S.D.College of Pharmacy (245)
Janaula, Pataudi (Gurugram)
Lesson Plan

Name of the Faculty : **Kapil Yadav**

Discipline : **Pharmacy**

Year : **1st year**

Subject : **Pharmaceutical Chemistry-1**

Lesson plan duration : **weeks (16th august .2019 to April. 2020)**

Work load : **Theory -Lecture 03hours / week, Practical- 04 hours /week**

Week	Theory			Practical		
	Lecture Day	**Topic** (including assignment / test)	**Covered Date**	**Practical Date**	**Topic**	
1.	1	**Acids, bases and buffers**-Boric acid			Identification tests for inorganic compounds	
	2	**Acids, bases and buffers:** Hydrochloric acid, Strong Ammonium hydroxide				
	3	**Acids, bases and buffers:** Sodium hydroxide				
2.		**Acids, bases and buffers**: official buffers			Identification tests for inorganic compounds	
		Antioxidants: Hypophosphorous acid, Sulphur dioxide				
		Antioxidants: Sodium bisulphite, Sodium meta-bisulphite				
3.		**Antioxidants**: Sodium thiosulphate, Nitrogen			Identification tests for inorganic compounds	
		Antioxidants: Sodium nitrite				
		Gastrointestinal agents- **Acidifying agents**: Dilute Hydrochloric acid.				
4.		**Antacids**- Sodium bicarbonate, Aluminum hydroxide gel,			File check &viva	
		Antacids: Aluminum phosphate, Calcium carbonate				
		Antacids: Magnesium carbonate,				

		Magnesium trisilicate				
5.		**Antacids:** Magnesium oxide, Combinations of antacid preparations			Identification tests for inorganic compounds	
		Test				
		Protective and Adsorbents: Bismuth sub carbonate				
6.		**Protective and Adsorbents:** Kaolin.			Identification tests for inorganic compounds	
		Saline cathartics: Sodium potassium tartrate, Magnesium sulphate.				
		Test				
7.		**Topical Agents** **Protective**: Talc, Zinc Oxide			Identification tests for inorganic compounds	
		Protective: Calamine, Zinc stearate,				
		Protective: Titanium dioxide, silicone polymers				
8.		**Test**			File check and viva	
		Antimicrobials and Astringents- Hydrogen peroxide, Potassium permanganate				
		Antimicrobials and Astringents- Chlorinated lime, Iodine, Solutions of Iodine				
9.		**1st Sessional**				
10		**Antimicrobials and Astringents-** Povidone-iodine, Boric acid			Identification tests for inorganic compounds	
		Antimicrobials and Astringents- Borax, Silver nitrate				
		Antimicrobials and Astringents: Mild silver protein, Mercury yellow				
11		**Antimicrobials and Astringents:** Mercuric oxide, Ammoniated mercury.			Identification tests for inorganic compounds	
		Test				
		Sulphur and its compounds: Sublimed sulphur				
12		**Sulphur and its compounds**: Precipitated sulphur, Selenium sulphide			File check and viva	
		Astringents: Alum and Zinc Sulphate				
		Test				

13		**Dental Products**: Sodium fluoride			Limit test for chloride	
		Dental Products: Stannous fluoride, Calcium carbonate				
		Dental Products: Sodium meta phosphate, Dicalcium phosphate				
14		**Dental Products:** Strontium chloride, Zinc chloride			Limit test for sulphate	
		Inhalants: Oxygen, Carbon dioxide				
		Inhalants: Nitrous oxide				
15		**Respiratory stimulants**: Ammonium carbonate			File check and viva	
		Respiratory stimulants: Potassium iodide, Antimony potassium tartrate				0
		Test				
16		**Antidotes**: Sodium nitrite			Limit test for iron	
		Test				
		Major Intra and Extra cellular electrolytes: Introduction				
17		**Electrolytes used for replacement therapy**: Sodium chloride and its preparations			Limit test for arsenic	
		Electrolytes used for replacement therapy: Potassium chloride and its preparations				
		Physiological acid-base balance and electrolytes used: Sodium acetate				
18		**Physiological acid-base balance and electrolytes used:** Potassium Acetate, Sodium bicarbonate injection			Limit test for heavy metal	
		Physiological acid-base balance and electrolytes used: Sodium citrate, Potassium citrate				
		Physiological acid-base balance and electrolytes used: Sodium lactate injection and its preparation				
19		**Physiological acid-base balance and electrolytes used:** Ammonium chloride and its preparation			File check and viva	
		Combination of oral electrolyte powders and solutions				
		Test				

20		**2nd Sessional**				
21		**Winter Vacation**				
22		**Winter Vacation**				
23		**Inorganic official compounds** of Iron			Introduction of Extracts	
		Inorganic official compounds of Iodine				
		Inorganic official compounds of Calcium				
24		**Inorganic official compounds** of Ferrous sulphate			Identification test for cation	
		Inorganic official compounds of Calcium gluconate				
		Radio pharmaceuticals and contrast media: Radio activity				
25		**Radio pharmaceuticals and contrast media**: Alpha, beta and Gamma Radiations			Identification test for cation	
		Radio pharmaceuticals and contrast media: Biological effects of radiations				
		Radio pharmaceuticals and contrast media: Measurement of radio activity				
26		**Radio pharmaceuticals and contrast media**: G.M. Counter			Identification test for cation	
		Radio pharmaceuticals and contrast media: Radio isotopes-their uses				
		Radio pharmaceuticals and contrast media: Storage and precautions of radio isotopes with special reference to the official preparations				
27		**Radio pharmaceuticals and contrast media**: Radio opaque contrast media			File check and viva	
		Radio pharmaceuticals and contrast media: Barium Sulphate				
		Test				
28		**Quality control of Drugs and pharmaceuticals:** Introduction			Identification test for cation	
		Quality control of Drugs and pharmaceuticals: Importance of quality control				

		Quality control of Drugs and pharmaceuticals: Significant errors				
29		**Quality control of Drugs and pharmaceuticals:** Methods used for quality control			Identification test for Anion	
		Quality control of Drugs and pharmaceuticals: sources of impurities in pharmaceuticals				
		Quality control of Drugs and pharmaceuticals: Limit tests for Arsenic				
30		**Quality control of Drugs and pharmaceuticals:** Limit tests for Chloride			Identification test for Anion	
		Quality control of Drugs and pharmaceuticals: Limit tests for Sulphate				
		Quality control of Drugs and pharmaceuticals: Limit tests for Iron				
31		**Quality control of Drugs and pharmaceuticals:** Limit test for Heavy metals			File check and viva	
		Quality control of Drugs and pharmaceuticals: Limit test for Heavy metals				
		Test				
32		**3rd Sessional**				
33		**Identification tests for cations as per Indian pharmacopoeia**			Identification test for Anion	
		Identification tests for cations as per Indian pharmacopoeia				
		Identification tests for cation as per Indian pharmacopoeia				
34		**Identification tests for anions as per Indian pharmacopoeia**			Identification test for Anion	
		Identification tests for anions as per Indian pharmacopoeia				
		Identification tests for anions as per Indian pharmacopoeia				