

9741

College Name & Symbol.....Vivekanand college, Kolhapur.

(Affiliated to shivaji University, Kolhapur)

Teacher's Personal Information

Academic Year – 2018 - 2019

Name in full: Dr. Sanjay shivram Ankushrao.....

Qualification: M.Sc., SET, GATE, Department: Chemistry.....
PhD.

Designation: Asst. Professor Date of Appointment: 11/06/2016

Present Pay Scale: 15600-39100+ Blood Group: B+ve
AGP-6000**ADDRESS**

Residential

20/65, Hanbar Chal, ..
Hotel Meghdoot Road, ..
Kolhapur Naka, TchalKarauji

Permanent

Alp- Methwade, ..
Tal-Sangola, Dist-Solapur
pin - 413317Ph. No. (R) 9096070345
(O)Mobile No.: 9096070345
E-mail: sanjayankushrao@gmail.com

Fax :

Individual Time-Table
Academic Year - (2018-2019)

Department: Chemistry.

Timings

Sl. No.	Time	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1	7:30 to 11:30					B.Sc. III (P)	
2	11:30	B.Sc. II	B.Sc. II			M.Sc. I (D)	B.Sc. I (B) T
3	12:18	Practical	Practical	B.Sc. III (CT)	M.Sc. II (P)		B.Sc. III
4	1:06	-	-	B.Sc. III (CT)			B.Sc. I (A) (CT)
5	2:05						
6	2:53			B.Sc. I (P)			
7	3:41						
8	4:29						



Head of Dept.

Theory: 3 + Msc(2) = 5 Practicals: 18

Total no. of periods per week: 21


PRINCIPAL
 Vivekanand College
 Kolhapur

Individual Time Table

Academic year – 2018 - 2019

DEPARTMENT... Chemistry

Timings:

Sr. No.	Time	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1	7:30 to 11:30					B.Sc.III (P)	A
2	11:30	B.Sc.II	B.Sc.II			M.Sc.I (L)	
3	12:18	Practical	Practical	B.Sc.III (T)	B.Sc.III (T)		
Short Recess							
4	1:06				B.Sc.IA (T)		B.Sc.IA (T)
5	2:05						
6	2:53			B.Sc.I (P)			
7	3:41						
8	4:29						

5:17

Head of Department

Theory: 04

Practical: 18

Total No. of Periods per Week..... 23



[Signature]
Principal

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Kolhapur.

ANNUAL TEACHING PLAN

Academic Year: 20..18..... - 20..19... Class: B.Sc. I Division: A.F.B.

Subject: Inorganic Chemistry Paper Title: Inorg. Paper No.: 11.....

			Topic/ Unit	Sub-units Planned
Month: June			Admission process.	
Teaching days		15		
Periods Allotted		06		
Periods available				
Teaching	Practical's/ Tutorials	Tests		
Month: July			Ionic bonding	<ul style="list-style-type: none"> - Defn, form of I.B. - General characteristics of I.B. - Energies in ionic bond form - Born-Haber cycle - Polarising power & polarizability.
Teaching days		26		
Periods Allotted		08		
Periods available				
Teaching	Practical's/ Tutorials	Tests		
Month: August				<ul style="list-style-type: none"> - Fajan's Rule - Ionic character in covalent comp. - Bond moment, dipole moment & Percentage ionic character.
Teaching days		24		
Periods Allotted		10		
Periods available				
Teaching	Practical's/ Tutorials	Tests		

Month: September			Topic/Unit	Sub-units Planned
Teaching days		23	Covalent bonding (Valence Bond Theory)	VBT - Info ⁿ , Advantages Appl ⁿ & limitations - - Concept of hybrid ⁿ . - diff. Types of hybrid ⁿ . - Geometry of molecule - Linear - planar trigonal geometry - Tetrahedral - Trigonal bipyramidal - Octahedral geometry. - pentagonal bipyramidal - VSEPR.
Periods Allotted				
Periods available				
Teaching	Practical's/ Tutorials	Tests		
Month: October				
Teaching days		25		
Periods Allotted				
Periods available				
Teaching	Practical's/ Tutorials	Tests		
Month: November			RASMI	
Teaching days				
Periods Allotted				
Periods available				
Teaching	Practical's/ Tutorials	Tests		
Month: December				
Teaching days				
Periods Allotted				
Periods available				
Teaching	Practical's/ Tutorials	Tests		

Month: September			Topic/ Unit	Sub-units Planned	
Teaching days			I II	81 potentials	
Periods Allotted					
Periods available					—
Teaching	Practical's/ Tutorials	Tests			
Month: October					
Teaching days			—	—	
Periods Allotted					
Periods available					
Teaching	Practical's/ Tutorials	Tests			
Month: November					
Teaching days			Thermodynamics (Unit-2)	<ul style="list-style-type: none"> - Introduction - Terminology - Spontaneous & non spontaneous process with examples. - Carnot's cycle & its efficiency. - Second law of thermodynamics 	
Periods Allotted					
Periods available					
Teaching	Practical's/ Tutorials	Tests			
Month: December					
Teaching days			Entropy & Third law (Unit-3)	<ul style="list-style-type: none"> - Concept of entropy - Physical significance of entropy. - Entropy as a state function of V, S, P, T. - Entropy of mixing 	
Periods Allotted					
Periods available					
Teaching	Practical's/ Tutorials	Tests			

Month: January			Topic/ Unit	Sub-units Planned
Teaching days			Unit-4 Chemical Equilibria	- Entropy of phase transition
Periods Allotted				- Third law
Periods available				- Calculation of absolute entropies
Teaching	Practical's/ Tutorials	Tests		- Concept of free energy
			- Free energy change in chemical reaction	
Month: February				- Thermodynamic derivation of the law of chemical eqm.
Teaching days			Unit-5 Chemical Energetics	- Distinction betn ΔG & ΔG°
Periods Allotted				- Le-Chatelier's principle
Periods available				- Conditions for max. yield in industrial processes like mfg. of NH_3 & H_2SO_4
Teaching	Practical's/ Tutorials	Tests		- Relation betn K_p , K_c & K_x for ideal gas
			- ΔH , Enthalpy of reaction.	
Month: March				
Teaching days			Unit-6 Chemical Energetics	- Std. enthalpy changes
Periods Allotted				- Various types of enthalpy changes
Periods available				eg- Enthalpy of formation, neutralization, ionization, soln, hydration, phase transition, calculation of bond energy & resonance energy
Teaching	Practical's/ Tutorials	Tests		- Kirchoff's eqn.
Month: April				
Teaching days			Examinations	
Periods Allotted				
Periods available				
Teaching	Practical's/ Tutorials	Tests		

ANNUAL TEACHING PLAN

Academic Year: 2018..... - 2019.....

Class: B.Sc. II Division:

Subject: Chemistry

Paper Title: Analytical Chemistry

Paper No.: IV

			Topic/ Unit	Sub-units Planned
Month: June			—	—
Teaching days				
Periods Allotted				
Periods available				
Teaching	Practical's/ Tutorials	Tests		
Month: July			Theory of Gravimetric Analysis -	- Introduction - types of Analysis - Terminology - characteristics of ppt - physical nature of ppt - process of pptation (a) Nucleation (b) crystal growth (c) Digestion
Teaching days				
Periods Allotted				
Periods available				
Teaching	Practical's/ Tutorials	Tests		
Month: August				- Purity of ppt (a) Copptation (b) occlusion (c) post pptation. - Role of precipitants in gravimetric analysis - Washing - Ignition
Teaching days				
Periods Allotted				
Periods available				
Teaching	Practical's/ Tutorials	Tests		

ANNUAL TEACHING PLAN

Academic Year: 20..18.... - 20..19....

Class: B.Sc. III Division:

Subject: Chemistry

Paper Title: Inorganic

Paper No.: X & XII

Industrial Chem.

			Topic/ Unit	Sub-units Planned
Month: June			<p><i>(Faint handwritten notes)</i></p>	<p>-</p>
Teaching days				
Periods Allotted				
Periods available				
Teaching	Practical's/ Tutorials	Tests		
Month: July			<p>Hard & soft Acids & Bases (Inorganic)</p>	<ul style="list-style-type: none"> - Classification of acids & bases as hard & soft - Theoretical bases of hardness & softness. - Pearson's HSAB concept - Applications & limitations of HSAB principle.
Teaching days				
Periods Allotted				
Periods available				
Teaching	Practical's/ Tutorials	Tests		
Month: August			<p>Corrosion & passivity</p>	<ul style="list-style-type: none"> - Intro to corrosion - Types of corrosion - Electrochemical theory of corrosion - Factors affecting corrosion.
Teaching days				
Periods Allotted				
Periods available				
Teaching	Practical's/ Tutorials	Tests		



Month: September			Topic/ Unit	Sub-units Planned
Teaching days				<ul style="list-style-type: none"> 1) Position of metal 2) purity, effect of moisture 3) Effect of moisture. 4) Hydrogen overvoltage - Methods of protection from corrosion - Introdn to passivity Types, oxide film theory - Appln of passivity.
Periods Allotted				
Periods available				
Teaching	Practical's/ Tutorials	Tests		
Month: October			Manufacturing of Industrial Heavy Chemicals.	<ul style="list-style-type: none"> - Introdn - Mfg. of NH_3 - Physicochemical principles. - Mfg. of H_2SO_4 by contact process - Mfg. of HNO_3 by Ostwald's process.
Teaching days				
Periods Allotted				
Periods available				
Teaching	Practical's/ Tutorials	Tests		
Month: November				<ul style="list-style-type: none"> - Mfg. of Na_2CO_3 by Solway process.
Teaching days				
Periods Allotted				
Periods available				
Teaching	Practical's/ Tutorials	Tests		
Month: December				
Teaching days				
Periods Allotted				
Periods available				
Teaching	Practical's/ Tutorials	Tests		

Month: September			Topic/ Unit	Sub-units Planned
Teaching days				
Periods Allotted				
Periods available				
Teaching	Practical's/ Tutorials	Tests		
Month: October			Impure iron pig iron - (workbook)	-
Teaching days				
Periods Allotted				
Periods available				
Teaching	Practical's/ Tutorials	Tests		
Month: November			Iron & steel (Inorganic)	<ul style="list-style-type: none"> - Introduction - Occurrence - Extraction of iron by blast furnace. - products of blast furnace - steel & its types. - conversion of cast iron into steel.
Teaching days				
Periods Allotted				
Periods available				
Teaching	Practical's/ Tutorials	Tests		
Month: December			Bioinorganic chem: (Inorganic)	<ul style="list-style-type: none"> - Bessemer & L. P. process, - Heat treatment of steel. <ul style="list-style-type: none"> - Introducty - essential & trace elements - in biological system
Teaching days				
Periods Allotted				
Periods available				
Teaching	Practical's/ Tutorials	Tests		

Month: January			Topic/ Unit	Sub-units Planned
Teaching days			Bioinorganic Chemistry	Metalloporphyrins with special ref. to Hb & Mb - Biological role of alkali & alkaline earth metal ions with special ref. to Na ⁺ , K ⁺ & Ca ²⁺ .
Periods Allotted				
Periods available				
Teaching	Practical's/ Tutorials	Tests		
Month: February				
Teaching days				
Periods Allotted				
Periods available				
Teaching	Practical's/ Tutorials	Tests	Theory of titrimetric Analysis (Analytical)	- Intrody Neutralization Indicator. - Theory of indicators ① Ostwald's color change interval ② Ostwald's quinoid theory. - Neutralization curves & choice of indicators a) Strong acid - strong base b) Strong acid - weak base c) Strong base - weak acid
Month: March				
Teaching days				
Periods Allotted				
Periods available				
Teaching	Practical's/ Tutorials	Tests		
Month: April				
Teaching days				
Periods Allotted				
Periods available				
Teaching	Practical's/ Tutorials	Tests		- Complexometric titration. - General account - Types of EDTA titration - Metallochromic indicators w.r.t. EBT



RESEARCH AND ACADEMIC CONTRIBUTIONS

1) Research papers Published :

1) Synthesis & characterization of aromatic polyimides containing tetraphenyl furan-thiazole moiety, Journal of Thermal Analysis & Calorimetry, 2018.

2) Synthesis and characterization of novel processable poly(ether-azomethines) containing naphthyl moiety, Journal of applicable chemistry, 7 (4), 806-815, 2018 (ISSN: 2278-1862)

3) Student Assessment in Indian Education System: A need of Revolutionary change. Proceeding of one day state level seminar organized by D.K.A.S.C. College, Ichalkaranji, page (54-57), ISBN= 978-81-926341-9-7 (28th Dec. 2018)

4) optically transparent, organo soluble poly(ether-amide)s containing tetraphenyl furan bearing triptycene unit; synthesis & characterization, J. of Macro. Sci., Part-A, Pure & applied chemistry, 2018 [ISSN-1060-1325 (print)

[ISSN-1528²¹¹-5738 (online)]

RESEARCH AND ACADEMIC CONTRIBUTIONS

2) Books Published : Nil

3) Research Projects :

Minor Research project sanctioned under Research Initiation Scheme, Shivaji University, Kolhapur.

Amount sanctioned = ₹ 1,51,500/-

Amount received as first installment = ₹ 1,29,000/-

Title of Project: → Synthesis & characterization & properties processable polyazomethines for high temp. applications.

RESEARCH AND ACADEMIC CONTRIBUTIONS

5) Training courses Completed :


Refresher course on "Disaster Management" during period 14-11-2018 to 4-12-2018 at HRDC, Guru Nanak Dev University, Amritsar (panjab).

6) Worked as Chairperson /Resource Person for Conference / Seminar / Workshop

nil

AWARDS / CERTIFICATES

Sr. No.	
1)	Received a letter of appreciation from college for the achievement of Excellent grade in student feedback.


Signature of the Teacher

CERTIFICATE


This is to certify that the details filled in the Academic diary are found correct.

Date : 21/5/2019

Seal :



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Principal
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Kolhapur.