SYLLABUS OF PHYSICS PRACTICAL SEND-UP EXAMS – 2019

Physics Practical list of 1st Year Practicals

1. To find the volume of a solid cylinder using Vernier Callipers.
2. To find the Area of cross section of a wire using micrometer screw gauge.
3. To find Volume of a small sphere using micrometer screw gauge.
4. To find the unknown weight of a body by the method of vector addition of forces.
5. Determination of value of acceleration due to gravity "g" by free fall method using electronic timer/ticker timer.
6. To verify the relation of Simple Pendulum that time period is independent of amplitude.
7. To verify the relation of Simple Pendulum that time period is independent of its mass or density of the bob.
8. To verify the relation of Simple Pendulum that time period is directly proportional to the square root of its length.
9. To find the acceleration due to gravity by oscillating spring mass system.
   To study the fall of a body through a viscous medium and hence to deduce the coefficient of viscosity of the medium.
10. To find the moment of inertia of fly wheel.
11. To determine of frequency of A. C. by Melde's apparatus.
12. To investigate the law of length of stretched strings by sonometer.
13. To investigate the law of tension of stretched strings by sonometer.
14. To determine the wavelength of sound in air using stationary waves and to calculate the speed of sound by one resonance position and applying end correction.
15. To determine the wavelength of sound in air using stationary waves and to calculate the speed of sound by using two resonance position.
16. To determine the focal length of a convex lens by displacement method.
17. To find the refractive index of glass by using prism by critical angle method.
18. To find the refractive index of water by using a concave mirror.

Practicals list of 2nd year

1. To find the specific resistance of a given wire by using slide wire bridge
2. To find resistance of moving coil galvanometer by half deflection method
3. Determine the resistance of voltmeter by drawing a graph between R and 1/V
4. To study the relation between current and capacitance when different capacitors are used in an A.C circuit
5. Determine EMF of a cell by using potentiometer
6. Determine the internal resistance of a cell by potentiometer
7. Study the relation between current passing through a tungsten filament and potential difference applied across it
8. To study the variation of current and intensity of light using a photo cell
9. To verify the truth table of logic gates

Physics Practicals Send-up exams Date Sheet -- 2019

Day	Date	Sections in Lab # P-018	Time	Sections in Lab # P-008	Time
Monday	11.11.2019	2 M-7	8:00 – 9:30	2 E13	8:00 – 9:30
		2E-2	9:40 – 11:10	2 E12	9:40 – 11:10
		2E-6	11:20 – 12:50		
		2C-1	1:00 – 2:25		
Tuesday	12.11.2019	2E-1	8:00 – 9:30		
		2E-3	9:40 – 11:10	2 E11	9:40 – 11:10
		2M-4	9:40 – 11:10		
			11:20 – 12:50		
			11:20 – 12:50		
			1:00 – 2:30		
Wednesday	13.11.2019	2M-5	8:00 – 9:30		
		2E-4	9:40 – 11:10		
		2E-7	9:40 – 11:10	2 E10	11:20 – 12:50
			11:20 – 12:50		
			1:00 – 2:30		
			2:30 – 4:00		
Thursday	14.11.2019	2M-2	8:00 – 9:30	2 E8	8:00 – 9:30
		2M-6	9:40 – 11:10		
		2M-3	11:20 – 12:50		
		2C-2	1:00 – 2:30	2 C5	1:00 – 2:25
			2:30 – 4:00		
Friday	15.11.2019	2M-1	8:00 – 9:30		
		2E-5	9:40 – 11:10		

Send-up Practical examination(Chemistry)

Syllabus / Paper pattern / Marks Division

Total Marks = 30

Q No. 1 : Salt analysis ---------- 10 Marks

(ALL ACID RADICALS & BASIC RADICALS UPTO 5TH GROUP)

(i) Acid radicals ---------- 04 marks

(ii) Basic radicals ---------- 06 Marks

Q No. 2 : Volumetric analysis ---------- 10 marks

. **(i) Acid – Base Titration**

. **(ii) Redox Titration**

. **(iii) Iodimetric Titration**

Q No. 3 : 1st Year Minor Practicals ---------- 05 Marks

(i) Ink mixture chromatography
(ii) Cd^{+2} , Pb^{+2} chromatography
(iii) Crystallization of Benzoic acid.
(iv) Purification of common salt by common ion effect.
(v) Determination of Heat of Neutralization by calorimeter.

Q. No. 4 : Complete & checked practical note book ---------- 03 marks

Q. NO 5 : Viva ---------- ---------- 02 marks.

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Note :- In First 20 Minutes

(i) For Q No 2 :
Write principle ,standard solution ,indicator ,end point ,chemical equation ,procedure and supposed readings and calculation

(ii) For Q No 3 : Write procedure whatever the minor practical . And

- **Draw the table of calculations for chromatography.**
- **Draw the diagram for Benzoic acid crystallization.**
- **Write chemical equation and supposed calculations for Barium Ion estimation.**
- **Do calculations for heat of neutralization.**
- **Write principle & chemical equation for common ion effect.**

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Acid Base Titration

1- **Standardize the given solution of HCl and also calculate volume required to prepare 500cm^3 of 0.025 M HCl.You are provided 0.1 M NaOH.**
2- **Determine the amount of free alkali in a provided sample of soap.**
3- **Determine the amount of acetate acid in 100cm3 of vinegar sample.**
4- **The given solution contains 10g of impure baking soda ($NaHCo_3$) dissolved per dm^3. Find impurity present in 50gm of sample and also % age impurity of the sample.**
5- **The given solution contains 0.53gms of alkali metal carbonate dissolved per 100cm3 0f solutions. Calculate atomic mass of the Metal M.**
6- **Determine the solubility of oxalic acid at room temperature volumetrically.**

Redox ($KMnO_4$) Titrations

1- The given solution contains 39.2 g of $(NH_4)_2SO_4.FeSO_4.X\ H_2O$ dissolved per dm^3. Determine the value of "X" in hydrated sample of $(NH_4)_2SO_4.FeSO_4.X\ H_2O$ volumetrically.

2- The given solution contains 30gm of partially oxidized $FeSO_4$ dissolved per dm^3. Find out the %age oxidation of $FeSO_4$ volumetrically.

3- The given solution contains 9gm mixture of oxalic acid and sulphuric acid dissolved/ dm^3. Determine the percentage composition of mixture volumetrically.

4- 15 gm mixture of $(NH_4)_2C_2O_4$ and $(NH_4)_2SO_4$ dissolved/dm_3. Determine the amount of $(NH_4)_2SO_4$ in 80g of mixture volumetrically.

5- 3.9 gm of $KMno_4$ has been dissolved/ dm_3. Determine the percentage of Mn^{+2} in the given sample volumetrically.

Iodine Titrations

1- 24.8 gm of hydrated thiosulphate $Na_2S_2O_3.XH_2O$ dissolved/dm^3. Calculate the value of "X" by volumetrically.

2- 15.8 gm of alkali metal thiosulphate $M_2S_2O_3$ is dissolved per dm^3. Calculate the atomic weight of metal M by volumetric analysis.

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2nd Year

Chemistry Practical Send up Exams Date Sheet --- 2019

Day	Date	Section	Time
Monday	18.11.2019	M-5	8:00 – 9:30
		E-5	9:40 – 11:10
		M-4	11:20 – 12:50
		E-11	1:00 – 2:25
		M-2 (B)	1:00 – 2:25
		M-8	2:30 – 4:00
Tuesday	19.11.2019	M-1	8:00 – 9:30
		E-6	9:40 – 11:10
		E-13(A)	9:40 – 11:10
		E-4	11:20 – 12:50
		M-2 (A)	11:20 – 12:50
		E-12	1:00 – 2:30
		M-9	2:30 – 4:00
Wednesday	20.11.2019	M-7	8:00 – 9:30
		M-3	9:40 – 11:10

		E-13 (B)	9:40 – 11:10
		M-6	11:20 – 12:50
		E-9	1:00 – 2:30
		E-14	2:30 – 4:00
Thursday	21.11.2019	E-1	8:00 – 9:30
		E-7	9:40 – 11:10
		E-8	11:20 – 12:50
		E-10	1:00 – 2:30
		E-15	2:30 – 4:00
Friday	22.11.2019	E-2	8:00 – 9:30
		E-3	9:40 – 11:10

- **Note:- Practical Exams will be conducted according to the respective Chemistry Labs.**

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BIOLOGY PRACTICAL SEND-UP EXAM – 2019
INTERMEDIATE – II, FCC (I), LAHORE.

Biology Practicals will be conducted in Biology Lab # 108

DATE	DAY	SECTION	TIME
25-11-19	Monday	2M1	8:00 AM – 9:35 AM
25-11-19	Monday	2M8	12:10 AM – 1:30 PM
26-11-19	Tuesday	2M7	8:00 AM – 9:35 AM
26-11-19	Tuesday	2M9	12:10 PM – 1:30 PM
27-11-19	Wednesday	2M6	8:00 AM – 9:35 AM
27-11-19	Wednesday	2M2	10:30 AM – 12:05 PM
28-11-19	Thursday	2M5	8:00 AM – 9:35 AM
29-11-19	Friday	2M4	8:00 AM – 9:35 AM
29-11-19	Friday	2M3	9:40 AM – 11: 15 AM