure 'C' of Direction No.04/2017**

Sr.	Faculty	Name of Board of Studies	Subject	Group of Subject/ Subjects		
1	<b>Science and Technology</b>	18	<b>Computer Engineering and Information Technology</b>	I. Computer Engineering and Information Technology II. Computer Science and Engineering	46	Introduction to Computing
					47	iPhone Programming
					48	Java Programming
					49	Linux
					50	Management Information System
					51	Mathematical Foundations of Computer Science
					52	Microprocessor
					53	Microprocessor and Microcontroller
					54	Microprocessor and Microcontroller Interfacing
					55	Mobile Computing
					56	Mobile Network
					57	Multimedia Techniques
					58	Net-Centric Computing
					59	Neural Network and Fuzzy Logic
					60	Object Oriented Modelling and Design
					61	Object Oriented Technology
					62	Operating System
					63	Operational Research
					64	Parallel Computing
					65	Pattern Recognition
					66	Principles of Management
67	Programming Paradigm and Methodology					
68	Real Time System					
69	Soft Computing					
70	Software Engineering					
71	Software Engineering and Project Management					

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Sr.	Faculty	Name of Board of Studies		Subject	Group of Subject/ Subjects	
1	<b>Science and Technology</b>	18	<b>Computer Engineering and Information Technology</b>	I. Computer Engineering Information Technology	72	Software Metrics and Quality Assurance
					73	Software Project Management
				II. Computer Science and Engineering	74	Software Testing and Quality Assurance
					75	System Programming
					76	Web Design
					77	Web Engineering
					78	Web Programming
					19	<b>Electronics and Telecommunication and Industrial Electronics Engineering</b>
		2	Advanced Communication System			
		II. Industrial Electronics Engineering	3	Advanced Computer Network		
			4	Advanced Digital Communication		
		III. Electronics Engineering (Communication Engineering)	5	Advanced Digital Image Processing		
			6	Advanced Digital Signal Processing		
			7	Advanced Embedded System Design		
		IV. Electronics	8	Advanced Instrumentation System		
			9	Advanced Light Wave Communication		
		V. Electronics and Communication	10	Advanced Telecomm Network Management		
			11	Advanced VLSI Design		
		VI. Digital Electronics	12	Advanced Digital Signal Processing and Processors		
			13	Analog Integrated Circuits and Applications		
VII. Digital System	14	Analog VLSI Design				
	15	Antenna and Wave Propagation				
16	Antenna Theory					
17	Antenna Theory and Design					
18	Artificial Intelligence					
19	Artificial Intelligence and Neural Network					

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Sr.	Faculty	Name of Board of Studies		Subject	Group of Subject/ Subjects	
1	<b>Science and Technology</b>	19	<b>Electronics and Telecommunication and Industrial Electronics Engineering</b>	I. Electronics and Telecommunication Engineering II. Industrial Electronics Engineering III. Electronics Engineering (Communication Engineering) IV. Electronics V. Electronics and Communication VI. Digital Electronics VII. Digital System	20	Artificial Intelligence and Soft Computing
					21	Artificial Neural Networks and Fuzzy Systems
					22	Audio-video Engineering
					23	Automotive Electronics
					24	Biomedical Engineering
					25	Biomedical Engineering Systems
					26	Biomedical Instrumentation
					27	Biomedical Signal Processing
					28	Broadband Communication
					29	Communication System
					30	Communication System Design
					31	Component Devices and Instrumentation Technology
					32	Computer Architecture
					33	Computer Communication Network
					34	Computer Networks
					35	Computer Networks and Management
					36	Control System Techniques
					37	Data Communication and Design
					38	Digital Communication Systems
					39	Digital Image Processing
					40	Digital Integrated Circuits and System
					41	Digital Signal Processing
					42	Digital Signal Processing and Image Processing
					43	Digital System Design
					44	Digital Techniques and Applications
					45	Digital VLSI Design

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Sr.	Faculty	Name of Board of Studies	Subject	Group of Subject/ Subjects	
1	<b>Science and Technology</b>	19	<b>Electronics and Telecommunication and Industrial Electronics Engineering</b> I. Electronics and Telecommunication Engineering II. Industrial Electronics Engineering III. Electronics Engineering (Communication Engineering) IV. Electronics V. Electronics and Communication VI. Digital Electronics VII. Digital System	46	Electrical Circuits and Machines
				47	Electromagnetic Engineering
				48	Electromagnetic Interference and Compatibility
				49	Electronic Circuit Design
				50	Electronic Instrumentation
				51	Electronic Measurement
				52	Electronic Measurement Techniques
				53	Electronics Circuit Design
				54	Electronics Materials and Components
				55	Elements of Electronics Engineering
				56	Embedded Networking and Wireless Sensor Network
				57	Embedded System
				58	Embedded System Design
				59	Error Control Codes
				60	Feedback Control System
				61	Fibre Optic Communication
				62	FPGA Based System Design
				63	Image and Video Processing
				64	Image Processing
				65	Image Processing and Computer Vision
				66	Image Processing and Pattern Recognition
				67	Industrial Automation
				68	Industrial Economics and Telecom Regulation
				69	Information Theory and Coding Technology
				70	Light Wave communication
				71	Linear Integrated circuits

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Sr.	Faculty	Name of Board of Studies	Subject	Group of Subject/ Subjects	
1	<b>Science and Technology</b>	19 <b>Electronics and Telecommunication and Industrial Electronics Engineering</b>	I. Electronics and Telecommunication Engineering II. Industrial Electronics Engineering III. Electronics Engineering (Communication Engineering) IV. Electronics V. Electronics and Communication VI. Digital Electronics VII. Digital System	72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96	Linear Systems Theory Management Science Mechatronics Microcontroller and Peripheral Interface Controller Microcontroller Systems Microelectronic Circuit Design Microelectronics Microprocessors Microprocessors and Microcontroller System Mobile Communication Modelling and Simulation Modelling and Simulation Techniques Multimedia Communication Multimedia Systems Nano Electronics Nanotech and Nanotechnology Nanotechnology Network Analysis and Synthesis Network and Lines Network System and Filter Design Neural Network and Fuzzy Logic Neural Network and Fuzzy System Object Oriented Programming Operating System Optimization Techniques

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Sr.	Faculty	Name of Board of Studies	Subject	Group of Subject/ Subjects	
1	<b>Science and Technology</b>	19	<b>Electronics and Telecommunication and Industrial Electronics Engineering</b> I. Electronics and Telecommunication Engineering II. Industrial Electronics Engineering III. Electronics Engineering (Communication Engineering) IV. Electronics V. Electronics and Communication VI. Digital Electronics VII. Digital System	97	Parallel Computing
				98	Pattern Recognition and Classification
				99	Power Electronics
				100	Process Control System
				101	Process Instrumentation
				102	Radiation and Microwave Techniques
				103	Random Processes
				104	Real Time Operating System
				105	RF Circuit Design
				106	Robotics
				107	Satellite and Mobile Communication
				108	Satellite Communication
				109	Signal Processing and Application
				110	Solid State Devices and Circuits
				111	Speech and Audio Processing
				112	System Programming
				113	Telecomm Network Management
				114	Telecommunication Network Management
				115	Telematics
				116	Television and Consumer Electronics
				117	Transducers and Measurement Techniques.
				118	VLSI Design
				119	VLSI Testing and Verification
				120	Wireless and Mobile Communication
				121	Wireless communication
				122	Wireless communication System

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Sr.	Faculty	Name of Board of Studies		Subject	Group of Subject/ Subjects	
1	<b>Science and Technology</b>	20	<b>Electrical and Instrumentation Engineering</b>	I. Electrical Engineering II. Electrical Power System III. Instrumentation Engineering	1	A C Circuit and Transformer
					2	Advance Microprocessor
					3	Agricultural Instrumentation
					4	Analog and Digital Electronics
					5	Analog Circuits and Analysis
					6	Analytical Instrumentation
					7	Applied Thermodynamics
					8	Artificial Intelligence
					9	Automatic Control Systems
					10	Automotive Instrumentation
					11	Basic Electrical Drives and Controls
					12	Biomedical Instrumentation
					13	Communication Engineering and Telemetry
					14	Computational Methods and Programming
					15	Computer Aided Power System Analysis
					16	Computer Network
					17	Computer Networking
					18	Control System
					19	Control System Components
					20	Data Communication and Telemetry
					21	Digital Circuits Design
					22	Digital Control System
					23	Digital Signal Processing
					24	Digital Image Processing.
					25	Distributed Control System
					26	Discrete Control System and MATLAB

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Sr.	Faculty	Name of Board of Studies		Subject	Group of Subject/ Subjects	
1	<b>Science and Technology</b>	20	<b>Electrical and Instrumentation Engineering</b>	I. Electrical Engineering	27	Electric Traction Engineering
				II. Electrical Power System	28	Electrical Engineering Materials
				III. Instrumentation Engineering	29	Electrical Installation Estimation and Distribution
					30	Electrical Machine Design
					31	Electrical Machine
					32	Electrical Machines and Networks
					33	Electrical Machines and Industrial Electronics
					34	Electrical Measurement
					35	Electromagnetic Engineering
					36	Electromechanical Energy Conversion.
					37	Electronic Instrumentation
					38	Elements of Electrical Engineering
					39	Elements of Electrical and Electronics Engineering
					40	Embedded System
					41	Embedded System Design
					42	Energy Audit and Conservation
					43	Extra High Voltage Transmission
					44	Environmental Instrumentation
					45	Fibre Optics and Laser Instrumentation
					46	Flexible A C Transmission
					47	Flexible AC Transmission System and Power Quality
48	Generation Planning and Load Dispatch					
49	High Voltage Engineering					
50	High Voltage Transmission					
51	Image Processing					



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Sr.	Faculty	Name of Board of Studies	Subject	Group of Subject/ Subjects		
1	<b>Science and Technology</b>	20	<b>Electrical and Instrumentation Engineering</b>	I. Electrical Engineering	52	Industrial Automation
				II. Electrical Power System	53	Industrial Drives and Control
				III. Instrumentation Engineering	54	Industrial Electrical Engineering
					55	Instrumentation for Agriculture, Food and Pharmaceutical Industry
					56	Instrumentation in Unit Operation
					57	Instrumentation System design
					58	Linear Techniques
					59	Measurement Fundamentals
					60	Metrology and machine Tools
					61	Microcontroller and Application
					62	Microprocessor and Microcontroller
					63	Microprocessor Techniques
					64	Modelling And Simulation
					65	Nano Instrumentation
					66	Network Analysis
					67	Neural and Fuzzy Logic
					68	Neural network and Fuzzy Logic Instrumentation
					69	Numerical Techniques
					70	Optimal and Adaptive Control
					71	Optimization Techniques
					72	Power Electronics
					73	Power Plant Engineering
					74	Power Plant instrumentation
					75	Power System
					76	Power System Design Practice

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Sr.	Faculty	Name of Board of Studies	Subject	Group of Subject/ Subjects	
1	<b>Science and Technology</b>	20	<b>Electrical and Instrumentation Engineering</b> I. Electrical Engineering II. Electrical Power System III. Instrumentation Engineering	77	Power System Dynamics
				78	Power System Operation And Control
				79	Power System Stability
				80	Process Instrumentation
				81	Process Planning Estimation and Economics
				82	Programmable Logic Controller and Distributed Control System
				83	Renewable Energy Sources
				84	Robotics And Automation
				85	Sensors and Transducers
				86	Signals and System
				87	Soft Computing
				88	Switchgear and Protection
				89	Thermal and Fluid Power Engineering
				90	Unit Operation
				91	Virtual Instrumentation
				92	Virtual Instrumentation and LABVIEW
				93	Advanced Power System Protection
				94	Artificial Intelligence and its Applications in Power Systems
				95	Computer Methods in Power System Analysis
				96	EHV Transmission Systems
				97	FACTS and Power Quality
				98	High Voltage Power Transmission
				99	Power System Design
				100	Power System Modelling and Control

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Sr.	Faculty	Name of Board of Studies		Subject	Group of Subject/ Subjects			
1	<b>Science and Technology</b>	20	<b>Electrical and Instrumentation Engineering</b>	I. Electrical Engineering	101	Power System Optimization Techniques		
				II. Electrical Power System	102	Power System Planning and Reliability		
				III. Instrumentation Engineering				
		21	<b>Mechanical , Production and Automobile Engineering</b>			I. Mechanical Engineering	1	Advanced Air Conditioning
						II. Computer Aided Design and Analysis	2	Advanced Engine Technology
						III. Machine Design	3	Advanced Fluid Mechanics
						IV. Thermal Engineering	4	Advanced Heat Transfer
						V. Production Engineering	5	Advanced Machine Design
						VI. Design Engineering	6	Advanced Manufacturing and Forming Processes
						VII. Automobile Engineering	7	Advanced Mechanical Engineering Design of Equipment
							8	Advanced Refrigeration
							9	Advanced Robotics
							10	Advanced Thermodynamics and Gas Dynamics
							11	Advanced Tool and Die Design
							12	Advanced Welding Technology
							13	Alternate Energy Sources
							14	Analysis and Synthesis of Mechanism
							15	Applied Thermodynamics
							16	Automobile Design
							17	Automobile Dynamics
							18	Automobile Electrical Systems
	19					Automobile Engineering		
	20					Automobile Engines		
	21	Automobile Painting and Collision Repairs						

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Sr.	Faculty	Name of Board of Studies	Subject	Group of Subject/ Subjects	
1	<b>Science and Technology</b>	21	<b>Mechanical , Production and Automobile Engineering</b>	I. Mechanical Engineering	22 Automobile Services and Repairs
				II. Computer Aided Design and Analysis	23 Automobile System Design
				III. Machine Design	24 Automobile Systems
				IV. Thermal Engineering	25 Automotive Design
				V. Production Engineering	26 Automotive Materials
				VI. Design Engineering	27 Autotronics
				VII. Automobile Engineering	28 Basic Electrical Drives and Controls
					29 CAD-CAM and Automation
					30 Computational Fluid Dynamics
					31 Computer Aided Design
					32 Computer Aided Design and Computer Aided Manufacturing
					33 Computer Aided Engineering
					34 Computer Aided Manufacturing
					35 Computer Methods in Mechanical Design
					36 Convective Heat Transfer Analysis
					37 Cost and Cost Control
					38 Database Management
					39 Design and synthesis of Mechanism
					40 Design for Manufacture and Assembly
					41 Design of Experiments and Analysis
					42 Design of Heat Exchanger
					43 Design of Machine Element
					44 Design of Material Handling Equipment
					45 Design of Pressure Vessel
	46 Design of Pumps and Compressors				

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Sr.	Faculty	Name of Board of Studies	Subject	Group of Subject/ Subjects	
1	<b>Science and Technology</b>	21 <b>Mechanical , Production and Automobile Engineering</b>	I. Mechanical Engineering	47	Electrical Machines and Industrial Electronics
			II. Computer Aided Design and Analysis	48	Energy Conservation and Management
			III. Machine Design	49	Energy Engineering
			IV. Thermal Engineering	50	Energy Resources and Technology
			V. Production Engineering	51	Engineering Drawing and Elements of Mechanical Engineering
			VI. Design Engineering	52	Engineering Mechanics
			VII. Automobile Engineering	53	Engineering Metallurgy
				54	Engineering Thermodynamics
				55	Equipment Design For Thermal Systems
				56	Finite Element Analysis
				57	Finite Element Analysis and Simulation Techniques
				58	Fluid Machinery
				59	Fluid Mechanics
				60	Gas Turbine and Jet Propulsion
				61	Heat Transfer
				62	Industrial Engineering
				63	Industrial Engineering and Safety
				64	Industrial Fluid Power
				65	Industrial Hydraulics And Pneumatics
				66	Instrumentation and Automatic Control System
	67	Internal Combustion Engines			
	68	Introduction to Computing			
	69	Introduction to Robotics			
	70	Mechatronic Product Design			

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Sr.	Faculty	Name of Board of Studies	Subject	Group of Subject/ Subjects	
1	<b>Science and Technology</b>	21 <b>Mechanical , Production and Automobile Engineering</b>	I. Mechanical Engineering	71	Machine Design
			II. Computer Aided Design and Analysis	72	Machine Drawing and Computer Graphics
			III. Machine Design	73	Machine Tool Design
			IV. Thermal Engineering	74	Machine Tools and Product Design
			V. Production Engineering	75	Manufacturing Engineering
			VI. Design Engineering	76	Manufacturing Science
			VII. Automobile Engineering	77	Material Handling Systems
				78	Material Science
				79	Material Science and Metallurgy
				80	Measurement Techniques And Data Analysis
				81	Mechanical Design Analysis
				82	Mechanical Measurement and Metrology
				83	Mechanical Vibration
				84	Mechatronics Systems
				85	Metrology and Quality Control
				86	Noise Vibration and Harshness in Automobiles
				87	Non Conventional Power Plant
				88	Non-Conventional Energy System
				89	Numerical Analysis and Computational Method
				90	Numerical Control and Machine Tool Robotics
				91	Numerical Methods in Thermal and Fluid engineering
				92	Operation Research
				93	Operation Research Techniques
				94	Optimization Techniques
				95	Optimization Techniques in Design

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Sr.	Faculty	Name of Board of Studies	Subject	Group of Subject/ Subjects		
1	<b>Science and Technology</b>	21	<b>Mechanical , Production and Automobile Engineering</b>	I. Mechanical Engineering II. Computer Aided Design and Analysis III. Machine Design IV. Thermal Engineering V. Production Engineering VI. Design Engineering VII. Automobile Engineering	96	Personal Management and Industrial Relations
					97	Power Plant Engineering
					98	Process Equipment Design
					99	Procurement and Inventory Control
					100	Product Development and Rapid Prototyping
					101	Production Management
					102	Production Planning and Control
					103	Project and Business Management
					104	Refrigeration and Air Conditioning
					105	Research Methodology
					106	Robotics
					107	Solar Energy Technology
					108	Special Purpose Vehicles
					109	Strength of Materials
					110	System Dynamics and Simulation
					111	Theory of Elasticity and Plasticity
					112	Theory of Machines
					113	Thermal Equipment Design
					114	Tool Engineering
					115	Transport Management and Motor Industry
					116	Transport Management and Safety Regulations
					117	Tribology
					118	Turbomachinery
					119	Vehicle Body Engineering
					120	Vehicle Testing and Evaluation
					121	Vibration Engineering

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Sr.	Faculty	Name of Board of Studies		Subject	Group of Subject/ Subjects	
1	<b>Science and Technology</b>	22	Pharmaceutics	I. Pharmaceutics	1	Dispensing Pharmacy
					2	Unit Operations
					3	Physical Pharmacy
					4	Communication Skills and Soft Skills Development
					5	Pharmaceutical Microbiology
					6	Hospital Pharmacy
					7	Pharmaceutical Technology
					8	Bio-Pharmaceutics and Pharmacokinetics
					9	Pharmaceutical Jurisprudence and Ethics
					10	Pharmaceutical Technology
					11	Pharmaceutical Industrial Management
					12	Pharmaceutics
					13	Pharma Marketing
					14	Quality Assurance
					15	Bioavailability and TDM
					16	Cosmeceutics
					17	Packaging Technology
		23	Pharmaceutical Chemistry	I. Pharmaceutical Chemistry	1	Inorganic Pharmaceutical Chemistry
					2	Inorganic and Physical Chemistry
					3	Organic Chemistry
6	Biochemistry					
7	Medicinal Chemistry					
8	Pharmaceutical Analysis					
			9	Drug design and lead Identification		



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Sr.	Faculty	Name of Board of Studies		Subject	Group of Subject/ Subjects	
1	<b>Science and Technology</b>	24	Pharmacognosy	I. Pharmacognosy	1	Pharmacognosy
					2	Environmental Science
					3	Chemistry of Natural Products
					4	Pharmaceutical Biotechnology
					5	Medicinal Plant Biotechnology
					6	Plant Biotechnology
		25	Pharmacology	I. Pharmacology	1	Applied Biostatistics and Computer Applications in Pharmacy
					2	Anatomy, Physiology and Health Education
					3	Industrial Psychology
					4	Pathophysiology of Common Diseases
					5	Pharmacology
					6	Clinical Pharmacy and Drug Interaction
		26	B.Tech Cosmetics	I. Cosmetics	1	Cosmetics
		27	Public Health Science	I. Public Health Science	1	Public Health Science
28	Physiotherapy	I. Physiotherapy	1	Physiotherapy		
29	Nursing	I. Nursing	1	Nursing		
30	Health Care	I. Health Care	1	Health Care		

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Sr.	Faculty	Name of Board of Studies	Subject	Group of Subject/ Subjects	
2	<b>Commerce and Management</b>	1	Accountancy and Costing	I.	Accounting and Costing 1 Financial and Cost Accounting 2 Advanced Cost and Management Accounting 3 Principles of Accounting 4 Cost Control and Cost Reduction 5 Business Accounting 6 Management Accounting 7 Auditing Practices 8 Cost and Management Accountancy 9 Corporate Accounting and Costing 10 Advanced Accountancy 11 Corporate Accounting 12 Cost Accounting 13 Advanced Accounting 14 Income Tax 15 Auditing and Information System Audit 16 Financial Accounting and Costing 17 Financial Accounting 18 Corporate Accountancy 19 Principles & Practices of Auditing 20 Advanced Cost Accountancy 21 Management Accounting and Financial Management 22 Financial Management and Decision Making 23 Principles and Practices of Auditing 24 Direct and Indirect Tax 25 Auditing 26 Auditing and ISA

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Sr.	Faculty	Name of Board of Studies	Subject	Group of Subject/ Subjects		
2	<b>Commerce and Management</b>	1	Accountancy and Costing	I. Accountancy and Costing	27	Business Accounting and Financial Management
					28	Security Analysis and Portfolio Management
					29	Corporate Laws and Income Tax Laws
					30	Income Tax Law
					31	Financial Services and Instrument
					32	Financial Analysis and Business Journalism
					33	Introduction to Information System Audit
					34	International Financial Management
					35	International Finance
		2	Commerce and Business Laws	I. Commerce and Business Laws	1.	Corporate Law
					2.	Business Ethics and Mind Management
					3.	Current Business Scenario
					4.	Industrial Safety Management
					5.	Co-operative Laws and Micro Finance
					6.	Business Law
					7.	Company Law
					8.	Stock and Commodity Market
9.	Mercantile Laws					
10.	Production and Material Management					
11.	Industrial Relation					
12.	Production Management					
13.	Business Research Methods					
14.	Corporate Social Responsibility					
15.	e-Commerce and Excellence Management					
16.	Indian Commercial Laws					
17.	Industrial Relations and Trade Unions					

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Sr.	Faculty	Name of Board of Studies		Subject	Group of Subject/ Subjects	
2	<b>Commerce and Management</b>	2	<b>Commerce and Business Laws</b>	I. Commerce and Business Laws	18.	Industrial Compliance Framework
					19.	Consumer Protection and Business Ethics
					20.	Foundation Course for Managers
					21.	Business Communication
					22.	Business Enterprises
					23.	International Business
					24.	Corporate Governance
					25.	Entrepreneurship Development
					26.	Corporate Communication Skills
					27.	Legal Aspects of Business
					28.	Social Security and Welfare Legislations
					29.	Labour Legislations
					30.	Public Relations
					31.	Research Methodology in Commerce and Management
					32.	Research Methodology
					33.	Labour Welfare and Administration
					34.	Professional Communication
					35.	Entrepreneurship and Project Management
					36.	Indian Financial System
					37.	Foreign Trade
					38.	Soft Skills Development
					39.	Advance Research Method
					40.	Ethical Practices in Business
41.	Direct Tax Law and Practices					
42.	Industrial Legislation and Labour Laws					
43.	Operation Research					

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Sr.	Faculty	Name of Board of Studies	Subject	Group of Subject/ Subjects			
2	<b>Commerce and Management</b>	2	<b>Commerce and Business Laws</b>	I. Commerce and Business Laws	44.	Principles and Practices of Insurance	
					45.	Business and Tax Law	
					46.	Business Entrepreneurship	
					47.	Corporate Regulatory and Framework	
					48.	Income Tax and Competitive Skills	
					49.	Entrepreneurship	
					50.	Legal Aspects of Business	
					51.	Direct Tax Laws and Business Laws	
					52.	Competitive Skills	
					53.	Business and Mercantile Law	
					54.	Competitive Business Skills	
					55.	Social Security and Welfare Regulations	
					56.	Case Study in Industrial Relations	
					57.	Laws Relating to Industrial Relations	
					58.	Professional Communication Skills	
					59.	Communication Skills and Auditing	
					60.	Corporate Laws and Income Tax	
					61.	Business Research Methods	
					62.	Industrial Counselling	
					63.	Industrial Psychology and Sociology	
			64.	Rural Development			
			65.	Business Ethics and Professional Values			
			66.	Banking and Insurance			
			3	<b>Business Administration</b>	I. Business Administration	1	HR Administration and Labour Welfare
		2				Organizational Behaviour	
		3				Quality Control and Application	

**Annexure 'C' of Direction No.04/2017**

Sr.	Faculty	Name of Board of Studies		Subject	Group of Subject/ Subjects	
2	<b>Commerce and Management</b>	3	<b>Business Administration</b>	I. Business Administration	4	Business Plan
					5	Modern Retail Management
					6	Marketing and Advertising
					7	Marketing Management
					8	Business Administration
					9	Retail Management
					10	Supply Chain Management
					11	Sales and Distribution Management
					12	Marketing Strategic and Competitive Positioning
					13	Retail Marketing
					14	Agriculture Marketing
					15	Financial Instruments
					16	Management Principles
					17	Logistics and Supply Chain Management
					18	Financial Management
					19	International Marketing and Export Promotion
					20	Import Export Management
					21	Labour Welfare and Administration
					22	Principles of Marketing
					23	Marketing Research Consumer Behaviour
					24	Marketing and Retail Management
					25	Global Marketing Management
					26	Distribution and Logistics Management
					27	International Logistic and Supply Chain Management
					28	Distribution and Retail Management
					29	Advertisement and Sales Promotion

**Annexure 'C' of Direction No.04/2017**

Sr.	Faculty	Name of Board of Studies		Subject	Group of Subject/ Subjects	
2	<b>Commerce and Management</b>	3	<b>Business Administration</b>	I. Business Administration	30	Promotion and Brand Management
					31	Service Marketing
					32	Office Management
					33	Promotion Management
		4	<b>Business Economics and Banking</b>	I. Business Economics and Banking	1	Principles and Practices of Banking
					2	Business Economics
					3	Macro-Economics
					4	Global Economic Scenario
					5	Indian Economic Scenario
					6	Advanced Banking
					7	Economics of Industries
					8	Micro-Economics
					9	Managerial Economics
					10	Modern Banking and Financial System
					11	Labour Economics
					12	Indian Economy
					13	Economics of Global Trade and Finance
					14	Industrial Economics
					15	International Economic Scenario
					16	Fundamentals of Banking and Insurance
					17	Principles of Economics
					18	Banking and Finance Management
19	Labour Economics and International HRM					
20	Agriculture Economics					
21	Global Economics					
22	Indian Economics					

**Annexure 'C' of Direction No.04/2017**

Sr.	Faculty	Name of Board of Studies	Subject	Group of Subject/ Subjects			
2	<b>Commerce and Management</b>	4	<b>Business Economics and Banking</b>	I. Business Economics and Banking	23	Basic Economics Concepts	
					24	New Trends and Development in Agri Sector	
					25	Agro Business	
		5	<b>Management Studies</b>	I. Management Studies II. Personnel Management		1	Human Resource Management
						2	International Business Management
						3	Global Management Practices
						4	Personnel Management
						5	Innovation Management
						6	Strategic Management
						7	Event and Hospitality Management
						8	Modern Management Principles
						9	Modern Management Techniques
						10	Modern Management Practices
						11	Personal Administration and Management
						12	Strategic Financial Management
						13	Modern HR Practices and OD
						14	HR in Services Management
						15	Strategic Technology Management
						16	Total Quality Management
						17	Strategic Sourcing for Operations
						18	International Marketing Management
						19	International Strategic Management
						20	International Services and Quality Management
	21	Agro Business Management					
	22	Management of Agriculture and Allied Sciences					
	23	Management of Agri-Business Projects					



**Annexure 'C' of Direction No.04/2017**

Sr.	Faculty	Name of Board of Studies	Subject	Group of Subject/ Subjects	
2	<b>Commerce and Management</b>	5	<b>Management Studies</b>  I. Management Studies II. Personnel Management	24	Case Studies in Strategic Management
				25	Family Business Management
				26	Hospitality Management
				27	Case Studies in Management and Managerial Decision Making
				28	Advanced Human Resource Management
				29	HRM Practices
				30	Case Study in PM
				31	Operations Management
				32	Introduction to ERP and SAP
				33	Labour Costing and Compensation Management
				34	Career Management and Counselling
				35	Operations and Material Management
				36	Integrated Material Management
				37	Inventory Management and Requirement Planning
				38	Production and Operations Management
				39	Business Management
				40	Principles of Management
				41	Financial Management
				42	Principles and Practices Management
				43	Strategic Human Resource Management
				44	Management Principle and Personnel Management
				45	Invest Management
				46	Management Information System
				47	Management Information System and ERP
48	Modern Office Management				

**Annexure 'C' of Direction No.04/2017**

Sr.	Faculty	Name of Board of Studies		Subject	Group of Subject/ Subjects	
2	<b>Commerce and Management</b>	5	<b>Management Studies</b>	I. Management Studies II. Personnel Management	49	Enterprise Resource Planning
					50	Management Science
		6	<b>Computer Management</b>	I. Computer Management	1	Internet and Web Design
					2	Server Side Scripting using PHP
					3	Advanced Excel
					4	Quantitative Techniques
					5	Programming in C++
					6	Fundamentals of Computer and Internet
					7	Cyber Laws and Security
					8	Database Management
					9	System Analysis and Design
					10	RDBMS using Oracle and D2K
					11	RDBMS
					12	Java Programming Languages
					13	Information System for Business
					14	Introduction to Information System Audit
					15	CASE Tool with MS VISIO
					16	MSOFFICE 2007, Word, Excel, Power Point
					17	e-Services Applications
					18	Management Information System
					19	Computer Fundamentals and Office Automation
					20	Tally ERP
					21	Tally, MS-ACCESS and e-Commerce
					22	Business Statistics
23	Business Statistics and Operation Research					
24	Business Mathematics					

**Annexure 'C' of Direction No.04/2017**

Sr.	Faculty	Name of Board of Studies		Subject	Group of Subject/ Subjects	
2	<b>Commerce and Management</b>	6	<b>Computer Management</b>	I. Computer Management	25	Internet and Application
					26	Web Designing Using HTML
					27	Internet and HTML
					28	e-Commerce
					29	Mathematics and Statistics for Manager
					30	MS-Office, Internet
					31	C# .Net
					32	e-Business and e-Governance
					33	Computing Management
					34	ASP.NET
					35	Computer Application
					36	Data Structure
					37	Computer Animation Using Flash
					38	Introduction to e-Commerce
					39	Information Technology for Managers
					40	Cyber Crime and Security Law
					41	ICT in Taxation
					42	Internet Programming with ASP .NET
					43	Linux Operating System
					44	MIS and ERP
					45	ERP
					46	Cyber Crime and Security
					47	Management Information System and e-Commerce
					48	Database Management System
					49	Software Engineering
					50	Oracle and Visual Basic

**Annexure 'C' of Direction No.04/2017**

Sr.	Faculty	Name of Board of Studies	Subject	Group of Subject/ Subjects		
2	<b>Commerce and Management</b>	6	<b>Computer Management</b>	I. Computer Management	51	Internet Technology
					52	Software Project Management and Information System Audit
					53	Systems Management
					54	Information Technology and Systems Management
					55	Database Administration with Oracle and D2K
					56	Scripting Languages
					57	Commerce and Web Site Management
					58	Data Mining and Data Warehousing
					59	VB.NET
					60	Database Administration and Security
					61	Advanced Graphics and Animation
					62	ICT Fundamental and Operating Systems
					63	Object Oriented Programming using C++
					64	Web Designing and Web Tools
					65	RDBMS with MS - SQL Server
					66	Programming Concept using C++
					67	Graphics and Animation
					68	Cyber Crime and Security
					69	Java Programming
					70	Computer Fundamental and Application
					71	Human Resource Information Systems and ERP
					72	Introduction to Internet and Web Technologies

**Annexure 'C' of Direction No.04/2017**

Sr.	Faculty	Name of Board of Studies		Subject	Group of Subject/ Subjects	
2	<b>Commerce and Management</b>	6	<b>Computer Management</b>	I. Computer Management	73	Web Designing using HTML
					74	Programing In VB.NET
					75	Oracle and D2K
					76	Computer Awareness
					77	Internet and Web Services
					78	Software Testing
					79	MS-Access and VB 6.0
					80	e-Commerce and Internet Services
					81	Computer Animation
					82	Fundamentals of Computer and Internet
					83	Introducing to Programming using C++
					84	MS Access and Visual Basic 6.0
					85	Information System and Introduction to BPO
					86	Essentials of e-Commerce

**Annexure 'C' of Direction No.04/2017**

Sr.	Faculty	Name of Board of Studies		Subject	Group of Subject/ Subjects	
3.	Humanities	1	Marathi	I. Marathi	1	Marathi
		2	Hindi	I. Hindi	1	Hindi
		3	English	I. English	1	English
		4	Ancient Indian Languages	I. Sanskrit	1	Sanskrit
				II. Pali	2	Pali
				III. Ardhamagadhi (Prakrit)	3	Ardhamagadhi (Prakrit)
		5	Urdu, Persian and Arabic Languages	I. Urdu	1	Urdu
				II. Persian and Arabic Languages	2	Persian and Arabic Languages
		6	History	I. History	1	History
				II. History of Civilization	2	History of Civilization
		7	Political Science	I. Political Science	1	Political Science
				II. Public Administration	2	Public Administration
		8	Psychology	I. Psychology	1	Psychology
		9	Yoga Studies	I. Yoga Studies	2	Yoga Studies
		10	Defence and Strategic Studies	I. Defence and Strategic Studies	1	Defence and Strategic Studies
11	Economics	I. Economics	1	Economics		
12	Philosophy	I. Philosophy	1	Philosophy		
		II. Logic	2	Logic		
13	Sociology	I. Sociology	1	Sociology		
14	Social Work	I. Social Work	1	Social Work		
15	Law	I. Law	1	Administrative Law and Right to Information		
		II. Taxation Law	2	Alternative Dispute Resolution		
		III. Labour Law	3	Arbitration, Conciliation and ADR Systems		

**Annexure 'C' of Direction No.04/2017**

Sr.	Faculty	Name of Board of Studies		Subject	Group of Subject/ Subjects	
3.	<b>Humanities</b>	15	<b>Law</b>	IV. Bioforensic and Bioterrorism Law V. Intellectual Property Rights VI. Medical Jurisprudence and Toxicology	4	Banking Laws and Negotiable Instruments
					5	Basic of Law, Forensic Science and Crime
					6	Bioterrorism : National and International Scenario
					7	Book Keeping and Accountancy
					8	Business Law
					9	Civil Procedure Code and Limitation Act
					10	Company Law
					11	Comparative Criminal Procedure
					12	Computer
					13	Constitutional Law
					14	Constitutional Law and New Challenges
					15	Criminal Procedure Code
					16	Criminal Procedure code, Juvenile Justice Act and Probation of Offenders
					17	Criminology
					18	Cyber Space and IPR
					19	Drafting ,Pleading ,Conveyancing
					20	Economics
					21	English (Compulsory)
					22	Environmental Law
					23	Equity & Trust
					24	Family Law
					25	Finance Act 1994 (Service Tax)

**Annexure 'C' of Direction No.04/2017**

Sr.	Faculty	Name of Board of Studies		Subject	Group of Subject/ Subjects	
3.	Humanities	15	Law	I. Law II. Taxation Law III. Labour Law IV. Bioforensic and Bioterrorism Law V. Intellectual Property Rights VI. Medical Jurisprudence and Toxicology	26	Forensic Science and its Application in Crime Investigation
					27	General English
					28	General Law affecting Taxation
					29	General Regime of IPR
					30	Geographical Indications, Layout designs of Integrated Circuits and Protection of Plant Varieties and Farmers' Rights
					31	History
					32	History of Courts,Legislature and Legal profession
					33	Human Rights
					34	Human Rights and International Law
					35	Income Tax Act 1961 with Relevant Rules
					36	Industrial Relations
					37	Insurance Law
					38	Interpretation os Statues & Legislative Principles
					39	Judicial Process (Jurisprudence)
					40	Jurisprudence
					41	Juvenile Delinquency
					42	Labour Laws
					43	Land Laws
					44	Land Laws including Ceiling and any other Local Laws Tenancy Laws and Land Laws
					45	Law and Medical Profession
					46	Law and Social Transformation in India
					47	Law of Contract



**Annexure 'C' of Direction No.04/2017**

Sr.	Faculty	Name of Board of Studies		Subject	Group of Subject/ Subjects	
3.	Humanities	15	Law	I. Law II. Taxation Law III. Labour Law IV. Bioforensic and Bioterrorism Law V. Intellectual Property Rights VI. Medical Jurisprudence and Toxicology	48	Law of Crimes
					49	Law of Evidence
					50	Law of Import Export Regulation
					51	Law of Medicine
					52	Law of Torts
					53	Law of Torts including MV Accident and Consumer Protection Act
					54	Law of Trust
					55	Law of Wages and Principles of Wage Fixation
					56	Legal Education and Research Methodology
					57	Legal Language / Legal Writing Including General English
					58	Legal Language including Legal Writing
					59	Legal Regulation of Economic Enterprises
					60	Legislation Affecting Condition of Work
					61	Legislative Principles and Interpretation of Statutes
					62	Logic
					63	Maharashtra Professional Central Sales & Wealth Tax Act
					64	Marathi
					65	Mass Media Law
					66	Medico Legal Aspects
					67	Medico legal Practice
					68	Ownership and Enforcement of IPR

**Annexure 'C' of Direction No.04/2017**

Sr.	Faculty	Name of Board of Studies		Subject	Group of Subject/ Subjects	
3.	Humanities	15	Law	I. Law	69	Penology
				II. Taxation Law	70	Penology : Treatment of Offenders
				III. Labour Law	71	Political Science
				IV. Bioforensic and Bioterrorism Law	72	Principles of Taxation
				V. Intellectual Property Rights	73	Public International Law
				VI. Medical Jurisprudence and Toxicology	74	Public Utilities Law
					75	Recent Advances in Forensic Science and the Laws
					76	Social Security Legislation
					77	Sociology
					78	Special Contract
					79	Taxation Law
					80	The Maharashtra Value Added Tax Act 2002
					81	Toxicology
				82	Transfer of Property Act	
83	Trust Equity and Fiduciary Relationships					

**Annexure 'C' of Direction No.04/2017**

Sr.	Faculty	Name of Board of Studies	Subject	Group of Subject/ Subjects	
4.	Inter-disciplinary Studies	1 Education	I. Education	1	Education in 21 <sup>st</sup> Century
		2	Teacher Education		
		3	Educational Technology		
		4	New Trends in Education		
		5	Advanced Educational Theory		
		6	Fundamental of Educational Theory		
		7	Knowledge and Curriculum		
		8	Contemporary India and Education		
		9	Language across the Curriculum		
		10	Genders, School and Society		
		11	Inclusive Education		
		12	Curriculum Designing, Adaptation and Evaluation		
		13	Curriculum, Adaptation and Strategies for Teaching Expanded Curriculum		
		14	Philosophy of Education		
		15	Sociological Foundation of Education		
		16	Deprived and Women Education in India		
		17	Elementary and Secondary Education		
		18	Curriculum Development and Transaction		
		19	Special Education		
		20	Higher Education in India		
		21	Educational Theories in Global Perspectives		
		22	ICT and e-learning		
		2 Educational Psychology	I. Educational Psychology	1	Learning and Teaching
2	Learning Teaching and Assessment				
3	Childhood and Growing Up				

**Annexure 'C' of Direction No.04/2017**

Sr.	Faculty	Name of Board of Studies	Subject	Group of Subject/ Subjects			
4.	<b>Inter-disciplinary Studies</b>	<b>2 Educational Psychology</b>	I. Educational Psychology	4	Human Growth and Development		
				5	Assessment and Identification of Needs		
				6	Community Based Rehabilitation		
				7	Gender and Disability		
				8	Guidance and Counselling for Disabled		
				9	Psycho Social and Family Issues		
				10	Technology and Disability		
				11	Identification of Children with Visual Impairment and Assessment of Needs		
				12	Educational Guidance and Counselling		
				13	Psychology of Development and Learning		
				14	Advanced Guidance, Counselling		
				15	Learning, Teaching and Childhood Psychology		
				16	MR E1 - E11		
				17	VI E1 - E11		
				18	Dissertation		
				<b>3 Administration and Evaluation</b>	I. Administration and Evaluation	1	Pedagogical Content Knowledge CCM-I,III (Marathi, Hindi, English, History, Geography, Urdu, Sanskrit, Mathematics, Science)
						2	Pedagogical Content Knowledge CCM- II,IV (Marathi, Hindi, English, History, Geography, Urdu, Sanskrit, Mathematics, Science)
						3	Information Communication and Technology and e-Learning
		4	Teaching Methodologies				

**Annexure 'C' of Direction No.04/2017**

Sr.	Faculty	Name of Board of Studies	Subject	Group of Subject/ Subjects					
4.	Inter-disciplinary Studies	3 Administration and Evaluation	I. Administration and Evaluation	5	Pedagogy of Teaching (Special Reference to MR) : Languages				
				6	Pedagogy of Teaching Mathematics				
				7	Pedagogy of Teaching Science				
				8	Pedagogy of Teaching Social Studies				
				9	Pedagogy of Teaching (Special Reference to VI) : Languages				
				10	Intervention and Teaching Strategies				
				11	Technology and Education of the Visually Impaired				
				12	Methodology of Educational Research				
				13	Educational Planning and Administration				
				14	EPC				
				15	Internship Programme				
				16	Applied Paper on Internship				
				17	Final Lesson				
				18	Statistical Methods for Data Analysis				
				19	Assessment for Learning				
						4 Physical Education	J. Physical Education	1	Organization and Administration in Physical Education
								2	Officiating and Coaching
								3	Test Measurement and Evaluation in Physical Education
								4	Contemporary Issues in Physical Education, Fitness and Wellness
5	Sports Psychology								

**Annexure 'C' of Direction No.04/2017**

Sr.	Faculty	Name of Board of Studies	Subject	Group of Subject/ Subjects	
4.	<b>Inter-disciplinary Studies</b>	4 <b>Physical Education</b>	I. Physical Education	6	Sports Medicine
				7	Computer Applications in Physical Education
				8	Yoga Education
				9	Olympic Movement
				10	Curriculum Design in Physical Education
				11	Health Education and Environmental Studies
				12	Sports Medicine, Physiotherapy and Rehabilitation
				13	Kinesiology and Biomechanics
				14	Research and Statistics in Physical Education
				15	Sports Nutrition and Weight Management
				16	Sports Management
				17	Educational Technology and Methods of Teaching in Physical Education
				18	Anatomy and Physiology
				19	History, Principles and Foundation of Physical Education
				20	Sports Psychology and Sociology
				21	Measurement and Evaluation in Physical Education
				22	Physiology of Exercise
				23	Sports Biomechanics and Kinesiology
				24	Sports Journalism and Mass Media
				25	Sports Technology

**Annexure 'C' of Direction No.04/2017**

Sr.	Faculty	Name of Board of Studies		Subject	Group of Subject/ Subjects	
4.	<b>Inter-disciplinary Studies</b>	4	<b>Physical Education</b>	I. Physical Education	26	Information and Communication Technology (ICT) in Physical Education
					27	Yogic Science
					28	Scientific Principles of Sports Training
					29	Theory of Sports and Games
					30	Sports Management and Curriculum Design in Physical Education
					31	Athletic Care and Rehabilitation
					32	Health Education and Sports Nutrition
					33	Sports Engineering
					34	Physical Fitness and Wellness
					35	Research Process in Physical Education and Sports Sciences
					36	Applied Statistics in Physical Education and Sports
					37	Value and Environmental Education
					38	Teaching Practice
					39	Dissertation
					40	Ground Practice
					41	Internship

**Annexure 'C' of Direction No.04/2017**

Sr.	Faculty	Name of Board of Studies		Subject	Group of Subject/ Subjects	
4	Inter-disciplinary Studies	5	Fine and Performing Arts	I. Music II. Dancing III. Dramatics IV. Drawing and Painting V. Sculpture VI. Applied Art VII. Printing Art VIII. Print Making IX. Art History X. Visual Communication	1	Music
					2	Dancing
					3	Dramatics
					4	Drawing and Painting
					5	Sculpture
					6	Applied Art
					7	Printing Art
					8	Print Making
					9	Art History
					10	Visual Communication
		6	Library and Information Science	I. Library and Information Science	1	Library and Information Science
		7	Mass Communication and Journalism	I. Mass Communication and Journalism	1	Mass Communication and Journalism
		8	B.Voc. Agricultural and Natural Resource Management Skill	I. B.Voc. Agricultural and Natural Resource Management Skill	1	Agricultural and Natural Resource Management Skill.
					2	Agriculture
					3	Soil and Water Conservation
		9	B.Voc. Animation and Web Designing	I. B.Voc. Animation and Web Designing	1	Animation and Web Designing
					2	Software Development
					3	Printing and Publishing
		10	B.Voc. Beauty Therapy	I. B.Voc. Beauty Therapy	1	Beauty Therapy



**Annexure 'C' of Direction No.04/2017**

Sr.	Faculty	Name of Board of Studies		Subject	Group of Subject/ Subjects	
4	Inter-disciplinary Studies	11	B.Voc. Fashion Designing	I. B.Voc. Fashion Designing	1	Fashion Designing
		12	Thoughts	I. Dr.Ambedkar Thought	1	Dr.Ambedkar Thought
				II. Gandhian Thought	2	Gandhian Thought
				III. Buddhist Heritage Studies and Tourism	3	Buddhist Heritage Studies and Tourism
		13	Skill Development	I. Skill Development	1	Community Education and Vocational Courses
		14	Women's Studies	I. Women's Studies	1	Women's Studies
15	Nanotechnology	I. Nanotechnology	1	Nanotechnology		

Annexure 'D' of Direction No.04/2017

**NORTH MAHARASHTRA UNIVERSITY, JALGAON**

**[D] The Departments in the University and Colleges with the subjects and their Corresponding Board of Studies.**

(Under Section 40(1)(2) of the Maharashtra Public Universities Act 2016)

The Departments in the University and Colleges teaching the subjects at the special, principal, major or main level for the purposes of Board of Studies under section 40(1)(2) of the Maharashtra Public Universities Act, 2016 shall be as given below :-

**1. Faculty of Science and Technology:-**

Sr. No.	Departments with the Subjects	Sr. No.	Corresponding Board of Studies
	<b>1. Department of Mathematics</b>	1	Board of Studies in Mathematics
1	Mathematics		
	<b>2. Department of Statistics</b>	2	Board of Studies in Statistics
1	Statistics		
2	Actuarial Science		
	<b>3. Department of Physics</b>	3	Board of Studies in Physics
1	Physics		
2	Energy Studies		
3	Material Science		
	<b>4. Department of Chemistry</b>	4	Board of Studies in Chemistry
1	Chemistry		
2	Inorganic Chemistry		
3	Organic Chemistry		
4	Analytical Chemistry		
5	Physical Chemistry		
6	Drug Chemistry		
	<b>5. Department of Botany</b>	5	Board of Studies in Botany
1	Botany		
	<b>6. Department of Computer Sciences</b>	6	Board of Studies in Computer Sciences
1	Computer Science		
2	Information Technology		
3	Computer Application (MCA)		
	<b>7. Department of Zoology</b>	7	Board of Studies in Zoology
1	Zoology		
	<b>8. Department of Geography</b>	8	Board of Studies in Geography
1	Geography		
2	Applied Geography		

**Annexure 'D' of Direction No.04/2017**

<b>Sr. No.</b>	<b>Departments with the Subjects</b>	<b>Sr. No.</b>	<b>Corresponding Board of Studies</b>
	<b>9. Department of Life Sciences</b>	9	Board of Studies in Life Sciences
1	Microbiology		
2	Biochemistry		
3	Biotechnology		
	<b>10. Department of Electronic Science and Instrumentation</b>	10	Board of Studies in Electronic Science and Instrumentation
1	Electronic Science		
2	VLSI Technology		
	<b>11. Department of Environmental Science</b>	11	Board of Studies in Environmental Science
1	Environmental Science		
	<b>12. Department of Chemical Sciences</b>	12	Board of Studies in Chemical Sciences
1	Polymer Chemistry		
2	Pesticides and Agrochemicals		
3	Industrial Chemistry		
4	Organic Chemistry		
5	Analytical Chemistry		
6	Physical Chemistry		
	<b>13. Department of Geosciences</b>	13	Board of Studies in Geosciences
1	Geology		
2	Applied Geology		
3	Geoinformatics		
	<b>14. Department of Applied Sciences and Humanities</b>	14	Board of Studies in Applied Sciences and Humanities
1	Applied Inorganic Chemistry		
2	Applied Mathematics		
3	Applied Organic Chemistry		
4	Applied Physical Chemistry		
5	Bioprocess Industrial Economics and Management		
6	Communication and Soft Skill		
7	Computer Programming		
8	Computer Science and Application		
9	Engineering Chemistry		
10	Process Engineering and Economics Costing/ Plant Design and economics costing		
11	Engineering Mathematics		
12	Engineering Physics		
13	Entrepreneurship		
14	Entrepreneurship and Business Planning		
15	Entrepreneurship Development		
16	Environmental Sciences/Studies		

**Annexure 'D' of Direction No.04/2017**

Sr. No.	Departments with the Subjects	Sr. No.	Corresponding Board of Studies
	<b>14. Department of Applied Sciences and Humanities</b>	14	Board of Studies in Applied Sciences and Humanities
17	Financial Management		
18	Industrial Economics and Management		
19	Industrial Management		
20	Industrial Management and Communication Skill		
21	Industrial Organization and Management		
22	Inorganic Chemistry		
23	Intellectual Property Rights		
24	IPR and Entrepreneurship		
25	Managerial Behaviour: Psychosocial Dimensions		
26	Marketing Management		
27	Mathematics		
28	Organic Chemistry		
29	Physical Chemistry		
30	Physics		
31	Plant Design, Economics and Costing		
32	Process Engineering Economics and Costing		
33	Professional Communication		
34	Soft and Entrepreneurship Skill		
35	Soft Skills		
	<b>15. Department of Chemical Engineering, Chemical Technology and Bio-technology (Engineering)</b>	15	Board of Studies in Chemical Engineering, Chemical Technology and Bio-technology (Engineering)
1	Applied and Structural Mechanics		
2	Advance Catalysis		
3	Advanced Bakery and Confectionary Technology		
4	Advanced Biomaterials		
5	Advanced Separation Techniques		
6	Advanced Technology in Food Packaging		
7	Advances in Food Nutritions		
8	Advances in Technology of Oil and Fats Product		
9	Advenced Food Processing Technology		
10	Animal Biotechnology		
11	Application Techniques and Paints Defect		
12	Applications of Nano Science and Technology in Electronics		

**Annexure 'D' of Direction No.04/2017**

Sr. No.	Departments with the Subjects	Sr. No.	Corresponding Board of Studies
	<b>15. Department of Chemical Engineering, Chemical Technology and Bio-technology (Engineering)</b>	15	Board of Studies in Chemical Engineering, Chemical Technology and Bio-technology (Engineering)
13	Applications of Nano Science and Technology in Material Technology		
14	Applied Colloid and Surface Chemistry		
15	Applied Genetic Engineering		
16	Automotive and Insulation Coatings		
17	Bio Polymers		
18	Biochemical Engineering		
19	Biochemistry		
20	Biofuel and Alcohol Technology		
21	Bioinformatics		
22	Biological Thermodynamics		
23	Biomechanics		
24	Biomedical Fluid Dynamics		
25	Biomedical Instrumentation		
26	Biomedical Instrumentation		
27	Bioprocess Calculation		
28	Bioprocess Engineering		
29	Bioprocess Engineering and Economics		
30	Bioprocess Equipment Design		
31	Bioprocess Industries		
32	Bioprocess Instrumentation and Analysis		
33	Bioprocess Modelling and Simulation		
34	Bioprocess Principles		
35	Biosafety and Bioethics		
36	Biostatistics		
37	Biotechnology and Waste Treatment		
38	Chemical Engineering Materials		
39	Chemical Engineering Modelling and Optimization		
40	Chemical Engineering Process		
41	Chemical Engineering Thermodynamics		
42	Chemical Equipment Design		
43	Chemical Plant Design and Project Engineering		
44	Chemical Process Technology		
45	Chemical Reaction Engineering		
46	Chemistry and Technology of Oils and Fats		

**Annexure 'D' of Direction No.04/2017**

Sr. No.	Departments with the Subjects	Sr. No.	Corresponding Board of Studies
	<b>15. Department of Chemical Engineering, Chemical Technology and Bio-technology (Engineering)</b>	15	Board of Studies in Chemical Engineering, Chemical Technology and Bio-technology (Engineering)
47	Chemistry and Technology of Polymers		
48	Chemistry and Technology of Powder Coatings		
49	Chemistry and Technology of Polymers.		
50	Chemistry of Surfactants and Oleo Chemicals		
51	Computational Fluid Dynamics		
52	Computer Aided Process Equipment Design, Modelling and Simulation		
53	Concept in Biotechnology		
54	Down Stream Processing		
55	Eco-friendly Coating Technologies		
56	Elements of Mechanics and Workshop Technology		
57	Energy Engineering		
58	Engineering Graphics		
59	Engineering of Pigmented Dispersion		
60	Environmental Biotechnology		
61	Enzyme Engineering		
62	Fermentation Biotechnology		
63	Fermentation Technology		
64	Fluid Flow Operation		
65	Food Biochemistry and Nutrition		
66	Food Biotechnology		
67	Food Chemistry		
68	Food Engineering		
69	Food Processing		
70	Food Quality		
71	Food Toxicity, Quality and Safety		
72	Generation and Transmission of Mechanical Power		
73	Genetic Engineering		
74	Genomics and Proteomics		
75	Good Manufacturing Practices		
76	Heat Transfer		
77	Heat, Mass and Momentum Transfer		
78	High Fats Products and Hydrogenation		
79	Immunology		

**Annexure 'D' of Direction No.04/2017**

Sr. No.	Departments with the Subjects	Sr. No.	Corresponding Board of Studies
	<b>15. Department of Chemical Engineering, Chemical Technology and Bio-technology (Engineering)</b>	15	Board of Studies in Chemical Engineering, Chemical Technology and Bio-technology (Engineering)
80	Industrial Fermentation Technology		
81	Industrial Hazards and Safety		
82	Industrial Pollution and Control		
83	Instrumentation and Instrumental Analysis		
84	Instrumentation and Process Control		
85	Introduction to Chemical Engineering		
86	Introduction to Polymer Technology		
87	Machine Design and Drawing		
88	Mass Transfer		
89	Mass Transfer Operations		
90	Mass Transfer with Multiphase System		
91	Material Technology		
92	Mathematical Methods in Chemical Engineering		
93	Mechanical Operation		
94	Medicinal Chemistry and Drug Discovery		
95	Metabolic Engineering		
96	Microbiology		
97	Microbiology and Molecular Biology		
98	Modelling Simulation and CAD		
99	Modern Methods of Extraction		
100	Modern Methods of Instrumental Analysis		
101	Modified and Tailor Made Oils		
102	Molecular Biology		
103	Molecular Modelling and Drug Design		
104	Mould and Die Design		
105	Nano Biotechnology		
106	Nano Particles in Energy Production		
107	Newer Separation Techniques		
108	Newer Techniques of Synthesis and Curing of Polymers		
109	Non Traditional Oil and Non Triglyceride Constituents		
110	Oil Technology		
111	Petrochemical Technology		
112	Petrochemicals		
113	Petroleum Refining Engineering		

**Annexure 'D' of Direction No.04/2017**

Sr. No.	Departments with the Subjects	Sr. No.	Corresponding Board of Studies
	<b>15. Department of Chemical Engineering, Chemical Technology and Bio-technology (Engineering)</b>	15	Board of Studies in Chemical Engineering, Chemical Technology and Bio-technology (Engineering)
114	Pharmaceutical Biotechnology		
115	Piping Design		
116	Plant Biotechnology		
117	Plant Design Economics and Costing		
118	Plant Tissue Culture and Plant Biotechnology		
119	Plant Utility		
120	Plastic Waste Management		
121	Pollution Control In Chemical Industries		
122	Polymer Blends and Composites		
123	Polymer Reaction Engineering		
124	Polymer Recycling and Waste Management		
125	Polymer Technology		
126	Polymer Testing		
127	Polymerization Kinetics		
128	Post-Harvest Technology of Oil Bearing Materials		
129	Principles of Food Preservation		
130	Process Calculations		
131	Process Dynamic and Control		
132	Process Engineering Economics and Costing		
133	Process Equipment Design		
134	Process Heat Transfer		
135	Processing of Plastics		
136	Project Engineering and Economics		
137	Protein Engineering		
138	Quality Assurance and Analysis of Surface Coating		
139	Quality Control Techniques in Oil and Fats		
140	Quantum Mechanics		
141	Radiation Curing Coating		
142	Reaction Engineering		
143	Reaction Engineering and Nano Catalysis		
144	Refining of Oils and Fats		
145	Science and Technology of Nano Medicines		
146	Science and Technology of Nano Composites and Nano Pigments		
147	Special Purpose and Effect Coatings		



**Annexure 'D' of Direction No.04/2017**

Sr. No.	Departments with the Subjects	Sr. No.	Corresponding Board of Studies
	<b>15. Department of Chemical Engineering, Chemical Technology and Bio-technology (Engineering)</b>	15	Board of Studies in Chemical Engineering, Chemical Technology and Bio-technology (Engineering)
148	Speciality Pigments and Additives in Coatings		
149	Stem Cell Technology		
150	System Biology		
151	Techniques for Synthesis of Nano Particles		
152	Technological Advances in Perfumery and Cosmetics		
153	Technology of Anionic Surfactants and Detergents		
154	Technology of Cationic and Amphoteric Surfactants		
155	Technology of Elastomers and Additives		
156	Technology of Fats Slitting and Soaps		
157	Technology of Fatty Acids and Soaps		
158	Technology of Oral, Hair and Skin Care Products		
159	Technology of Pigment		
160	Technology of Printing Inks		
161	Theory of Colour and Architectural Coatings		
162	Theory of Corrosion and Marine and Maintenance Coatings		
163	Trade Sale Paint		
164	Transport Phenomena		
165	Treatment and Disposal of Food Industrial Waste		
166	Unit Operation		
167	Waterborne Polymers and Coatings		
168	Workshop Technology		
	<b>16. Department of Civil Engineering</b>	16	Board of Studies in Civil Engineering
1	Advance Construction Equipments		
2	Advance Construction Technology		
3	Advance Design of Concrete Structures		
4	Advance RCC Structure		
5	Advanced Concrete Technology		
6	Advanced Structural Design		
7	Advanced Waste Water Treatment Technology		
8	Advanced Water Treatment Technology		
9	Air pollution		

**Annexure 'D' of Direction No.04/2017**

<b>Sr. No.</b>	<b>Departments with the Subjects</b>	<b>Sr. No.</b>	<b>Corresponding Board of Studies</b>
	<b>16. Department of Civil Engineering</b>	16	Board of Studies in Civil Engineering
10	Architecture and Town Planning		
11	Building Construction Techniques and Materials		
12	Building Design and Drawing		
13	Building Environment and Services		
14	Concrete Technology		
15	Construction and Project Management		
16	Construction Contract Administration and Management		
17	Construction Cost and Quality Management		
18	Construction Cost Dynamics		
19	Construction Disaster Management		
20	Construction Economics and Finance		
21	Construction Management		
22	Construction Methods and Equipment Management		
23	Construction Planning, Scheduling and Management		
24	Construction Safety		
25	Construction Safety and Disaster Management		
26	Construction Techniques and Equipments		
27	Contracts and Valuation		
28	Contracts, Administration and Arbitration		
29	Design of Water Supply and Waste Water structure		
30	Design Operation and Maintenance of Water Supply and Sewerage System		
31	Earthquake Engineering		
32	Earthquake Resistance Design of Building		
33	Elements of Civil Engineering		
34	Elements of Civil Engineering and Engineering Mechanics		
35	Engineering Geology		
36	Environment and Energy Management.		
37	Environmental Engineering		
38	Environmental Engineering Chemistry		
39	Environmental Engineering Microbiology		

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<b>Sr. No.</b>	<b>Departments with the Subjects</b>	<b>Sr. No.</b>	<b>Corresponding Board of Studies</b>
	<b>16. Department of Civil Engineering</b>	16	Board of Studies in Civil Engineering
40	Environmental Impact Assessment		
41	Environmental Risk Assessment and Hazard Management		
42	Environmental Sanitation		
43	Estimating and Costing		
44	Finite Element Methods		
45	Fluid Mechanics		
46	Geographical Information systems		
47	Geotechnical Engineering		
48	Geotechniques for Infrastructure.		
49	Highway Projects Planning, Designing and Economic Evaluation		
50	Industrial Pollution and Control		
51	Industrial Water and Waste Water Management		
52	Industrial Water Pollution and Control		
53	Infrastructural Engineering		
54	Infrastructure Development		
55	Irrigation Water Distribution Systems		
56	Low Cost Housing		
57	Management and Project Planning in Construction		
58	New Construction Material and Techniques		
59	Numerical Methods in Civil Engineering		
60	Open Channel and Conduit Flow		
61	Operation Research		
62	Ports and Harbour Structures		
63	Probability, Statistics and Optimization Technique		
64	Remote Sensing GIS and Its Environmental Application		
65	Repairs, Rehabilitation, Retrofitting of Structure		
66	Resource Management		
67	Retrofitting and Rehabilitation of Structures		
68	Retrofitting of Structures		
69	Rural Water Supply and Sanitation		
70	Safety Management in Construction		
71	Solid Waste and Management		
72	Strength of Materials		
73	Structural Design		

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<b>Sr. No.</b>	<b>Departments with the Subjects</b>	<b>Sr. No.</b>	<b>Corresponding Board of Studies</b>
	<b>16. Department of Civil Engineering</b>	16	Board of Studies in Civil Engineering
74	Structural Design and Drawing		
75	Surveying		
76	Sustainable Building Technology		
77	System Approach in Civil Engineering		
78	Theory of Structures		
79	Urban Hydrology and Storm Water Management.		
80	Water Power engineering		
81	Water Resources Engineering		
82	Watershed Management		
83	Work study and Incentive Management		
84	Life Cycle Costing of Infrastructure		

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<b>Sr. No.</b>	<b>Departments with the Subjects</b>	<b>Sr. No.</b>	<b>Corresponding Board of Studies</b>
	<b>17. Department of Architecture</b>	17	Board of Studies in Architecture
1	Architectural Design		
2	Graphics		
3	Building Technology (Materials & Construction)		
4	Building Services		
5	Climatology		
6	History of Architecture and Human Settlements		
7	Quantity Surveying and Estimating		
8	Structure		
9	Estimating & Specifications		
10	Professional Practice & Building Byelaws		
11	Landscape Design		
12	Town Planning & Urban Design		
13	Rural Architecture		
14	Acoustics		
15	Architectural Conservation		
16	Computer Applications		
17	Interior Design		
18	Housing		
19	Working Drawing		
20	Workshop & Visual Arts, Photography		
21	Surveying and Levelling		
22	Contract Document		
23	Application of Non-conventional Energy in Architecture		
24	Barrier free Architecture		
25	Project and Construction Management		
26	Sustainable Architecture		
27	GIS Applications in Architecture		
28	Industrial Architecture		
29	Traffic and Transportation		
30	Product Design		

**Annexure 'D' of Direction No.04/2017**

Sr. No.	Departments with the Subjects	Sr. No.	Corresponding Board of Studies
	<b>18. Department of Computer Engineering and Information Technology</b>	18	Board of Studies in Computer Engineering and Information Technology
1	Advanced Computer Architecture		
2	Advanced Computer Network		
3	Advanced Database Management Systems		
4	Advanced Software Engineering		
5	Advanced Unix Programming		
6	Analog and Digital Electronics		
7	Analog Electronics		
8	Analysis and Design of Algorithms		
9	Android Programming		
10	Android Programming		
11	Applied Algorithms		
12	Artificial Intelligence		
13	Artificial Intelligence and Expert System		
14	Artificial Intelligence and Neural Network		
15	Bio-Informatics		
16	Cloud Computing		
17	Compiler Construction		
18	Computer Graphics		
19	Computer Graphics and Multimedia		
20	Computer Network		
21	Computer Organization		
22	Computer Programming		
23	Cryptography and Network Security		
24	Cryptography and Network Security		
25	Data Communication		
26	Data Structures		
27	Data Warehousing and Mining		
28	Database Management System		
29	Digital Image and Video Processing		
30	Digital System and Microprocessor		
31	Digital System Design		
32	Discrete Structure and Graph Theory		
33	Distributed System		
34	Distributed System		
35	E-Commerce		
36	Embedded Software Design		
37	Embedded Systems		

**Annexure 'D' of Direction No.04/2017**

Sr. No.	Departments with the Subjects	Sr. No.	Corresponding Board of Studies
	<b>18. Department of Computer Engineering and Information Technology</b>	18	Board of Studies in Computer Engineering and Information Technology
38	Enterprise Resource Planning		
39	Enterprise Resource Planning and SAP		
40	Formal Language and Automata Theory		
41	Fuzzy Logic and Neural Networks		
42	Human Computer Interaction		
43	Image Processing		
44	Information Retrieval		
45	Information Theory		
46	Internet Security		
47	iPhone Programming		
48	Java Programming		
49	Linux		
50	Management Information System		
51	Mathematical Foundations of Computer Science		
52	Microprocessor		
53	Microprocessor and Microcontroller		
54	Microprocessor and Microcontroller Interfacing		
55	Mobile Computing		
56	Mobile Computing		
57	Mobile Network		
58	Mobile Network		
59	Multimedia Techniques		
60	Net-Centric Computing		
61	Neural Network and Fuzzy Logic		
62	Neural Network and Fuzzy Logic		
63	Object Oriented Modelling and Design		
64	Object Oriented Modelling and Design		
65	Object Oriented Technology		
66	Operating System		
67	Operational Research		
68	Parallel Computing		
69	Pattern Recognition		
70	Principles of Management		
71	Programming Paradigm and Methodology		
72	Real Time System		
73	Soft Computing		
74	Software Engineering		

**Annexure 'D' of Direction No.04/2017**

<b>Sr. No.</b>	<b>Departments with the Subjects</b>	<b>Sr. No.</b>	<b>Corresponding Board of Studies</b>
	<b>18. Department of Computer Engineering and Information Technology</b>	18	Board of Studies in Computer Engineering and Information Technology
75	Software Engineering and Project Management		
76	Software Metrics and Quality Assurance		
77	Software Project Management		
78	Software Testing and Quality Assurance		
79	System Programming		
80	Web Design		
81	Web Engineering		
82	Web Programming		

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**Annexure 'D' of Direction No.04/2017**

Sr. No.	Departments with the Subjects	Sr. No.	Corresponding Board of Studies
	<b>19. Department of Electronics and Telecommunication and Industrial Electronics Engineering</b>	19	Board of Studies in Electronics and Telecommunication and Industrial Electronics Engineering
1	Advance Power Electronics		
2	Advanced Communication System		
3	Advanced Computer Network		
4	Advanced Digital Communication		
5	Advanced Digital Image Processing		
6	Advanced Digital Signal Processing		
7	Advanced Embedded System Design		
8	Advanced Instrumentation System		
9	Advanced Light Wave Communication		
10	Advanced Telecomm Network Management		
11	Advanced VLSI Design		
12	Advanced Digital Signal Processing and Processors		
13	Analog Integrated Circuits and Applications		
14	Analog VLSI Design		
15	Antenna and Wave Propagation		
16	Antenna Theory		
17	Antenna Theory and Design		
18	Artificial Intelligence		
19	Artificial Intelligence and Neural Network		
20	Artificial Intelligence and Soft Computing		
21	Artificial Neural Networks and Fuzzy Systems		
22	Automotive Electronics		
23	Biomedical Engineering		
24	Biomedical Engineering Systems		
25	Biomedical Instrumentation		
26	Biomedical Signal Processing		
27	Broadband Communication		
28	Communication System		
29	Communication System Design		
30	Component Devices and Instrumentation Technology		
31	Computer Architecture		
32	Computer Communication Network		
33	Computer Networks		
34	Computer Networks and Management		

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Sr. No.	Departments with the Subjects	Sr. No.	Corresponding Board of Studies
	<b>19. Department of Electronics and Telecommunication and Industrial Electronics Engineering</b>	19	Board of Studies in Electronics and Telecommunication and Industrial Electronics Engineering
35	Control System Techniques		
36	Data Communication and Design		
37	Digital Communication Systems		
38	Digital Image Processing		
39	Digital Integrated Circuits and System		
40	Digital Signal Processing		
41	Digital Signal Processing and Image Processing		
42	Digital System Design		
43	Digital Techniques and Applications		
44	Digital VLSI Design		
45	Electrical Circuits and Machines		
46	Electromagnetic Engineering		
47	Electromagnetic Interference and Compatibility		
48	Electronic Circuit Design		
49	Electronic Instrumentation		
50	Electronic Measurement		
51	Electronic Measurement Techniques		
52	Electronics Circuit Design		
53	Electronics Materials and Components		
54	Elements of Electronics Engineering		
55	Embedded Networking and Wireless Sensor Network		
56	Embedded System		
57	Embedded System Design		
58	Error Control Codes		
59	Feedback Control System		
60	Fiber Optic Communication		
61	FPGA Based System Design		
62	Image and Video Processing		
63	Image Processing		
64	Image Processing and Pattern Recognition		
65	Industrial Automation		
66	Industrial Economics and Telecom Regulation		
67	Information Theory and Coding Technology		
68	Light Wave communication		
69	Linear Integrated circuits		
70	Linear Systems Theory		

**Annexure 'D' of Direction No.04/2017**

Sr. No.	Departments with the Subjects	Sr. No.	Corresponding Board of Studies
	<b>19. Department of Electronics and Telecommunication and Industrial Electronics Engineering</b>	19	Board of Studies in Electronics and Telecommunication and Industrial Electronics Engineering
71	Management Science		
72	Mechatronics		
73	Microcontroller and Peripheral Interface Controller		
74	Microcontroller Systems		
75	Microelectronic Circuit Design		
76	Microelectronics		
77	Microprocessors		
78	Microprocessors and Microcontroller System		
79	Mobile Communication		
80	Modelling and Simulation		
81	Modelling and Simulation Techniques		
82	Multimedia Communication		
83	Multimedia Systems		
84	Nano Electronics		
85	Nanotech and Nanotechnology		
86	Nanotechnology		
87	Network Analysis and Synthesis		
88	Network and Lines		
89	Network System and Filter Design		
90	Neural Network and Fuzzy Logic		
91	Neural Network and Fuzzy System		
92	Object Oriented Programming		
93	Operating System		
94	Optimization Techniques		
95	Parallel Computing		
96	Pattern Recognition and Classification		
97	Power Electronics		
98	Process Control System		
99	Process Instrumentation		
100	Radiation and Microwave Techniques		
101	Random Processes		
102	Real Time Operating System		
103	RF Circuit Design		
104	Robotics		
105	Satellite and Mobile Communication		

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<b>Sr. No.</b>	<b>Departments with the Subjects</b>	<b>Sr. No.</b>	<b>Corresponding Board of Studies</b>
	<b>19. Department of Electronics and Telecommunication and Industrial Electronics Engineering</b>	19	Board of Studies in Electronics and Telecommunication and Industrial Electronics Engineering
106	Satellite Communication		
107	Signal Processing and Application		
108	Solid State Devices and Circuits		
109	Speech and Audio Processing		
110	System Programming		
111	Telecomm Network Management		
112	Telecommunication Network Management		
113	Telematics		
114	Television and Consumer Electronics		
115	Transducers and Measurement Techniques.		
116	VLSI Design		
117	VLSI Testing and Verification		
118	Wireless and Mobile Communication		
119	Wireless communication		
120	Wireless communication System		

**Annexure 'D' of Direction No.04/2017**

Sr. No.	Departments with the Subjects	Sr. No.	Corresponding Board of Studies
	<b>20. Department of Electrical and Instrumentation Engineering</b>	20	Board of Studies in Electrical and Instrumentation Engineering
1	A C Circuit and Transformer		
2	Advance Microprocessor		
3	Agricultural Instrumentation		
4	Analog and Digital Electronics		
5	Analog Circuits and Analysis		
6	Analytical Instrumentation		
7	Applied Thermodynamics		
8	Artificial Intelligence		
9	Automatic Control Systems		
10	Automotive Instrumentation		
11	Biomedical Instrumentation		
12	Communication Engineering and Telemetry		
13	Computational Methods and Programming		
14	Computer Aided Power System Analysis		
15	Computer Network		
16	Computer Networking		
17	Control System		
18	Control System Components		
19	Data Communication and Telemetry		
20	Digital Circuits Design		
21	Digital Control System		
22	Digital Signal Processing		
23	Digital Image Processing.		
24	Distributed Control System		
25	Discrete Control System and MATLAB		
26	Electric Traction Engineering		
27	Electrical Engineering Materials		
28	Electrical Installation Estimation and Distribution		
29	Electrical Machine Design		
30	Electrical Machine		
31	Electrical Machines and Networks		
32	Electrical Measurement		
33	Electromagnetic Engineering		
34	Electromechanical Energy Conversion.		
35	Electronic Instrumentation		

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Sr. No.	Departments with the Subjects	Sr. No.	Corresponding Board of Studies
	<b>20. Department of Electrical and Instrumentation Engineering</b>	20	Board of Studies in Electrical and Instrumentation Engineering
36	Elements of Electrical Engineering		
37	Elements of Electrical and Electronics Engineering		
38	Embedded System		
39	Embedded System Design		
40	Energy Audit and Conservation		
41	Extra High Voltage Transmission		
42	Environmental Instrumentation		
43	Fiber Optics and Laser Instrumentation		
44	Flexible A C Transmission		
45	Flexible AC Transmission System and Power Quality		
46	Generation Planning and Load Dispatch		
47	High Voltage Engineering		
48	High Voltage Transmission		
49	Image Processing		
50	Industrial Automation		
51	Industrial Drives and Control		
52	Industrial Electrical Engineering		
53	Instrumentation for Agriculture, Food and Pharmaceutical Industry		
54	Instrumentation in Unit Operation		
55	Instrumentation System design		
56	Linear Techniques		
57	Measurement Fundamentals		
58	Metrology and machine Tools		
59	Microcontroller and Application		
60	Microprocessor and Microcontroller		
61	Microprocessor Techniques		
62	Modelling And Simulation		
63	Nano Instrumentation		
64	Network Analysis		
65	Neural and Fuzzy Logic		
66	Neural network and Fuzzy Logic Instrumentation		
67	Numerical Techniques		
68	Optimal and Adaptive Control		
69	Optimization Techniques		
70	Power Electronics		

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Sr. No.	Departments with the Subjects	Sr. No.	Corresponding Board of Studies
	<b>20. Department of Electrical and Instrumentation Engineering</b>	20	Board of Studies in Electrical and Instrumentation Engineering
71	Power Plant Engineering		
72	Power Plant instrumentation		
73	Power System		
74	Power System Design Practice		
75	Power System Dynamics		
76	Power System Operation And Control		
77	Power System Stability		
78	Process Instrumentation		
79	Process Planning Estimation and Economics		
80	Programmable Logic Controller and Distributed Control System		
81	Renewable Energy Sources		
82	Robotics And Automation		
83	Sensors and Transducers		
84	Signals and System		
85	Soft Computing		
86	Switchgear and Protection		
87	Thermal and Fluid Power Engineering		
88	Unit Operation		
89	Virtual Instrumentation		
90	Virtual Instrumentation and LABVIEW		
91	Advanced Power System Protection		
92	Artificial Intelligence and its Applications in Power Systems		
93	Computer Methods in Power System Analysis		
94	EHV Transmission Systems		
95	FACTS and Power Quality		
96	High Voltage Power Transmission		
97	Power Electronics Applications in Power Systems		
98	Power Sector Economics, Management and Restructuring		
99	Power System Design		
100	Power System Modelling and Control		
101	Power System Optimization Techniques		
102	Power System Planning and Reliability		

**Annexure 'D' of Direction No.04/2017**

Sr. No.	Departments with the Subjects	Sr. No.	Corresponding Board of Studies
	<b>21. Department of Mechanical, Production and Automobile Engineering</b>	21	Board of Studies in Mechanical, Production and Automobile Engineering
1	Advanced Air Conditioning		
2	Advanced Engine Technology		
3	Advanced Fluid Mechanics		
4	Advanced Heat Transfer		
5	Advanced Machine Design		
6	Advanced Manufacturing and Forming Processes		
7	Advanced Mechanical Engineering Design of Equipment		
8	Advanced Refrigeration		
9	Advanced Robotics		
10	Advanced Thermodynamics and Gas Dynamics		
11	Advanced Tool and Die Design		
12	Advanced Welding Technology		
13	Alternate Energy Sources		
14	Analysis and Synthesis of Mechanism		
15	Applied Thermodynamics		
16	Automobile Design		
17	Automobile Dynamics		
18	Automobile Electrical Systems		
19	Automobile Engineering		
20	Automobile Engines		
21	Automobile Painting and Collision Repairs		
22	Automobile Services and Repairs		
23	Automobile System Design		
24	Automobile Systems		
25	Automotive Design		
26	Automotive Materials		
27	Autotronics		
28	Basic Electrical Drives and Controls		
29	CAD-CAM and Automation		
30	Computational Fluid Dynamics		
31	Computer Aided Design		
32	Computer Aided Design and Computer Aided Manufacturing		
33	Computer Aided Engineering		
34	Computer Aided Manufacturing		
35	Computer Methods in Mechanical Design		



**Annexure 'D' of Direction No.04/2017**

Sr. No.	College Departments with the Subjects covered under the respective Departments	Sr. No.	Corresponding Board of Studies
	<b>21. Department of Mechanical, Production and Automobile Engineering</b>	21	Board of Studies in Mechanical, Production and Automobile Engineering
36	Convective Heat Transfer Analysis		
37	Cost and Cost Control		
38	Database Management		
39	Design and synthesis of Mechanism		
40	Design for Manufacture and Assembly		
41	Design of Experiments and Analysis		
42	Design of Heat Exchanger		
43	Design of Machine Element		
44	Design of Material Handling Equipment		
45	Design of Pressure Vessel		
46	Design of Pumps and Compressors		
47	Electrical Machines and Industrial Electronics		
48	Energy Conservation and Management		
49	Energy Engineering		
50	Energy Resources and Technology		
51	Engineering Drawing and Elements of Mechanical Engineering		
52	Engineering Mechanics		
53	Engineering Metallurgy		
54	Engineering Thermodynamics		
55	Equipment Design For Thermal Systems		
56	Finite Element Analysis		
57	Finite Element Analysis and Simulation Techniques		
58	Fluid Machinery		
59	Fluid Mechanics		
60	Gas Turbine and Jet Propulsion		
61	Heat Transfer		
62	Industrial Engineering		
63	Industrial Engineering and Safety		
64	Industrial Fluid Power		
65	Industrial Hydraulics And Pneumatics		
66	Instrumentation and Automatic Control System		
67	Internal Combustion Engines		
68	Introduction to Computing		

**Annexure 'D' of Direction No.04/2017**

Sr. No.	College Departments with the Subjects covered under the respective Departments	Sr. No.	Corresponding Board of Studies
	<b>21. Department of Mechanical, Production and Automobile Engineering</b>	21	Board of Studies in Mechanical, Production and Automobile Engineering
69	Introduction to Robotics		
70	Mechatronic Product Design		
71	Machine Design		
72	Machine Drawing and Computer Graphics		
73	Machine Tool Design		
74	Machine Tools and Product Design		
75	Manufacturing Engineering		
76	Manufacturing Science		
77	Material Handling Systems		
78	Material Science		
79	Material Science and Metallurgy		
80	Measurement Techniques And Data Analysis		
81	Mechanical Design Analysis		
82	Mechanical Measurement and Metrology		
83	Mechanical Vibration		
84	Mechatronics Systems		
85	Metrology and Quality Control		
86	Noise Vibration and Harshness in Automobiles		
87	Non Conventional Power Plant		
88	Non-Conventional Energy System		
89	Numerical Analysis and Computational Method		
90	Numerical Control and Machine Tool Robotics		
91	Numerical Methods in Thermal and Fluid engineering		
92	Operation Research		
93	Operation Research Techniques		
94	Optimization Techniques		
95	Optimization Techniques in Design		
96	Personal Management and Industrial Relations		
97	Power Plant Engineering		
98	Process Equipment Design		
99	Procurement and Inventory Control		
100	Product Development and Rapid Prototyping		

**Annexure 'D' of Direction No.04/2017**

Sr. No.	Departments with the Subjects	Sr. No.	Corresponding Board of Studies
	<b>21. Department of Mechanical, Production and Automobile Engineering</b>	21	Board of Studies in Mechanical, Production and Automobile Engineering
101	Production Management		
102	Production Planning and Control		
103	Project and Business Management		
104	Refrigeration and Air Conditioning		
105	Research Methodology		
106	Robotics		
107	Solar Energy Technology		
108	Special Purpose Vehicles		
109	Strength of Materials		
110	System Dynamics and Simulation		
111	Theory of Elasticity and Plasticity		
112	Theory of Machines		
113	Thermal Equipment Design		
114	Tool Engineering		
115	Transport Management and Motor Industry		
116	Transport Management and Safety Regulations		
117	Tribology		
118	Turbomachinery		
119	Vehicle Body Engineering		
120	Vehicle Testing and Evaluation		
121	Vibration Engineering		

**Annexure 'D' of Direction No.04/2017**

Sr. No.	Departments with the Subjects	Sr. No.	Corresponding Board of Studies
	<b>22. Department of Pharmaceutics</b>	22	Board of Studies in Pharmaceutics
1	Dispensing Pharmacy		
2	Unit Operations		
3	Physical Pharmacy		
4	Communication Skills and Soft Skills Development		
5	Pharmaceutical Microbiology		
6	Hospital Pharmacy		
7	Pharmaceutical Technology		
8	Bio-Pharmaceutics and Pharmacokinetics		
9	Pharmaceutical Jurisprudence and Ethics		
10	Pharmaceutical Technology		
11	Pharmaceutical Industrial Management		
12	Pharmaceutics		
13	Pharma Marketing		
14	Quality Assurance		
15	Bioavailability and TDM		
16	Cosmeceutics		
17	Packaging Technology		
	<b>23. Department of Pharmaceutical Chemistry</b>	23	Board of Studies in Pharmaceutical Chemistry
1	Inorganic Pharmaceutical Chemistry		
2	Inorganic and Physical Chemistry		
3	Organic Chemistry		
4	Biochemistry		
5	Medicinal Chemistry		
6	Pharmaceutical Analysis		
7	Drug design and lead Identification		
	<b>24. Department of Pharmacognosy</b>	24	Board of Studies in Pharmacognosy
1	Pharmacognosy		
2	Environmental Science		
3	Chemistry of Natural Products		
4	Pharmaceutical Biotechnology		
5	Medicinal Plant Biotechnology		
6	Plant Biotechnology		

**Annexure 'D' of Direction No.04/2017**

<b>Sr. No.</b>	<b>Departments with the Subjects</b>	<b>Sr. No.</b>	<b>Corresponding Board of Studies</b>
	<b>25. Department of Pharmacology</b>	25	Board of Studies inPharmacology
1	Applied Biostatistics and Computer Applications in Pharmacy		
2	Anatomy, Physiology and Health Education		
3	Industrial Psychology		
4	Pathophysiology of Common Diseases		
5	Pharmacology		
6	Clinical Pharmacy and Drug Interaction		
	<b>26. Department of Cosmetics</b>	26	Board of Studies inCosmetics
1	Cosmetics		
	<b>27. Department of Public Health Science</b>	27	Board of Studies inPublic Health Science
1	Public Health Science		
	<b>28. Department of Physiotherapy</b>	28	Board of Studies inPhysiotherapy
1	Physiotherapy		
	<b>29. Department of Nursing</b>	29	Board of Studies inNursing
1	Nursing		
	<b>30. Department of Health Care</b>	30	Board of Studies inHealth Care
1	Health Care		

Annexure 'D' of Direction No.04/2017

**2. Faculty of Commerce and Management:-**

Sr. No.	Departments with the Subjects	Sr. No.	Corresponding Board of Studies
	<b>1. Department of Accountancy and Costing</b>	1	Board of Studies in Accountancy and Costing
1	Financial and Cost Accounting		
2	Advanced Cost and Management Accounting		
3	Principles of Accounting		
4	Cost Control and Cost Reduction		
5	Business Accounting		
6	Management Accounting		
7	Auditing Practices		
8	Cost and Management Accountancy		
9	Corporate Accounting and Costing		
10	Advanced Accountancy		
11	Corporate Accounting		
12	Cost Accounting		
13	Advanced Accounting		
14	Income Tax		
15	Auditing and Information System Audit		
16	Financial Accounting and Costing		
17	Financial Accounting		
18	Corporate Accountancy		
19	Principles & Practices of Auditing		
20	Advanced Cost Accountancy		
21	Management Accounting and Financial Management		
22	Financial Management and Decision Making		
23	Principles and Practices of Auditing		
24	Direct and Indirect Tax		
25	Auditing		
26	Auditing and ISA		
27	Business Accounting and Financial Management		
28	Security Analysis and Portfolio Management		
29	Corporate Laws and Income Tax Laws		
30	Income Tax Law		
31	Financial Services and Instrument		
32	Financial Analysis and Business Journalism		
33	Introduction to Information System Audit		
34	International Financial Management		
35	International Finance		

**Annexure 'D' of Direction No.04/2017**

Sr. No.	Departments with the Subjects	Sr. No.	Corresponding Board of Studies
	<b>2. Department of Commerce and Business Laws</b>	2	Board of Studies in Commerce and Business Laws
1	Corporate Law		
2	Business Ethics and Mind Management		
3	Current Business Scenario		
4	Industrial Safety Management		
5	Co-operative Laws and Micro Finance		
6	Business Law		
7	Company Law		
8	Stock and Commodity Market		
9	Mercantile Laws		
10	Production and Material Management		
11	Industrial Relation		
12	Production Management		
13	Business Research Methods		
14	Corporate Social Responsibility		
15	e-Commerce and Excellence Management		
16	Indian Commercial Laws		
17	Industrial Relations and Trade Unions		
18	Industrial Compliance Framework		
19	Consumer Protection and Business Ethics		
20	Foundation Course for Managers		
21	Business Communication		
22	Business Enterprises		
23	International Business		
24	Corporate Governance		
25	Entrepreneurship Development		
26	Corporate Communication Skills		
27	Legal Aspects of Business		
28	Social Security and Welfare Legislations		
29	Labour Legislations		
30	Public Relations		
31	Research Methodology in Commerce and Management		
32	Research Methodology		
33	Labour Welfare and Administration		
34	Professional Communication		
35	Entrepreneurship and Project Management		

**Annexure 'D' of Direction No.04/2017**

<b>Sr. No.</b>	<b>Departments with the Subjects</b>	<b>Sr. No.</b>	<b>Corresponding Board of Studies</b>
	<b>2. Department of Commerce and Business Laws</b>	2	Board of Studies in Commerce and Business Laws
36	Indian Financial System		
37	Foreign Trade		
38	Soft Skills Development		
39	Advance Research Method		
40	Ethical Practices in Business		
41	Direct Tax Law and Practices		
42	Industrial Legislation and Labour Laws		
43	Operation Research		
44	Principles and Practices of Insurance		
45	Business and Tax Law		
46	Business Entrepreneurship		
47	Corporate Regulatory and Framework		
48	Income Tax and Competitive Skills		
49	Entrepreneurship		
50	Legal Aspects of Business		
51	Direct Tax Laws and Business Laws		
52	Competitive Skills		
53	Business and Mercantile Law		
54	Competitive Business Skills		
55	Social Security and Welfare Regulations		
56	Case Study in Industrial Relations		
57	Laws Relating to Industrial Relations		
58	Professional Communication Skills		
59	Communication Skills and Auditing		
60	Corporate Laws and Income Tax		
61	Business Research Methods		
62	Industrial Counselling		
63	Industrial Psychology and Sociology		
64	Rural Development		
65	Business Ethics and Professional Values		
66	Banking and Insurance		



**Annexure 'D' of Direction No.04/2017**

Sr. No.	Departments with the Subjects	Sr. No.	Corresponding Board of Studies
	<b>3. Department of Business Administration</b>	3	Board of Studies in Business Administration
1	HR Administration and Labour Welfare		
2	Organizational Behaviour		
3	Quality Control and Application		
4	Business Plan		
5	Modern Retail Management		
6	Marketing and Advertising		
7	Marketing Management		
8	Business Administration		
9	Retail Management		
10	Supply Chain Management		
11	Sales and Distribution Management		
12	Marketing Strategic and Competitive Positioning		
13	Retail Marketing		
14	Agriculture Marketing		
15	Financial Instruments		
16	Management Principles		
17	Logistics and Supply Chain Management		
18	Financial Management		
19	International Marketing and Export Promotion		
20	Import Export Management		
21	Labour Welfare and Administration		
22	Principles of Marketing		
23	Marketing Research Consumer Behaviour		
24	Marketing and Retail Management		
25	Global Marketing Management		
26	Distribution and Logistic Management		
27	International Logistic and Supply Chain Management		
28	Distribution and Retail Management		
29	Advertisement and Sales Promotion		
30	Promotion and Brand Management		
31	Service Marketing		
32	Office Management		
33	Promotion Management		

**Annexure 'D' of Direction No.04/2017**

Sr. No.	Departments with the Subjects	Sr. No.	Corresponding Board of Studies
	<b>4. Department of Business Economics and Banking</b>	4	Board of Studies in Business Economics and Banking
1	Principles and Practices of Banking		
2	Business Economics		
3	Macro-Economics		
4	Global Economic Scenario		
5	Indian Economic Scenario		
6	Advanced Banking		
7	Economics of Industries		
8	Micro-Economics		
9	Managerial Economics		
10	Modern Banking and Financial System		
11	Labour Economics		
12	Indian Economy		
13	Economics of Global Trade and Finance		
14	Industrial Economics		
15	International Economic Scenario		
16	Fundamentals of Banking and Insurance		
17	Principles of Economics		
18	Banking and Finance Management		
19	Labour Economics and International HRM		
20	Agriculture Economics		
21	Global Economics		
22	Indian Economics		
23	Basic Economics Concepts		
24	New Trends and Development in Agri Sector		
25	Agro Business		

**Annexure 'D' of Direction No.04/2017**

<b>Sr. No.</b>	<b>Departments with the Subjects</b>	<b>Sr. No.</b>	<b>Corresponding Board of Studies</b>
	<b>5. Department of Management Studies</b>	5	Board of Studies in Management Studies
1	Human Resource Management		
2	International Business Management		
3	Global Management Practices		
4	Personnel Management		
5	Innovation Management		
6	Strategic Management		
7	Event and Hospitality Management		
8	Modern Management Principles		
9	Modern Management Techniques		
10	Modern Management Practices		
11	Personal Administration and Management		
12	Strategic Financial Management		
13	Modern HR Practices and OD		
14	HR in Services Management		
15	Strategic Technology Management		
16	Total Quality Management		
17	Strategic Sourcing for Operations		
18	International Marketing Management		
19	International Strategic Management		
20	International Services and Quality Management		
21	Agro Business Management		
22	Management of Agriculture and Allied Sciences		
23	Management of Agri-Business Projects		
24	Case Studies in Strategic Management		
25	Family Business Management		
26	Hospitality Management		
27	Case Studies in Management and Managerial Decision Making		
28	Advanced Human Resource Management		
29	HRM Practices		
30	Case Study in PM		
31	Operations Management		
32	Introduction to ERP and SAP		
33	Labour Costing and Compensation Management		
34	Career Management and Counselling		
35	Operations and Material Management		

**Annexure 'D' of Direction No.04/2017**

Sr. No.	Departments with the Subjects	Sr. No.	Corresponding Board of Studies
	<b>5. Department of Management Studies</b>	5	Board of Studies inManagement Studies
36	Integrated Material Management		
37	Inventory Management and Requirement Planning		
38	Production and Operations Management		
39	Business Management		
40	Principles of Management		
41	Financial Management		
42	Principles and Practices Management		
43	Strategic Human Resource Management		
44	Management Principle and Personnel Management		
45	Invest Management		
46	Management Information System		
47	Management Information System and ERP		
48	Modern Office Management		
49	Enterprise Resource Planning		
50	Management Science		
	<b>6. Department of Computer Management</b>	6	
1	Internet and Web Design		
2	Server Side Scripting using PHP		
3	Advanced Excel		
4	Quantitative Techniques		
5	Programming in C++		
6	Fundamentals of Computer and Internet		
7	Cyber Laws and Security		
8	Database Management		
9	System Analysis and Design		
10	RDBMS using Oracle and D2K		
11	RDBMS		
12	Java Programming Languages		
13	Information System for Business		
14	Introduction to Information System Audit		
15	CASE Tool with MS VISIO		
16	MSOFFICE 2007, Word, Excel, Power Point		
17	e-Services Applications		

**Annexure 'D' of Direction No.04/2017**

Sr. No.	Departments with the Subjects	Sr. No.	Corresponding Board of Studies
	<b>6. Department of Computer Management</b>	6	Board of Studies in Computer Management
18	Management Information System		
19	Computer Fundamentals and Office Automation		
20	Tally ERP		
21	Tally, MS-ACCESS and e-Commerce		
22	Business Statistics		
23	Business Statistics and Operation Research		
24	Business Mathematics		
25	Internet and Application		
26	Web Designing Using HTML		
27	Internet and HTML		
28	e-Commerce		
29	Mathematics and Statistics for Manager		
30	MS-Office, Internet		
31	C# .Net		
32	e-Business and e-Governance		
33	Computing Management		
34	ASP.NET		
35	Computer Application		
36	Data Structure		
37	Computer Animation Using Flash		
38	Introduction to e-Commerce		
39	Information Technology for Managers		
40	Cyber Crime and Security Law		
41	ICT in Taxation		
42	Internet Programming with ASP .NET		
43	Linux Operating System		
44	MIS and ERP		
45	ERP		
46	Cyber Crime and Security		
47	Management Information System and e-Commerce		
48	Database Management System		
49	Software Engineering		
50	Oracle and Visual Basic		
51	Internet Technology		

**Annexure 'D' of Direction No.04/2017**

Sr. No.	Departments with the Subjects	Sr. No.	Corresponding Board of Studies
	<b>6. Department of Computer Management</b>	6	Board of Studies inComputer Management
52	Software Project Management and Information System Audit		
53	Systems Management		
54	Information Technology and Systems Management		
55	Database Administration with Oracle and D2K		
56	Scripting Languages		
57	Commerce and Web Site Management		
58	Data Mining and Data Warehousing		
59	VB.NET		
60	Database Administration and Security		
61	Advanced Graphics and Animation		
62	ICT Fundamental and Operating Systems		
63	Object Oriented Programming using C++		
64	Web Designing and Web Tools		
65	RDBMS with MS - SQL Server		
66	Programming Concept using C++		
67	Graphics and Animation		
68	Cyber Crime and Security		
69	Java Programming		
70	Computer Fundamental and Application		
71	Human Resource Information Systems and ERP		
72	Introduction to Internet and Web Technologies		
73	Web Designing using HTML		
74	Programing In VB.NET		
75	Oracle and D2K		
76	Computer Awareness		
77	Internet and Web Services		
78	Software Testing		
79	MS-Access and VB 6.0		
80	e-Commerce and Internet Services		
81	Computer Animation		
82	Fundamentals of Computer and Internet		
83	Introducing to Programming using C++		
84	MS Access and Visual Basic 6.0		
85	Information System and Introduction to BPO		
86	Essentials of e-Commerce		

Annexure 'D' of Direction No.04/2017

**3. Faculty of Humanities:-**

Sr. No.	Departments with the Subjects	Sr. No.	Corresponding Board of Studies
	<b>1. Department of Marathi</b>	1	Board of Studies in Marathi
1	Marathi		
	<b>2. Department of Hindi</b>	2	Board of Studies in Hindi
1	Hindi		
	<b>3. Department of English</b>	3	Board of Studies in English
1	English		
	<b>4. Department of Ancient Indian Languages</b>	4	Board of Studies in Ancient Indian Languages
1	Sanskrit		
2	Pali		
3	Ardhmagadhi (Prakrit)		
	<b>5. Department of Urdu, Persian and Arabic Languages</b>	5	Board of Studies in Urdu, Persian and Arabic Languages
1	Urdu		
2	Persian and Arabic Languages		
	<b>6. Department of History</b>	6	Board of Studies in History
1	History		
2	History of Civilization		
	<b>7. Department of Political Science</b>	7	Board of Studies in Political Science
1	Political Science		
2	Public Administration		
	<b>8. Department of Psychology</b>	8	Board of Studies in Psychology
1	Psychology		
	<b>9. Department of Yoga Studies</b>	9	Board of Studies in Yoga Studies
1	Yoga Studies		
	<b>10. Department of Defence and Strategic Studies</b>	10	Board of Studies in Defence and Strategic Studies
1	Defence and Strategic Studies		
	<b>11. Department of Economics</b>	11	Board of Studies in Economics
1	Economics		
	<b>12. Department of Philosophy</b>	12	Board of Studies in Philosophy
1	Philosophy		
2	Logic		
	<b>13. Department of Sociology</b>	13	Board of Studies in Sociology
1	Sociology		
	<b>14. Department of Social Work</b>	14	Board of Studies in Social Work
1	Social Work		

**Annexure 'D' of Direction No.04/2017**

Sr. No.	Departments with the Subjects	Sr. No.	Corresponding Board of Studies
	<b>15. Department of Law</b>	15	Board of Studies in Law
1	Administrative Law and Right to Information		
2	Alternative Dispute Resolution		
3	Arbitration, Conciliation and ADR Systems		
4	Banking Laws and Negotiable Instruments		
5	Basic of Law, Forensic Science and Crime		
6	Bioterrorism : National and International Scenario		
7	Book Keeping and Accountancy		
8	Business Law		
9	Civil Procedure Code and Limitation Act		
10	Company Law		
11	Comparative Criminal Procedure		
12	Computer		
13	Constitutional Law		
14	Constitutional Law and New Challenges		
15	Criminal Procedure Code		
16	Criminal Procedure code, Juvenile Justice Act and Probation of Offenders		
17	Criminology		
18	Cyber Space and IPR		
19	Drafting ,Pleading ,Conveyancing		
20	Economics		
21	English (Compulsory)		
22	Environmental Law		
23	Equity & Trust		
24	Family Law		
25	Finance Act 1994 (Service Tax)		
26	Forensic Science and its Application in Crime Investigation		
27	General English		
28	General Law affecting Taxation		
29	General Regime of IPR		
30	Geographical Indications, Layout designs of Integrated Circuits and Protection of Plant Varieties and Farmers' Rights		



**Annexure 'D' of Direction No.04/2017**

Sr. No.	Departments with the Subjects	Sr. No.	Corresponding Board of Studies
	<b>15. Department of Law</b>	15	Board of Studies in Law
31	History		
32	History of Courts, Legislature and Legal profession		
33	Human Rights		
34	Human Rights and International Law		
35	Income Tax Act 1961 with Relevant Rules		
36	Industrial Relations		
37	Insurance Law		
38	Interpretation of Statutes & Legislative Principles		
39	Judicial Process (Jurisprudence)		
40	Jurisprudence		
41	Juvenile Delinquency		
42	Labour Laws		
43	Land Laws		
44	Land Laws including Ceiling and any other Local Laws Tenancy Laws and Land Laws		
45	Law and Medical Profession		
46	Law and Social Transformation in India		
47	Law of Contract		
48	Law of Crimes		
49	Law of Evidence		
50	Law of Import Export Regulation		
51	Law of Medicine		
52	Law of Torts		
53	Law of Torts including MV Accident and Consumer Protection Act		
54	Law of Trust		
55	Law of Wages and Principles of Wage Fixation		
56	Legal Education and Research Methodology		
57	Legal Language / Legal Writing Including General English		
58	Legal Language including Legal Writing		
59	Legal Regulation of Economic Enterprises		
60	Legislation Affecting Condition of Work		

**Annexure 'D' of Direction No.04/2017**

<b>Sr. No.</b>	<b>Departments with the Subjects</b>	<b>Sr. No.</b>	<b>Corresponding Board of Studies</b>
	<b>15. Department of Law</b>	15	Board of Studies in Law
61	Legislative Principles and Interpretation of Statutes		
62	Logic		
63	Maharashtra Professional Central Sales & Wealth Tax Act		
64	Marathi		
65	Mass Media Law		
66	Medico Legal Aspects		
67	Medico legal Practice		
68	Ownership and Enforcement of IPR		
69	Penology		
70	Penology : Treatment of Offenders		
71	Political Science		
72	Principles of Taxation		
73	Public International Law		
74	Public Utilities Law		
75	Recent Advances in Forensic Science and the Laws		
76	Social Security Legislation		
77	Sociology		
78	Special Contract		
79	Taxation Law		
80	The Maharashtra Value Added Tax Act 2002		
81	Toxicology		
82	Transfer of Property Act		
83	Trust Equity and Fiduciary Relationships		

Annexure 'D' of Direction No.04/2017

**4. Faculty of Inter-disciplinary Studies:-**

Sr. No.	Departments with the Subjects	Sr. No.	Corresponding Board of Studies
	<b>1. Department of Education</b>	1	Board of Studies in Education
1	Education in 21 <sup>st</sup> Century		
2	Teacher Education		
3	Educational Technology		
4	New Trends in Education		
5	Advanced Educational Theory		
6	Fundamental of Educational Theory		
7	Knowledge and Curriculum		
8	Contemporary India and Education		
9	Language across the Curriculum		
10	Genders, School and Society		
11	Inclusive Education		
12	Curriculum Designing, Adaptation and Evaluation		
13	Curriculum, Adaptation and Strategies for Teaching Expanded Curriculum		
14	Philosophy of Education		
15	Sociological Foundation of Education		
16	Deprived and Women Education in India		
17	Elementary and Secondary Education		
18	Curriculum Development and Transaction		
19	Special Education		
20	Higher Education in India		
21	Educational Theories in Global Perspectives		
22	ICT and e-learning		
	<b>2. Department of Educational Psychology</b>	2	Board of Studies in Educational Psychology
1	Learning and Teaching		
2	Learning Teaching and Assessment		
3	Childhood and Growing Up		
4	Human Growth and Development		
5	Assessment and Identification of Needs		
6	Community Based Rehabilitation		
7	Gender and Disability		
8	Guidance and Counselling for Disabled		
9	Psycho Social and Family Issues		
10	Technology and Disability		

**Annexure 'D' of Direction No.04/2017**

Sr. No.	Departments with the Subjects	Sr. No.	Corresponding Board of Studies
	<b>2. Department of Educational Psychology</b>	2	Board of Studies in Educational Psychology
11	Identification of Children with Visual Impairment and Assessment of Needs		
12	Educational Guidance and Counselling		
13	Psychology of Development and Learning		
14	Advanced Guidance, Counselling		
15	Learning, Teaching and Childhood Psychology		
16	MR E1 - E11		
17	VI E1 - E11		
18	Dessertation		
	<b>3. Department of Administration and Evaluation</b>	3	Board of Studies in Administration and Evaluation
1	Pedagogical Content Knowledge CCM-I,III (Marathi, Hindi, English, History, Geography, Urdu, Sanskrit, Mathematics, Science)		
2	Pedagogical Content Knowledge CCM- II,IV (Marathi, Hindi, English, History, Geography, Urdu, Sanskrit, Mathematics, Science)		
3	Information Communication and Technology and e-Learning		
4	Teaching Methodologies		
5	Pedagogy of Teaching (Special Reference to MR) : Languages		
6	Pedagogy of Teaching Mathematics		
7	Pedagogy of Teaching Science		
8	Pedagogy of Teaching Social Studies		
9	Pedagogy of Teaching (Special Reference to VI) : Languages		
10	Intervention and Teaching Strategies		
11	Technology and Education of the Visually Impaired		
12	Methodology of Educational Research		
13	Educational Planning and Administration		
14	EPC		
15	Internship Programme		
16	Applied Paper on Internship		
17	Final Lesson		
18	Statistical Methods for Data Analysis		
19	Assessment for Learning		

**Annexure 'D' of Direction No.04/2017**

Sr. No.	Departments with the Subjects	Sr. No.	Corresponding Board of Studies
	<b>4. Department of Physical Education</b>	4	Board of Studies in Physical Education
1	Organization and Administration in Physical Education		
2	Officiating and Coaching		
3	Test Measurement and Evaluation in Physical Education		
4	Contemporary Issues in Physical Education, Fitness and Wellness		
5	Sports Psychology		
6	Sports Medicine		
7	Computer Applications in Physical Education		
8	Yoga Education		
9	Olympic Movement		
10	Curriculum Design in Physical Education		
11	Health Education and Environmental Studies		
12	Sports Medicine, Physiotherapy and Rehabilitation		
13	Kinesiology and Biomechanics		
14	Research and Statistics in Physical Education		
15	Sports Nutrition and Weight Management		
16	Sports Management		
17	Educational Technology and Methods of Teaching in Physical Education		
18	Anatomy and Physiology		
19	History, Principles and Foundation of Physical Education		
20	Sports Psychology and Sociology		
21	Measurement and Evaluation in Physical Education		
22	Physiology of Exercise		
23	Sports Biomechanics and Kinesiology		
24	Sports Journalism and Mass Media		
25	Sports Technology		
26	Information and Communication Technology (ICT) in Physical Education		
27	Yogic Science		
28	Scientific Principles of Sports Training		
29	Theory of Sports and Games		
30	Sports Management and Curriculum Design in Physical Education		

**Annexure 'D' of Direction No.04/2017**

<b>Sr. No.</b>	<b>Departments with the Subjects</b>	<b>Sr. No.</b>	<b>Corresponding Board of Studies</b>
	<b>4. Department of Physical Education</b>	4	Board of Studies in Physical Education
31	Athletic Care and Rehabilitation		
32	Health Education and Sports Nutrition		
33	Sports Engineering		
34	Physical Fitness and Wellness		
35	Research Process in Physical Education and Sports Sciences		
36	Applied Statistics in Physical Education and Sports		
37	Value and Environmental Education		
38	Teaching Practice		
39	Dessertation		
40	Ground Practice		
41	Internship		
	<b>5. Department of Fine and Performing Arts</b>	5	Board of Studies in Fine and Performing Arts
1	Music		
2	Dancing		
3	Dramatics		
4	Drawing and Painting		
5	Sculpture		
6	Applied Art		
7	Printing Art		
8	Print Making		
9	Art History		
10	Visual Communication		
	<b>6. Department of Library and Information Science</b>	6	Board of Studies in Library and Information Science
1	Library and Information Science		
	<b>7. Department of Mass Communication and Journalism</b>	7	Board of Studies in Mass Communication and Journalism
1	Mass Communication and Journalism		
	<b>8. Department of B.Voc. Agricultural and Natural Resource Management Skill</b>	8	Board of Studies in B.Voc. Agricultural and Natural Resource Management Skill
1	Agricultural and Natural Resource Management Skill		
2	Agriculture		
3	Soil and Water Conservation		

**Annexure 'D' of Direction No.04/2017**

<b>Sr. No.</b>	<b>Departments with the Subjects</b>	<b>Sr. No.</b>	<b>Corresponding Board of Studies</b>
	<b>9. Department of B.Voc. Animation and Web Designing</b>	9	Board of Studies in B.Voc. Animation and Web Designing
1	Animation and Web Designing		
2	Software Development		
3	Printing and Publishing		
	<b>10. Department of B.Voc. Beauty Therapy</b>	10	Board of Studies in B.Voc. Beauty Therapy
1	Beauty Therapy		
	<b>11. Department of B.Voc. Fashion Designing</b>	11	Board of Studies in B.Voc. Fashion Designing
1	Fashion Designing		
	<b>12. Department of Thoughts</b>	12	Board of Studies in Thoughts
1	Dr. Ambedkar Thought		
2	Gandhian Thought		
3	Buddhist Heritage Studies and Tourism		
	<b>13. Department of Skill Development</b>	13	Board of Studies in Skill Development
1	Skill Development : Community Education and Vocational Courses		
	<b>14. Department of Women's Studies</b>	14	Board of Studies in Women's Studies
1	Women's Studies		
	<b>15. Department of Nanotechnology</b>	15	Board of Studies in Nanotechnology
1	Nanotechnology		