



MSP Mandal's
VINAYAKRAO PATIL MAHAVIDYALAYA VAIJAPUR
DIST. AURANGABAD (M.S.)
TEACHING VIDEOS

1. Department of Mathematics

Class and Paper Name	Topic	Video Link
B.Sc. I Paper Name : Integral Calculus MAT-201	Syllabus and Reduction formula	https://www.youtube.com/watch?v=POZvVczntlc
	Reduction formula 2	https://www.youtube.com/watch?v=bfgbmytGviQ
	Reduction formula-3	https://www.youtube.com/watch?v=cg2hY08f0p0
	Reduction formula-4 & 5	https://www.youtube.com/watch?v=E7qHV5K8QQQ
	Some important formulae	https://www.youtube.com/watch?v=7VIsH3o687E
	Integration of algebraic rational functions- Type-I (Non-repeated linear factors at denominator)	https://www.youtube.com/watch?v=3ccQgPCLenA
	Integration of algebraic rational functions-Type-II(Non-repeated or repeated linear factors at denominator)	https://www.youtube.com/watch?v=BoFweEbda6c
	Integration of algebraic rational functions- Type-III(Linear or quadratic non-repeated factors at denominator)	https://www.youtube.com/watch?v=BoFweEbda6c
	Integration of algebraic rational functions- Type-III(Linear or quadratic non-repeated factors at denominator)	https://www.youtube.com/watch?v=OK1hRuhk7Os
Integration of Trigonometric Functions $\sin nx$ (if n is an odd integer)	https://www.youtube.com/watch?v=CY2ikMK5nqA	

	Integration of Trigonometric Functions $\sin nx$ (if n is an even integer)	https://www.youtube.com/watch?v=jsebawEc130
	Integration of $\sin nx$, from 0 to π by 2	https://www.youtube.com/watch?v=qy7mNNClS0
	Integration of $\cos nx$ (Part-1)	https://www.youtube.com/watch?v=350f8HUIJd08
	Integration of $\cos nx$ (Part-2)	https://www.youtube.com/watch?v=Phj-a58tTb0
	Integration of $\cos nx$ (Part-3)	https://www.youtube.com/watch?v=y-ZHhWhsjLI
	Integration of $\cos nx$ between 0 to π by 2	https://www.youtube.com/watch?v=uSMdYvSRIak
	Definite integral as the limit of sum	https://www.youtube.com/watch?v=Qabf2HRNlcU
	Areas of plane regions	https://www.youtube.com/watch?v=fDYIDZht1yU
	Rectification, length of plane curves	https://www.youtube.com/watch?v=C-fv2ZFMdbS
	Volumes and surfaces of revolution	https://www.youtube.com/watch?v=sEpGBRpVjeE
	Line integral, Surface integral and Volume integral	https://www.youtube.com/watch?v=-lx-0Yo0Qwg
	Gauss divergence theorem	https://www.youtube.com/watch?v=ymjdOFO8iiY
	Stoke's theorem and Green's theorem	https://www.youtube.com/watch?v=6BDn5ig67ls
B.Sc. I Differential calculus MAT-101	Introduction to Differential calculus	https://www.youtube.com/watch?v=n_NpJufz_tY
B.Sc. II Differential equations MAT-102	Introduction to Differential equations	https://www.youtube.com/watch?v=jVu8IVjMOI0
B.Sc. II Numerical analysis MAT-401	Syllabus and introduction to numerical analysis	https://www.youtube.com/watch?v=mCrCADGK8a8
	Bisection method	https://www.youtube.com/watch?v=2VNnsdf9uII
	False position method	https://www.youtube.com/watch?v=cBR1sY7mD_Q
	Problems on false position method	https://www.youtube.com/watch?v=_cMWDQF7KQ
	Newton-Raphson method	https://www.youtube.com/watch?v=ywW8kwxGxJ0
	Examples on Newton-Raphson method	https://www.youtube.com/watch?v=ZndIH_ME_0o

	Generalized Newton's method	https://www.youtube.com/watch?v=Z96dfrAuzhk
	Forward and backward differences	https://www.youtube.com/watch?v=WeOBDJMPasA
	Forward and backward differences-II	https://www.youtube.com/watch?v=o6vIxNp5yp0
	Finite differences and relations between them	https://www.youtube.com/watch?v=qlqUxMgV0yY
	Newton's forward and backward difference interpolation formula	https://www.youtube.com/watch?v=HHW1e7cgtbc
	Lagrange's interpolation formula	https://www.youtube.com/watch?v=5iWNwY-PIXU
	Newton's general interpolation formula	https://www.youtube.com/watch?v=rVFN3o-FVwM
	Curve fitting (The Least square curve fitting method)	https://www.youtube.com/watch?v=YbQMpfBZhGM
	Approximation of functions (Chebyshev polynomial)	https://www.youtube.com/watch?v=pRS03rml7i0
	Gauss elimination and Gauss-Jordan method-I	https://www.youtube.com/watch?v=KNNRbkbB92no
	Gauss elimination and Gauss-Jordan method-II	https://www.youtube.com/watch?v=JeTkCc4R6Hs
	Method of factorization	https://www.youtube.com/watch?v=SzHB-BUHCYc
	Jacobi's and Gauss Seidel iterative method	https://www.youtube.com/watch?v=TB-T0hNJ5T4
	Eigenvalue problem	https://www.youtube.com/watch?v=20KN69Vn_iM
	Taylor' series method	https://www.youtube.com/watch?v=Jcd8Ia8wSQE
	Picard's method	https://www.youtube.com/watch?v=nkXdBQfNHj8
	Euler's method	https://www.youtube.com/watch?v=O5Uf5g-bu30
	Runge-Kutta method	https://www.youtube.com/watch?v=ixJf5H6Q-70
B.Sc. II Number theory MAT-301	First principle of mathematical induction	https://www.youtube.com/watch?v=e7E4L52rjtY
	Division Algorithm	https://www.youtube.com/watch?v=YUP2WswFslk
	Examples on division algorithm	https://www.youtube.com/watch?v=1mRZhsAJV18
	Greatest common divisor	https://www.youtube.com/watch?v=Lec9UPtwYow
	Properties of divisibility relation	https://www.youtube.com/watch?v=o24JCuRpSMw

	(Chapter-05, Chapter-06 and Chapter-07) Chinese remainder theorem, Fermat's theorem, number theoretic functions and Euler's generalization of Fermat's theorem.	https://www.youtube.com/watch?v=ExcczQpd34c
B.Sc. III Real analysis-II MAT-601	Syllabus, definition of metric and metric space	https://www.youtube.com/watch?v=E2Py5uJFoVY
	Limits in metric spaces and continuous functions on metric spaces	https://www.youtube.com/watch?v=zxoFt-rjVXQ
	Open sets	https://www.youtube.com/watch?v=2yF-8d7PoAQ
	Closed sets	https://www.youtube.com/watch?v=KMjLWslwJuo
	More about open sets & connected sets	https://www.youtube.com/watch?v=GfHloLeNgz8
	Complete metric spaces	https://www.youtube.com/watch?v=JbxfNRYtL8A
	Compact metric spaces	https://www.youtube.com/watch?v=Msi4srARhBI
	Sets of measure zero	https://www.youtube.com/watch?v=YzhY9SHXpTg
	Upper sum and lower sum	https://www.youtube.com/watch?v=I1aZU2i_2sA
	Definition of Riemann integrable function	https://www.youtube.com/watch?v=tCLGaXf7QpY
	Properties of Riemann integrable function	https://www.youtube.com/watch?v=AF4QB_mvY4k
	Definition of Fourier series	https://www.youtube.com/watch?v=f_8zMqFqcgU
Examples on Fourier series	https://www.youtube.com/watch?v=yHtyQ4XG7TE	
B.Sc. III Real analysis-I MAT-501	Syllabus, sets and relations	https://www.youtube.com/watch?v=3kuDKhiRGjM
	Sets and relations part-II	https://www.youtube.com/watch?v=dNcLVPjQEeo
	Functions and real valued functions-I	https://www.youtube.com/watch?v=kw9-jc6S1-U
	Functions and real valued functions-II	https://www.youtube.com/watch?v=HegeMMn3faM
	Maximum and minimum of real valued functions, characteristic function	https://www.youtube.com/watch?v=TdLxIntJCjU
	Properties of characteristic function	https://www.youtube.com/watch?v=UW4yj6rg6IU
	Equivalence and countability	https://www.youtube.com/watch?v=tV50Teo4N-k

	Examples on countable set	https://www.youtube.com/watch?v=HlsX20V2PRs
	Real numbers, the least upper bounds	https://www.youtube.com/watch?v=kTL_suofDII
	(Chapter-3 & Chapter-4) Series of real numbers and Jacobians	https://www.youtube.com/watch?v=Cu_2FdSVuq4
B.Sc. III Abstract algebra-I MAT-502	Sets, functions and integers-I	https://www.youtube.com/watch?v=M9PeYmZk4mo
	Sets, relations and integers-II	https://www.youtube.com/watch?v=l0F71Yy-9Jk
	Sets, relations and integers-III	https://www.youtube.com/watch?v=oCOdu7lXV90
	Divisibility, congruence relation, the greatest common divisor and least common multiple	https://www.youtube.com/watch?v=P_tO1jcT-0k

2. Department of Zoology

Class and Paper Name	Topic	Video Link
B.Sc. Sem. I Protozoa to Annelida Paper I	Introduction to Animal Kingdom	https://www.youtube.com/watch?v=_Ks8NjLN9AA
B. Sc. Sem. VI Evolution XXI	Formation and Types	https://www.youtube.com/watch?v=b3zUnHvhG80&t=3s

3. Department of Chemistry

S. N.	Topic	Link
1	Atomic Structure	https://drive.google.com/file/d/1OdqP6wy6_rGwMfCrztJstt8kk5Y-j-xf/view?usp=sharing
2	Chemical Bonding Part 5	https://drive.google.com/file/d/1a3gpDZvVfMEluiSV3QcqrUTRa6C0QD8f/view?usp=sharing
3	Chemical Bonding Part 3	https://drive.google.com/file/d/1VzSzXc6dH4yulg5x-YmOIA1rVpQWHXON/view?usp=sharing
4	Chemical Bonding Part 2	https://drive.google.com/file/d/1zGLn2mXcpl0-WM-PjMA7bGjtiDsHyZVs/view?usp=sharing
5	Periodic Table Parts	https://drive.google.com/file/d/1ts4l0awwhYF9GVRG5NfGzPyC4_RhQpq/view?usp=sharing
6	Atomic Structure part 3	https://drive.google.com/file/d/1iixN0sK7VwXylUtMD8nmm0-r6ZDOL45n/view?usp=sharing
7	Atomic Structure part 1	https://drive.google.com/file/d/187U8dLvqmgqCoZ_zc5H20BuhANqiuNX/view?usp=sharing
8	Chemical Bonding Part 1	https://drive.google.com/file/d/1mwZVNvHdA9ohqlepgH-GRwKg4u3DLQIP/view?usp=sharing
9	Chemical Bonding	https://drive.google.com/file/d/1---FctQOoXrGqs0tf5F7fqHyxl2wuiHn/view?usp=sharing
10	Chemical Bonding Part 4	https://drive.google.com/file/d/1m_Bk5-sUymG5PmGT41TGdM9pb0kpNYLr/view?usp=sharing
11	Atomic Structure part 5	https://drive.google.com/file/d/1IbYRTMauVe3DMM2igbOAXLwleMdKqyQr/view?usp=sharing
12	Atomic Structure Part 4	https://drive.google.com/file/d/1L_CQSU9rH1eeDHxH8X_4NfO-m4I6-wQo/view?usp=sharing
13	Examples of PCC and PDC	https://drive.google.com/file/d/1bGDVJWji6Ub0bhbN6oha5EjKleJMVVAq/view?usp=sharing
14	Oxidation	https://drive.google.com/file/d/1TI85Psgfb5Dm2Dw5bnQRFYFCqQlIXwMc/view?usp=sharing
15	Jones Oxidation	https://drive.google.com/file/d/1429bTjlsFcZkyA8TtGM004_PPagrlq65/view?usp=sharing
16	Oxidation Of Alcohol	https://drive.google.com/file/d/1nHPm3FozD3OzwH3eAjw3AynB9abAjXyg/view?usp=sharing
17	Conduct metric Titration	https://youtu.be/Kg40ze9torw
18	Mofette Oxidation	https://youtu.be/4iqZ6Gmuyas

4. Department of Physics

Class	Chapter, Topic	Video Link
B. Sc. I SEM P-I	Syllabus, Chapter 1 Mechanics: Introduction Compound pendulum – Figure, Derivation Kater's pendulum figure, derivation	https://youtu.be/F-TGolli0TY
B. Sc. V SEM P-XV	De Broglie Wavelength in Term of Energy and Temperature	https://youtu.be/1bPrbWmp3X4
B. Sc. I SEM P-I	Elasticity stress, strain, elastic constant, Young's modulus, Bulk modulus	https://youtu.be/n6-6eFMvEOs
B. Sc. I SEM P-I	Curvature of beam or bar cantilever loaded at free end Derivation of curvature of beam when weight of beam is ineffective	https://youtu.be/mCKMiLZZv5o
B. Sc. I SEM P-I	Cantilever: when weight of beam is effective, beam supported to both end, Problems.	https://youtu.be/YNTKFao27p8
B. Sc. I SEM P-I	Twisting couple on a cylinder, bending moment of a beam.	https://youtu.be/PzcVE0TFpt4
B. Sc. V SEM P-XV	Cyclotron-working synchrocyclotron -construction, working	https://youtu.be/gHT-Ynd5kQQ
B. Sc. V SEM P-XV	What is wave function? Derivation of Schrodinger time dependent equation	https://youtu.be/Q0sAJF7fdss
B. Sc. V SEM P-XV	Expectations value Operator Schrodinger time independent equation	https://youtu.be/paE96ytHEbo
B. Sc. V SEM P-XV	Derivation particle in one dimensional box	https://youtu.be/VTF-JRLuFfg
B. Sc. I SEM P-I	Jager's Method	https://youtu.be/lgiD5j8PheM
B. Sc. V SEM P-XV	Compton Effect	https://youtu.be/J_om8fp9VPY
B. Sc. V SEM P-XV	Quantization of energy and momentum	https://youtu.be/ewv2WRy9K9I
B. Sc. III SEM P-VIII	Piezo electric effect, Piezo electric generator	https://youtu.be/JRXvNn0Hbmg

5. Department of Economics

Class and Paper Name	Topic	Video Link
B.A. II Statistical Method Paper No- VIII	Introduction about Statistics	https://www.youtube.com/watch?v=5i0iAEkG8FU
	Mean	https://www.youtube.com/watch?v=DrffjI8qRi4 https://www.youtube.com/watch?v=fCCbTLYKdzA
	Median	https://www.youtube.com/watch?v=yXUDsWjII5o
	Mode	https://www.youtube.com/watch?v=_RxOcQP89Bo
	Range Method	https://www.youtube.com/watch?v=IAGdypziiEU
	SD	https://www.youtube.com/watch?v=lUBDHFjtf2Y https://www.youtube.com/watch?v=y1i9WEopr2s https://www.youtube.com/watch?v=KyTrKXYS-Cs
	Mean Deviation	https://www.youtube.com/watch?v=BHivIsWdlqg
	Correlation	https://www.youtube.com/watch?v=lzTCQJYP0f8 https://www.youtube.com/watch?v=f4Pxf5sgFaI
	Simple Correlation	https://www.youtube.com/watch?v=6OiU6YyGbhA
	Rank correlation	https://www.youtube.com/watch?v=D6fjJK-MPI8 https://www.youtube.com/watch?v=gJgx822_F10
	Index Numbers	https://www.youtube.com/watch?v=z4AxUo03y8w https://www.youtube.com/watch?v=9Hog1a7bYUU
	Index Numbers (Weighted)	https://www.youtube.com/watch?v=JSRwMVpn5Kk
	Index Numbers (Lasyper)	https://www.youtube.com/watch?v=-Rl8bJL5Nww
	Index Numbers (Fisher)	https://www.youtube.com/watch?v=YQclg9ukpIY https://www.youtube.com/watch?v=1FTJIRrQgqA https://www.youtube.com/watch?v=4eC-UQLGADo
	Solve Example	https://www.youtube.com/watch?v=FiGfs2HR2Qk https://www.youtube.com/watch?v=rIsR-EJabRQ https://www.youtube.com/watch?v=jguQfileHJo

BATY XIII Research Methodology	Meaning of Research	https://www.youtube.com/watch?v=4AOvg_9qjCg
	Scientific Research Method	https://www.youtube.com/watch?v=ZG-RcPKqZBg
	Research Design	https://www.youtube.com/watch?v=xdOfgzH2n_I
	Exploratory Research	https://www.youtube.com/watch?v=tIl5IBZ9Y00
	Descriptive Research	https://www.youtube.com/watch?v=jDefJxM976k
	Experimental Research	https://www.youtube.com/watch?v=mY2hZY_1NYM
	Data Collection	https://www.youtube.com/watch?v=ehtAZ-FCgEA
	Data Collection Method	https://www.youtube.com/watch?v=3Jt_RUJrYUU
	Data Collection Method	https://www.youtube.com/watch?v=prVOrf1Le2k
	Data Collection Method	https://www.youtube.com/watch?v=_1fNv-YVSPs
	Secondary Data Collection	https://www.youtube.com/watch?v=0-PF68Xgzs4
	Data Presentation	https://www.youtube.com/watch?v=OreMYroAR5g
	One Dimensional Diagrams	https://www.youtube.com/watch?v=9ApJIM3bF2g
	Two Dimensional Diagrams	https://www.youtube.com/watch?v=YJ7aZQlwrM
Two Dimensional Diagrams	https://www.youtube.com/watch?v=kJzc2n07Vf8	
Two Dimensional Diagrams	https://www.youtube.com/watch?v=7eqdB5NyswM	
BATY PXV Indian Economic Thinker	M K Gandhi	https://www.youtube.com/watch?v=yT19e3LvTBA
	M K Gandhi	https://www.youtube.com/watch?v=nOWRsDhj-qI
BATY P XVI Project Work	Project Writing	https://www.youtube.com/watch?v=gkdFbVLy1vk

6. Department of History

Class and Paper Name	Topic	Video Link
B.A. I History of modern Maharashtra (P. No II)	Bramhanetar Movement	https://www.youtube.com/watch?v=xIgdqQxO6gQ
B.A. II History of Early India (Up To B.C.300) (P. No. V)	Harshavardhan	https://www.youtube.com/watch?v=vd04YKvF1Co
B.A. III History of Indian National Movement (P. No. X)	Newspaper	https://www.youtube.com/watch?v=CGaDhhL6388
B.A. III Main Sub. Women's Struggle in Modern India (P. No XI)	Buddhism	https://www.youtube.com/watch?v=XiOktRMAs5k
B.A. I History of modern Maharashtra (P. No –IV)	Pina Sarvajanic Sabha	https://www.youtube.com/watch?v=xIgdqQxO6gQ
B.A. III History of World (P. No. XIV)	First World War I	https://www.youtube.com/watch?v=56vaxIjrjaU
B.A. III Main Sub. Glimpses of the History of Marathwada (XV)	Hindu, Jain	https://www.youtube.com/watch?v=QCLmm6B956o
B.A. II History Of India (B.C.300 – A.D.650) (P. NO. VII)	Chandragupta	https://www.youtube.com/watch?v=tWvZ-VTU2HM
B.A. III History Of Indian National Movement (P. No. X)	Surat Dadhiveshan	https://www.youtube.com/watch?v=IYwVFJ3OaTg

7. Department of Sociology

Dr. Rathod S. K.		
Class	Topic	You tube Link
B.A. I	Social Institution	https://youtu.be/HFRmdt1w00s
	Primary Group	https://youtu.be/U-_0xIJX7zQ
	Secondary Group	https://youtu.be/gCE6W04xOuc
	Social Group	https://youtu.be/U-_0xIJX7zQ
	Society	https://youtu.be/GaO1upvm2O8
B.A. II	Family Disintegration	https://youtu.be/2XytG3CAzBI
B.A. III	August Comte	https://youtu.be/fF-4orrkoEg
	Emile Durkhiem	https://youtu.be/z2A6PeaFytU https://youtu.be/N75-gL9izGo
	Spencer	https://youtu.be/75uvESNw9Ew
	Karl Marks	https://youtu.be/UULaSLs1wo0
Dr. Hiwale S. D.		
Class	Topic	You tube Link
B.A.II	Urbanization Part 01	https://youtu.be/SHmqj33-TqA
	Urbanization Part 02	https://youtu.be/znR1Yyt9Np8
	Contemporary Urban Issue	https://youtu.be/-UzvwEeUmhY
B.A. III	Theory in Social Research	https://youtu.be/2v43omS9RcI
	Scope of Social Research	https://youtu.be/E7EfCdXb9q0
	Importance and Utility of Social Research	https://youtu.be/hO0PSI5DDvs
	Meaning of Research	https://youtu.be/0LHaGtVLOuc
	Introduction to Research Methodology Part. 01	https://youtu.be/G_Vjlg5KLzs
	Introduction to Research Methodology Part. 02	https://youtu.be/03mrnUv4MH0
PG I	Social Change in Modern India	https://youtu.be/qcUKorY773k
	Concept of Peasant Society	https://youtu.be/kYa5zgZ9z84
	Phenomenological Thoughts of Luckman & Thomas	https://youtu.be/PM9yiXjV0Bo