

(Approved by AICTE & PCI, New Delhi, Affiliated to RGUHS, Bengaluru)
Accredited with Grade 'A' by NAAC, Bengaluru | ISO 9001 - 2015 Certified
12/1, CHIKKA BELLANDUR, CARMELARAM POST, VARTHUR HOBLI, BANGALORE - 560 035



2.2.1 The institution assesses the learning levels of the students and organizes special Programmes for advanced learners and slow learners

Special activities for slow learners



(Approved by AICTE & PCI, New Delhi, Affiliated to RGUHS, Bengaluru)
Accredited with Grade 'A' by NAAC, Bengaluru | ISO 9001 – 2015 Certified
12/1, CHIKKA BELLANDUR, CARMELARAM POST, VARTHUR HOBLI, BANGALORE – 560 035

KRUPANIDHI COLLEGE OF PHARMACY, BANGALORE

Circular

This is to inform all First Year B Pharm students that Remedial classes will be conducted from 29/11/2019.

Find the below attached list of students with the mentor details for remedial classes.

College or Ollege Or Olleg

Krupanidhi College of Pharmacy Chikkabellandur, Carmelaram Post, Varthur Hobli, Bangalore - 560 035

PRINCIPAL



(Approved by AICTE & PCI, New Delhi, Affiliated to RGUHS, Bengaluru)

Accredited with Grade 'A' by NAAC, Bengaluru | ISO 9001 – 2015 Certified

12/1, CHIKKA BELLANDUR, CARMELARAM POST, VARTHUR HOBLI, BANGALORE – 560 035

KRUPANIDHI COLLEGE OF PHARMACY, BANGALORE

Timetable for Remedial Class of I Sem B.Pharm (2019-20)

| Subject | Viva /Exam | Dates & time | Time | Mrs Sayani | Mrs Arnika | Dr. C. Sudha | Mrs Gargi | |
|---------------------|-------------------|------------------|-------------|--------------------|---------------|------------------------------|--------------|--|
| Pharma | VIVA/ | 29/11/19 | 9 – 4.30pm | Group A | Group B | Group C | Group D | |
| ceutics | TESTS | 30/11/19 | 9 – 4.30pm | Group A | Group B | Group C | Group D | |
| = | | 2/12/19 | 9 –1.30 pm | Group A | Group B | Group C | Group D | |
| - | | 3/12/19 | 9 -12 noon | Group A | Group B | Group C | Group D | |
| | PREFINA L EXAM | 3/12/2019 pm) | (1pm to 4 | Additional Exam | 03/12/201 | 9 (2.30 pm t | o 4 pm) | |
| PharmI | VIVA/ | 4/12/19 | 9 – 4.30pm | Group B | Group A | Group C | Group D | |
| norganic Chemist | TESTS | 5/12/19 | 9 – 4.30pm | Group B | Group A | Group C | Group D | |
| ry | | 6/12/19 | 9 – 4.30pm | Group B | Group A | Group C | Group D | |
| | | 7/12/19 | 9 -12 noon | Group B | Group A | Group C | Group D | |
| | PREFINA L EXAM | 9/12/2019 pm) | (1pm to 4 | Additional Exam | 09/12/201 | 9 (2.30 pm t | o 4 pm) | |
| Pharm | VIVA/ | 10/12/19 | 9 – 4.30pm | Group D | Group B | Group A | Group C | |
| analysis | TESTS | 11/12/19 | 9 – 4.30pm | Group D | Group B | Group A | Group C | |
| | - | 12/12/19 | 9 – 4.30pm | Group D | Group B | Group A | Group C | |
| | | 13/12/19 | 9 – 4.30pm | Group D | Group B | Group A | Group C | |
| | PREFINA L EXAM | 14/12/201 pm) | 9(10 am – 1 | Additional Exam | 14/12/201 | 14/12/2019 (11.30am to 1 pm) | | |
| HAP | VIVA/ | 16/12/19 | 9 – 4.30pm | Group D | Group B | Group C | Group A | |
| | TESTS | 17/11/19 | 9 – 4.30pm | Group D | Group B | Group C | Group A | |
| | | 18/11/19 | 9 – 4.30pm | Group D | Group B | Group C | Group A | |





(Approved by AICTE & PCI, New Delhi, Affiliated to RGUHS, Bengaluru)
Accredited with Grade 'A' by NAAC, Bengaluru | ISO 9001 – 2015 Certified
12/1, CHIKKA BELLANDUR, CARMELARAM POST, VARTHUR HOBLI, BANGALORE – 560 035

KRUPANIDHI COLLEGE OF PHARMACY, BANGALORE

Timetable for Remedial Class of I Sem B.Pharm (2019-20)

| Subject | Viva | Dates | Time | Mrs | Mrs | Dr. | Mrs |
|---------------------|-------------------|--------------------------|------------|--------------------|------------------------------|--------------|----------|
| | /Exam | & time | | Sayani | Arnika | C. Sudha | Gargi |
| Pharma | VIVA/ | 29/11/19 | 9 – 4.30pm | Group A | Group B | Group C | Group D |
| ceutics | TESTS | 30/11/19 | 9 – 4.30pm | Group A | Group B | Group C | Group D |
| | | 2/12/19 | 9 –1.30 pm | Group A | Group B | Group C | Group D |
| | | 3/12/19 | 9 -12 noon | Group A | Group B | Group C | Group D |
| | PREFINA L EXAM | 3/12/2019 pm) | (1pm to 4 | Additional Exam | 03/12/201 | 9 (2.30 pm t | o 4 pm) |
| PharmI | VIVA/ | 4/12/19 | 9 – 4.30pm | Group B | Group A | Group C | Group D |
| norganic Chemist | TESTS | 5/12/19 | 9 – 4.30pm | Group B | Group A | Group C | Group D |
| ry | | 6/12/19 | 9 – 4.30pm | Group B | Group A | Group C | Group D |
| | | 7/12/19 | 9 -12 noon | Group B | Group A | Group C | Group D |
| | PREFINA L EXAM | 9/12/2019 pm) | (1pm to 4 | Additional Exam | 09/12/2019 (2.30 pm to 4 pm) | | |
| Pharm | VIVA/ | 10/12/19 | 9 – 4.30pm | Group D | Group B | Group A | Group C |
| analysis | TESTS | 11/12/19 | 9 – 4.30pm | Group D | Group B | Group A | Group C |
| | | 12/12/19 | 9 – 4.30pm | Group D | Group B | Group A | Group C |
| | | 13/12/19 | 9 – 4.30pm | Group D | Group B | Group A | Group C |
| | PREFINA L EXAM | 14/12/2019(10 am - 1 pm) | | Additional Exam | 14/12/2019 (11.30am to 1 pm) | | to 1 pm) |
| HAP | VIVA/ | 16/12/19 | 9 – 4.30pm | Group D | Group B | Group C | Group A |
| | TESTS | 17/11/19 | 9 – 4.30pm | Group D | Group B | Group C | Group A |
| | | 18/11/19 | 9 – 4.30pm | Group D | Group B | Group C | Group A |





(Approved by AICTE & PCI, New Delhi, Affiliated to RGUHS, Bengaluru)

Accredited with Grade 'A' by NAAC, Bengaluru | ISO 9001 – 2015 Certified

12/1, CHIKKA BELLANDUR, CARMELARAM POST, VARTHUR HOBLI, BANGALORE – 560 035

KRUPANIDHI COLLEGE OF PHARMACY, BANGALORE I SEM B.PHARM (2019-20)

REMEDIAL CLASS

BATCH LIST

| SI No | GROUP A | GROUP B | GROUP C | GROUP D | |
|----------|---------------|----------------|-------------------|----------------|--|
| | GARGI | ARNIKA | SUDHA MAM | SAYANI MAM | |
| 1. | Abhishek | Cebin | Aleena | Brahmhotri | |
| 2. | Usman | Deep | Shylashree | Deepa | |
| 3. | Ajith | Shivsekhar | Bikando | Gururaj | |
| 4. | Shreyas | Divya M | Chandana | Hamsa | |
| 5. | Vikram | Ganesh | Durga Prasad | Kavya S | |
| 6. Rohul | | Balu Prashanth | Charitha | Daphisa | |
| 7. | Ankit | Vikas | Divya P | Keerthana Iyer | |
| 8. | Christy | Manisha | Angela | Shubha | |
| 9. | Sanjay | Kavyashree | Vishal | Shalini N | |
| 10. | Rounak | Pratistha | Jasmitha | Nochutenu | |
| 11. | Siravana | Dhruva | Ramya M | Vasanth | |
| 12. | Sumesh | Likitha | Priyanka s | Pradeep | |
| 13. | Hrithik kumar | Samreen | Lavanya Supreetha | | |
| 14. | Divakar | Rachna | Nikhil Gowda | Chandu | |
| 15. | Pranjal | Pratibha | Ramya N | Spoorthi | |
| 16. | Mahesh | Spandita | Lalramhua | Vedanayagam | |



(Approved by AICTE & PCI, New Delhi, Affiliated to RGUHS, Bengaluru)

Accredited with Grade 'A' by NAAC, Bengaluru | ISO 9001 – 2015 Certified

12/1, CHIKKA BELLANDUR, CARMELARAM POST, VARTHUR HOBLI, BANGALORE – 560 035

| 17. | Vigneswaram | Nirma | Roja | Talisunep |
|-----|-----------------|-----------|-------------------|--|
| 18. | Kunal | Poonam | Madhumita | Gagan |
| 19. | Kikon | Shalini P | Sahana Priya | Baby Nandini |
| 20. | Mohit | Lekha | Sonam | Suresh |
| 21. | Nitesh | Rakshitha | Pratishtha Phukan | Banlumlang |
| 22. | Pavan | | | |
| 23. | Lakshmish | | | |
| 24. | Prasanna | | | |
| 25. | Prashanth | | | |
| 26. | C lalthianglima | | | |
| 27. | Prakash | | | |
| 28. | sudeep | | | |
| 29. | Stephen Ashwin | | , | |
| 30. | Karthick | | | |
| 31. | Pooja | | | |
| 32. | Syed Jommy | | | |
| 33. | Illakkiya | | | v . |
| 34. | Nimisha T | | - | A CONTRACTOR OF THE PROPERTY O |

College or College Or



(Approved by AICTE & PCI, New Delhi, Affiliated to RGUHS, Bengaluru)
Accredited with Grade 'A' by NAAC, Bengaluru | ISO 9001 – 2015 Certified
12/1, CHIKKA BELLANDUR, CARMELARAM POST, VARTHUR HOBLI, BANGALORE – 560 035

KRUPANIDHI COLLEGE OF PHARMACY, BANGALORE I Sessional Exam of I SEM B.Pharm 2019-20 Sub: PHARMACEUTICAL ANALYSIS

Max. Marks: 30

Long Essay (Answer any One)

(1x10=10)

- 1. What are errors and classify them (5M) and describe how you minimize the errors.(5M)
- 2. Classify Acid Base titrations and explain about different theories of indicators.

Short Essay (Answer any Two)

(02x05=10)

- What type of compounds are considered as primary standards and why? Give suitable examples.
- 4. A) Define accuracy, precision and significant figures.
 - B) What are neutralization curves?
- 5. How do you prepare and standardize 0.1N Acetous perchloric acid.

Short notes (Answer all)

(05x02=10)

- 6. Define the terms Normality and Molarity.
- 7. Define qualitative and quantitative analysis.
- 8. Name the solvents used in the non aqueous titrations.
- 9. Give the use of the following in non aqueous titrimetry
 - a) Sodium methoxide
 - b) Acetic acid
 - c) Acetic anhydride
 - d) Quinaldein red
- 10. How do you prepare 250ml 0.5M sodium thio sulfate.

Chikkabellandur, Carmelaram Post, Varthur Hobli, Bangalore - 560 03



(Approved by AICTE & PCI, New Delhi, Affiliated to RGUHS, Bengaluru)
Accredited with Grade 'A' by NAAC, Bengaluru | ISO 9001 – 2015 Certified
12/1, CHIKKA BELLANDUR, CARMELARAM POST, VARTHUR HOBLI, BANGALORE – 560 035

KRUPANIDHI COLLEGE OF PHARMACY, BANGALORE II Sessional Exam of I SEM B.Pharm 2019-20 Sub: PHARMACEUTICAL ANALYSIS

Max. Marks: 30

Long Essay (Answer any One)

(1x10=10)

- 1. Define Redox titrations. Give the examples for the Oxidising and Reducing agents and explain about the types of redox titrations.
- 2. Define complexometry and classify the complexing agents with examples and give the applications of complexometry.

Short Essay (Answer any Two)

(02x05=10)

- 3. Explain about the principle, advantages and disadvantages of Volhard's and Modified Volhard's method.
- 4. Define polarography. Explain about the plorographic curve how it is plotted and mention the different areas.
- 5. Explain the principle, working, advantages and disadvantages of Dropping mercury electrode.

Short notes (Answer all)

(05x02=10)

- 6. What is standard hydrogen electrode?
- 7. What are masking and demasking agents?
- 8. What is the difference between chelates and complexes?
- 9. What is the difference between conductometry and potentiometry?
- 10. What are the conditions required in the process of digestion in gravimetry?

6



(Approved by AICTE & PCI, New Delhi, Affiliated to RGUHS, Bengaluru)
Accredited with Grade 'A' by NAAC, Bengaluru | ISO 9001 – 2015 Certified
12/1, CHIKKA BELLANDUR, CARMELARAM POST, VARTHUR HOBLI, BANGALORE – 560 035

KRUPANIDHI COLLEGE OF PHARMACY

Remedial classes portions for I SEM I B. Pharm (2019-20)

Subject: Pharmaceutical analysis

SESSION 1:

10/12/19 please ask the students write test by 3.00PM

10Marks

- 1. Define and classify errors? Describe the various methods to minimize the errors.
- 2. What are acid base titration? Explain the Neutralisation curve in acid base titration.
- 3. What are primary and secondary standards? Give examples of primary standards used in different types of titrations. Enlist the ideal properties of primary standard.
- 4. Explain the procedure for selection of indicators in the titration between strong acid and strong base using neutralisation curves.
- 5. Classify acid base titrations. Explain the Quinonoid theory of indicators with example.
- 6. What are Neutralization curves? Explain the selection of indicators in the titration between weak acid with strong base using neutralization curves.

5Marks

- 1. How do you calculate the equivalent weight and molecular weight of a substance? Give examples.
- 2. Briefly explain the different theories of indicators.
- 3. How do you prepare and standardise the following compounds a) 500ml of 0.1N hydrochloric acid b) 250ml of 0.1N sodium hydroxide. C) 500ml 0.1N Potassium permanganate d) 250ml 0.1N ceric ammonium sulfate
- 4. How do you prepare and standardise 0.1N perchloric acid solution?
- 5. What is leveling effect in non aqueous titrimetry? Explain in detail.
- 6. What is non-aqueous titration? Give the principle and procedure involved in estimation of Ephedrine Hydrochloride and sodium benzoate.
- 7. What is standardization? What type of substances should be standardised? How do you prepare 200ml of 0.5 N Oxalic acid solution?
- 8. What is pharmaceutical analysis? Explain different types of analysis. What is its scope in pharmacy?

2Marks

- 1. Calculate equivalent weight of Hydrogen peroxide and Oxalic acid.
- 2. Calculate equivalent weight of Potassium Permanganate and Iodine.
- 3. Complete and balance the equation: KMnO4 +H2SO4 →
- 4. Define Qualitative Analysis and Quantitative Analysis.
- 5. Differntiate between molar and normal solutions? What data is required to prepare these solutions.
- 6. Explain the importance of significant figures.
- 7. Give a list of methods of expressing concentration.
- 8. Give example for personal error and operative error.
- 9. Give the pH range of phenolphthalein and methyl orange indicators.

Krupanidhi CONTRAL Chikkabellandur, Çarmelaram Post, Varthur Hobli, Bangalore - 560 035



(Approved by AICTE & PCI, New Delhi, Affiliated to RGUHS, Bengaluru)

Accredited with Grade 'A' by NAAC, Bengaluru | ISO 9001 – 2015 Certified

12/1, CHIKKA BELLANDUR, CARMELARAM POST, VARTHUR HOBLI, BANGALORE – 560 035

- 10. How do you calculate stoichiometric end point in acid base titrations.
- 11. Name some indicators used in non-aqueous titrations.
- 12. Name the solvents used in non-aqueous titrations
- 13. Explain the uses of the following in non aqueous titrations a) perchloric acid b) acetic acid c) acetic anhydride d) crystal violet.

SESSION 2:

11/12/19 please ask the students write test by 3.00PM

5Marks

- 1. Explain the mechanism of action of indicators in Fajan's method.
- 2. Give the application of Gravimetric technique in the quantitative determination of barium as Barium sulphate.
- 3. Classify precipitation titration with examples. Explain Mohr's method in detail.
- 4. Discuss the principle and applications of Argentometric titrations with example.
- 5. Explain the principle and procedure involved in Volhards method and modified Volhards method.
- 6. Explain what is co-precipitation and post-precipitation with example.
- 7. Give the mechanism of action of adsorption indicators with suitable examples.
- 8. What is precipitation titration and give the principle involved in the assay of Sodium Chloride.
- 9. What is gravimetry? Explain the following terms a) Digestion b) ignition c) Ash treatment d) Inceneration
- 10. What is meant by Gravimetric analysis? Describe the techniques used for successful estimation of Barium.
- 11. Classify the various EDTA titrations and explain each one in detail.
- 12. Explain the principle and procedure involved in the estimation of Calcium Gluconate.
- 13. Explain the principle involved in the Complexometric titrations in detail and how will you estimate Magnesium Sulphate.

2Marks

- 1. Define co-precipitation and post-precipitation.
- 2. Difference between volhard's method and modified volhard's method.
- 3. What are Masking and Demasking Agents?
- 4. What are sequestering agents. Give examples.
- 5. What is back titration? Give example.
- 6. What is masking agent? Give example for masking by precipitation.
- 7. What is the difference between chelates and the complexes.
- 8. Write the structure of EDTA.
- 9. What are chelating agents. Give examples

(

KRUPANIDHI COLLEGE OF PHARMACY

(Approved by AICTE & PCI, New Delhi, Affiliated to RGUHS, Bengaluru)
Accredited with Grade 'A' by NAAC, Bengaluru | ISO 9001 – 2015 Certified
12/1, CHIKKA BELLANDUR, CARMELARAM POST, VARTHUR HOBLI, BANGALORE – 560 035

SESSION 3:

12/12/19 please ask the students write test by 3.00PM

10Marks

- 1. Discuss Iodometry and Iodimetry titrations briefly with examples.
- 2. Define oxidation and reduction. Give the applications of cerrimetry with suitable examples.
- 3. Define oxidising and reducing agents with suitable examples. Explain the principle involved in the iodometric titrations.
- 4. Define oxidation and reduction. Explain the principle involved in titration with potassium dichromate. Give its applications with suitable examples.
- 5. Classify redox titrations. Give the applications of cerimetry and bromatometry.
- Give the principle and procedure involved in the estimation of ferrous sulfate and hydrogen peroxide.
- 7. Write the equation involed in the titration of iodine and sodium thiosulphate solutions. And explain the reactants and products.

2Marks

- 1. Give one example each for self indicator and internal indicator.
- 2. Give the difference between iodometry and iodimetry.
- 3. Give the formula to calculate the equivalents in redox titration.
- 4. What are self-indicators? Give examples.
- 5. What is back titration? Give example.
- 6. What is Cerimetry? Give its applications.
- 7. What is redox potential?
- 8. Give two example for redox indicators
- 9. Write the importance of Nernst equation.

SESSION 4:

13/12/19 please ask the students write test by 3.00PM

5Marks

- 1. Explain the conductometric titration curves for strong acid with weak base.
- 2. What is Ilkovic equation?derive an equation for it.
- 3. Write the construction and working of Glass electrode with advantages and disadvantages.

4. Enumerate the various types of electrodes in potentiometry. Give the working of Calomel electrode.

E 5

KRUPANIDHI COLLEGE OF PHARMACY

(Approved by AICTE & PCI, New Delhi, Affiliated to RGUHS, Bengaluru)
Accredited with Grade 'A' by NAAC, Bengaluru | ISO 9001 – 2015 Certified
12/1, CHIKKA BELLANDUR, CARMELARAM POST, VARTHUR HOBLI, BANGALORE – 560 035

- 5. Explain the construction and working of glass electrode. What are the advantages of glass electrode?
- 6. Explain the different steps involved in locating the end point in Potentiometric titrations.
- 7. Explain the titremetric curves obtained in conductometric titration a) strong acid Vs weak base b) strong base Vs strong acid.
- 8. Give the construction and working of DME.
- 9. Give the construction, working and applications of platinum electrode.
- 10. What are the reference and indicator electrodes used in potentiometric titrations. Explain construction and working of any one electrode.
- 11. What is polarographic curve? How it is ploted? Mention different areas in the polarographic curves.
- 12. What is polarography? Explain the terms a) limiting current b) polarographic maxima c) diffussion current d) supporting electrolytes
- 13. Write the construction and working of conductivity cell.
- 14. Write the principle and applications of Polarographic analysis.
- 15. Write the principle, instrumentation and applications of conductometry.

2Marks

- 1. Define conductance and resistance.
- 2. Define Molar conductance and Specific conductance.
- 3. Give one example each for indicator electrode and reference electrode.
- 4. Name two compounds which can be estimated by conductometry.
- 5. What are Reference and Indicator electrode?
- 6. What is Null point potentiometry?
- 7. What is Specific conductance and Molar condutance?
- 8. What is standard hydrogen electrode?
- 9. Write the importance of Nernst equation.
- 10. What is conductivity cell.
- 11. Write the differences between conductometry and potentiometry.

9



(Approved by AICTE & PCI, New Delhi, Affiliated to RGUHS, Bengaluru) Accredited with Grade 'A' by NAAC, Bengaluru | ISO 9001 - 2015 Certified 12/1, CHIKKA BELLANDUR, CARMELARAM POST, VARTHUR HOBLI, BANGALORE - 560 035

KRUPANIDHI COLLEGE OF PHARMACY, BANGALORE **QUESTION PREDICTABILITY ANALYSIS**

Pharmaceutical Analysis-I

Teacher In-charge: Dr.P.D.Chaithanya Sudha

Report: Ph.Analysis- I, Jan 2020

| Weightage | Number of given Question in set of 30 Q&A | Total Marks (out of 95) | |
|-------------------|---|-------------------------|--|
| Long Essay | All 3 | 30 | |
| Short Essay | 8 questions | 40 | |
| Short answers | 8 questions | 16 | |
| TOTAL QUESTIONS I | FROM SET OF 30 Q& A | 86 marks out of 95 | |

| Uni 202 | iversity Questions:2nd Jan 0 | Asked in IA Exam | Remarks | Marks (out of 95 marks) | |
|------------|---------------------------------|--------------------------|------------------------|----------------------------|--|
| LO | NG ESSAY | | | | |
| | | 1st Sessional QP | Given in 30 Q&A set | 10 | |
| 1. | Errors | Additional Sessional QP | Quit see | | |
| | | Pre-final Examination QP | | | |
| | | 1st Sessional QP | Given in 30 Q&A set | 10 | |
| 2. | Non-Aqueous titrations | Additional Sessional QP | Q&A Set | | |
| | | Pre-final Examination QP | | | |
| | | II nd sessional QP | Given in 30 | 10 | |
| 3. | Redox titrations | Remedial classes | Q&A set | | |
| | | Pre-final Examination QP | | | |
| SHO | ORT ESSAY | | | | |



(Approved by AICTE & PCI, New Delhi, Affiliated to RGUHS, Bengaluru)
Accredited with Grade 'A' by NAAC, Bengaluru | ISO 9001 – 2015 Certified
12/1, CHIKKA BELLANDUR, CARMELARAM POST, VARTHUR HOBLI, BANGALORE – 560 035

| | | II nd sessional QP | Given in 30 O&A set | 10 | |
|-----|---------------------------------|--|----------------------------|----|--|
| 4. | Redox titrations | Pre-final Examination QP | Q&A SE | | |
| 5. | Acid Base Titrations | 1st Sessional QP | Given in 30 Q&A set | 05 | |
| | | Pre-final Examination QP | Qu'A sei | | |
| 6. | Acid Base Titrations | 1st Sessional QP | Given in 30 Q&A set | 10 | |
| | * | Pre-final Examination QP | Q&A set | 02 | |
| 7. | Precipitation Titrations | Presessional, class tests and Work book | Not Given in 30 Q&A set | | |
| 8. | Complexometric titrations | II nd sessional QP | Given in 30 | 05 | |
| | | Pre-final Examination QP | Q&A set | 02 | |
| 9. | Gravimetric Analysis | II nd sessional QP | Given in 30 | 05 | |
| | | Pre-final Examination QP | Q&A set | | |
| 10. | Potentiometry | II nd sessional QP | Given in 30 | 05 | |
| | | Pre-final Examination QP | Q&A set | | |
| 11. | Conductometry | II nd sessional QP | Given in 30 | 05 | |
| | | Pre-final Examination QP | Q&A set | 0 | |
| 12. | Polarography | II nd sessional QP | Given in 30 | 05 | |
| | | Pre-final Examination QP | Q&A set | | |
| SHC | ORT ANSWERS | | | | |
| 13. | Primary and secondary standards | I st sessional QP | Given in 30 Q&A set | 05 | |
| | Standards | Pre-final Examination QP | Q&A Set | | |



(Approved by AICTE & PCI, New Delhi, Affiliated to RGUHS, Bengaluru)
Accredited with Grade 'A' by NAAC, Bengaluru | ISO 9001 – 2015 Certified
12/1, CHIKKA BELLANDUR, CARMELARAM POST, VARTHUR HOBLI, BANGALORE – 560 035

| 14. | Acid Base Indicators | I st sessional QP | Given in 30 Q&A set | 02 | |
|-----|---------------------------------|---|------------------------|----|--|
| | | Pre-final Examination QP | Q&A Set | | |
| 15. | Equivalents weights calculation | I st and II nd presessional and work book | | | |
| 16. | Non Aqueous titrations | I st sessional QP | | | |
| | | Pre-final Examination QP | - | | |
| 17. | Complexometric titrations | 11 nd Sessional QP | Given in 30 | 05 | |
| | | Pre-final Examination QP | Q&A set | | |
| 18. | Redox titrations | 11 nd Sessional QP | Given in 30 | 10 | |
| | | Pre-final Examination QP | Q&A set | | |
| 19. | Gravimetry | 1I nd Sessional QP | Given in 30 Q&A set | 02 | |
| 20. | Electro analytical methods | II nd sessional QP | Given in 30 | 05 | |
| | | Pre-final Examination QP | Q&A set | | |
| 21. | Conductometry | II nd sessional QP | Given in 30 | 02 | |
| н | | Pre-final Examination QP | Q&A set | | |

TOTAL WEIGHTAGE from Q&A in set of 30 86/95

Date College of Colleg



(Approved by AICTE & PCI, New Delhi, Affiliated to RGUHS, Bengaluru) Accredited with Grade 'A' by NAAC, Bengaluru | ISO 9001 - 2015 Certified 12/1, CHIKKA BELLANDUR, CARMELARAM POST, VARTHUR HOBLI, BANGALORE - 560 035

Pre-Final QP Vs. University QP

KRUPANIDHI COLLEGE OF PHARMACY, **BANGALORE**

Pharmaceutical Analysis -I I SEM B.PHARM, PRE-FINAL **EXAMINATION, DECEMBER 2019**

MM: 75 marks

Time: 03:00 hrs $(10 \times 2 = 20)$

Long Essay (Any two)

Q1. Define and classify errors with examples and explain the methods to minimize the errors. Q2. What are non aqueous titrations? Classify non

aqueous solvents and explain the principle and procedure involved in the assay of sodium benzoate.

Q3. Define oxidizing and reducing agents with suitable examples and explain the different types of redox

titrations with examples.

Short Essay (Any Seven)

 $07 \times 05 = 35 \text{ marks}$

Q4. What type of compounds is considered as primary and secondary standards? Give examples.

Q5. Explain the adsorption indicators with examples.

Q6. Classify and explain the various EDTA titrations. Q7. Explain the construction and working of glass

electrode.

Q8. What is gravimetry? Give the principle and procedure involved in the barium sulfate estimation. Q9. Explain the principle involved in the estimation of strong acid with strong base with the help of titration

Q10.Enumerate the various types of electrodes used in potentiometry and add a note on working of calomel electrode.

Q11. How do you prepare and standardize the 0.1N perchloric acid?
Q12. What is polarographic curve and mention the different areas in the polarographic curve.

02x 10 = 20 marks

Short Answer (Answer All) 02x 10 = 20 Q13. What are universal and mixed indicators? Q14. What is standard hydrogen electrode?

Q15. Define neutralization curve and give its importance.

Q16. Define qualitative analysis and quantitative

Q17. Explain the uses of perchloric acid, acetic acid, acetic anhydride and crystal violet.
Q18. Give the PH range of phenolphthalein and methyl

Q19. Write the difference between conductometry and potentiometry. Q20. Give the role of starch indicator in redox

titrations.

Q21. What is specific and molar conductance? Q22. What are masking and demasking agents? Rajiv Gandhi University of Health Sciences, Karnataka First Semester B. Pharm Degree Examination - 04-Jan-2020

Time: Three Hours

PHARMACEUTICAL ANALYSIS - I Q.P. CODE: 5002

Your answers should be specific to the questions asked. Draw neat labeled diagrams wherever necessary,

LONG ESSAYS (Answer any Two)

2 x 10 = 20 Marks

Max. Marks: 75 Marks

1. Define error; classify determinate error with suitable examples. Explain the terms 'accuracy'

Write a note on solvents used in non-aqueous titrations. Explain the preparation and standardization of 0.1N perchloric acid.

Define oxidizing and reducing agents with a suitable example each. Discuss the principle of redox titrations. Explain standardization of 0.1N sodium thiosulphate solution.

SHORT ESSAYS (Answer any Seven)

7 x 5 = 35 Marks

Define 'normal solution'. Explain preparation and standardization of 0.1N potassium permanganate solution (Mol. Wt: 158)

Explain the titration curve of strong acid versus strong base, How are these curves useful in

Write a note on universal indicators and mixed indicators with examples and their uses.

7. Explain Mohr's method of determination of halides.

With a suitable example each, explain the terms 'masking', 'demasking', 'ligand' and 'chelate' in complexometric determinations.

Define gravimetry. Mention two compounds assayed by gravimetry. Explain the advantages

and disadvantages of this technique.

10. Explain the construction and working of a glass membrane electrode.

11. Explain any two conductometric titration curves.

12. Define polarography and indicate its applications. Enumerate the likovic equation.

10 x 2 = 20 Marks

13. With an example, define primary standard substance. Give its significance.

14. Mention two neutralization indicators, which work in addic pH along with their pH interval respective colours.

15. Define equivalent weight of: 'base' and 'reducing agent' with an example each.

16. Illustrate effect of temperature in non-aqueous titrations.

17. Name four complexometric indicators.

18. Differentiate between 'iodometric' and 'iodimetric determinations',

19. Short note on 'ignition' and 'peptization'

How does starch act as an indicator in lodimetric titrations?

21. Differentiate between reference electrode and indicator electrode.

22. Define molar conductivity.





(Approved by AICTE & PCI, New Delhi, Affiliated to RGUHS, Bengaluru)
Accredited with Grade 'A' by NAAC, Bengaluru | ISO 9001 – 2015 Certified
12/1, CHIKKA BELLANDUR, CARMELARAM POST, VARTHUR HOBLI, BANGALORE – 560 035

30 QUESTIONS AND ANSWERS FOR WEAK STUDENTS Pharmaceutical Analysis-I

10 Marks

- Define and classify errors with examples and list the methods for the minimization of errors.
- 2. Classify Acid-Base titrations and explain the theories of Indicators.
- 3. What are Non-Aqueous titrations and classify Non-Aqueous solvents? Write the Assay of Sodium Benzoate.
- Define Oxidising agents and reducing agents with suitable examples and explain different types of redox titrations.
- 5. How do you prepare and standardize 0.1N perchloric acid and Calculate equivalent weight of a) H₂O₂ and b) Oxalic acid.

5 Marks

- What types of compounds are considered as primary standards and give suitable examples.
- 2. Explain the principle involved in the estimation of mixture of strong acid with strong base with the help of titration curve.
- 3. Explain the adsorption indicators with examples.
- Explain the principle involved in the Volhard's method and modified Volhard's method.
- 5. Classify and explain various EDTA titrations.
- 6. Why gravimetric estimation is preferred for certain compounds? Give the principle and procedure involved in Barium Sulfate estimation.
- 7. Explain the titrimetric curves obtained in conductometric titrations
 - a) Strong acid with strong base
 - b) Strong base with strong acid
- 8. Explain the construction, working and advantages of glass electrode.
- 9. What is polarographic curve? How it is plotted and mention different areas in the polarographic curve?
- 10. Enumerate the various types of electrodes in potentiometry and working of calomel electrode.

2Marks

- 1. Write the importance of Nernst equation.
- 2. What is specific and molar conductance?
- 3. What is standard hydrogen electrode?
- 4. Give the role of starch as Indicator in Redox titrations?
- 5. What is cerimetry and give its applications?
- 6. What are chelating agents?
- 7. What is masking agent?
- 8. Define neutralization curve and give its importance.
- 9. What are Universal or Mixed indicators?
- 10. Define quantitative and qualitative analysis.
- 11. Give the PH range of phenolphthalein and methyl orange indicators.
- 12. Explain the uses of Perchloric acid, Acetic acid, Acetic anhydride and crystal violet.
- 13. What are conditions for process of digestion in gravimetry?

RS

KRUPANIDHI COLLEGE OF PHARMACY

(Approved by AICTE & PCI, New Delhi, Affiliated to RGUHS, Bengaluru)

Accredited with Grade 'A' by NAAC, Bengaluru | ISO 9001 – 2015 Certified

12/1, CHIKKA BELLANDUR, CARMELARAM POST, VARTHUR HOBLI, BANGALORE – 560 035

14. What is the difference between chelates and complexes?

15. Write the difference between conductometry and potentiometry.

PRING PRING Krupanidhi Colle Chikkabellandur, G

Krupanidhi College of Pharmacy Chikkabellandur, Carmelaram Post, Varthur Hobii, Bangalore - 560 03°

College of College of



(Approved by AICTE & PCI, New Delhi, Affiliated to RGUHS, Bengaluru)
Accredited with Grade 'A' by NAAC, Bengaluru | ISO 9001 – 2015 Certified
12/1, CHIKKA BELLANDUR, CARMELARAM POST, VARTHUR HOBLI, BANGALORE – 560 035

KRUPANIDHI COLLEGE OF PHARMACY SESSIONAL MARKS, I SEM B PHARM 2019-20 PHARMACEUTICAL ANALYSIS

| SI. | STUDENT | PH. ANALYSIS | | | |
|-----|--------------------------------|--------------|--------------|--|--|
| No | NAME | I Sessional | II Sessional | | |
| | | Theory (30) | Theory (30) | | |
| _ 1 | Muhammed Shahazain Sifath | 12 | 2 | | |
| 2 | Abhilash S. Reddy | 25 | 29 | | |
| 3 | Aditya Dholi | 7 | | | |
| 4 | Akash | 26 | 2 | | |
| 5 | Arnold Joseph | 20 | 2 | | |
| 6 | Benson Babu Thomas | 28 | 3 | | |
| 7 | Bhavana L | 25 | 2 | | |
| 8 | Bhavya Shree Balasubramani | 27 | 3 | | |
| 9 | Bhoomika HV | 20 | 2 | | |
| 10 | Bhuvan R | 14 | 2 | | |
| 11 | Chaithra MS | 24 | 2 | | |
| 12 | Channa Basavana Gouda Patil | 25 | 2 | | |
| 13 | Charan | 24 | 2 | | |
| 14 | Chephar Samati | 12 | 2 | | |
| 15 | Deekshitha B | 22 | 2: | | |
| 16 | Deepika | 27 | 30 | | |
| 17 | Dilip Kumar GM | 12 | 2 | | |
| 18 | Durga Prasad V | 18 | 2 | | |
| 19 | Girinath M | 14 | 2. | | |
| 20 | Harini R | 21 | 2 | | |
| 21 | Harshini S | 15 | 2 | | |
| 22 | Harshita Maheshwari | 21 | 2: | | |
| 23 | HK Lalengzuala | AB | Al | | |
| 24 | Jagadish K | 28 | 3 | | |
| 25 | Chethan.H | 3 | Al | | |
| 26 | Jayashree R | 29 | 29 | | |
| 27 | Jayashree S | 15 | 2 | | |
| 28 | Jerome David | 25 | 28 | | |
| 29 | Jyothi Shruthi B K | 15 | 2 | | |
| 30 | Kavita Donniayavar | 21 | 21 | | |
| 31 | Kavya B | 18 | 2 | | |
| 32 | Kavya.HS | 24 | 28 | | |
| 33 | Keerthana S | 29 | 29 | | |
| 34 | Khaled Gamal Abdullah Mayas | AB | AI | | |





(Approved by AICTE & PCI, New Delhi, Affiliated to RGUHS, Bengaluru)

Accredited with Grade 'A' by NAAC, Bengaluru | ISO 9001 – 2015 Certified

12/1, CHIKKA BELLANDUR, CARMELARAM POST, VARTHUR HOBLI, BANGALORE – 560 035

| 35 | Kishore Kumar V | 8 | 28 |
|----|-----------------------------|----|----|
| 36 | Krupa K | 26 | 30 |
| 37 | Lahari K | 23 | 22 |
| 38 | Lavanya M | 14 | 26 |
| 39 | Likhitha HR | 15 | 21 |
| 40 | Likitha M | 20 | 28 |
| 41 | M chandan | 20 | 22 |
| 42 | M.Abinash | 13 | 24 |
| 43 | M.Divyashree | 28 | 30 |
| 44 | M.Rakesh | 25 | 24 |
| 45 | M.Sanjay | 18 | 24 |
| 46 | Madan M | 22 | 23 |
| 47 | Makeshwar PE | 30 | 30 |
| 48 | Mallikarjun R | 16 | 23 |
| 49 | Manjunath R | 14 | 21 |
| 50 | Manjuprasad.M | 23 | 27 |
| 51 | Mithan Surya M | 0 | AB |
| 52 | Monica C | 27 | 30 |
| 53 | Monica S | 28 | 29 |
| 54 | Muhamed Hilal | 22 | 27 |
| 55 | Nandini M R | 28 | 28 |
| 56 | Nikhil E | 22 | 26 |
| 57 | Nikitha V | 22 | 28 |
| 58 | Nishu. BS | 21 | 28 |
| 59 | Nithya A | 15 | 27 |
| 60 | Nivya Anusha Reddy | 22 | 30 |
| 61 | Pavithra R. | 21 | 27 |
| 62 | Prajval M | 17 | 22 |
| 63 | Praveen Paul | 16 | 21 |
| 64 | Preethi AJ | 30 | 29 |
| 65 | Protik Kishore Choudhury | AB | AB |
| 66 | Purvika.K.S | 25 | 29 |
| 67 | Rafiya | 26 | 29 |
| 68 | Rahul Anganyan | 15 | 29 |
| 69 | Ranajit Sen | 21 | 25 |
| 70 | Ranjana devi sajjan | 14 | 30 |
| 71 | Ravi Kumar Sah | 12 | 21 |
| 72 | Rithiksha V | 23 | 27 |
| 73 | S.Fazila Parveen | 19 | 28 |
| 74 | S.Tejaswini Patil | 23 | 21 |
| 75 | Samker Kyizom | 17 | 26 |
| 76 | Sangeetha.J | AB | AB |



PRINCIPAL

Krupanidhi Coilege of Pharmacy
Chikkabellandur, Carmelaram Post,
Varchur Bassi, Bangalore - 560 035

18" town in



(Approved by AICTE & PCI, New Delhi, Affiliated to RGUHS, Bengaluru)
Accredited with Grade 'A' by NAAC, Bengaluru | ISO 9001 – 2015 Certified
12/1, CHIKKA BELLANDUR, CARMELARAM POST, VARTHUR HOBLI, BANGALORE – 560 035

| 77 | Santhip S | 28 | 30 |
|------------------|---------------|----|----|
| 78 Saya Jyothi U | | 26 | 26 |
| 79 | Shireesha KR | 20 | 27 |
| 80 | Shirisha R | 28 | 30 |
| 81 | Shreelekha L | 19 | 21 |
| 82 | Sibi M | 25 | 29 |
| 83 | Sridhar P | 27 | 29 |
| 84 | Sunil K | 21 | 22 |
| 85 | Sunil Kumar S | 29 | 30 |
| 86 | Sushma D | 26 | 28 |
| 87 | Sushma.N | 25 | 30 |
| 88 | Swetha K | 18 | 24 |
| 89 | Tejashwini J | 29 | 30 |
| 90 | Tejashwini K | 29 | 30 |
| 91 | Tenzin Nordon | 22 | 22 |
| 92 | Tenzin Woeser | 18 | 28 |
| 93 | Vaishnavi | 18 | 28 |
| 94 | Vanshika | 25 | 25 |
| 95 | Vasudeva M | 26 | 30 |
| 96 | Venu M | 12 | 29 |
| 97 | Vignesh S | 22 | 26 |
| 98 | Vinay Kumar N | 29 | 30 |
| 99 | Yashwanth.S | 28 | 30 |
| 100 | Yukitha.B | 30 | 30 |

IQA6

PRINCIPAL

KRUPANIDHI COLLEGE OF PHARMACY, BANGALORE

REMEDIAL CLASSES 2018-19

Class: III Pharm D

Name of the students: Mohammad Asir, Siddarth M

| SUBJECTS | | | | Dat | es | | | ¥ | Signature of teacher |
|------------------------------|------------|------------|------------|------------|------------|------------|------------|----------------|--|
| Pharmacology II | 22/04/2019 | 23/04/2019 | 24/04/2019 | 25/04/2019 | 26/04/2019 | 27/04/2019 | 29/04/2019 | 30/04/2 019 | Patriot |
| Pharmaceutical analysis | 22/04/2019 | 23/04/2019 | 24/04/2019 | 25/04/2019 | 26/04/2019 | 27/04/2019 | 29/04/2019 | 30/04/2 019 | Logge |
| Pharmacothera peutics II | 22/04/2019 | 23/04/2019 | 24/04/2019 | 25/04/2019 | 26/04/2019 | 27/04/2019 | 29/04/2019 | 30/04/2 019 | Ju |
| Pharmaceutical jurisprudence | 22/04/2019 | 23/04/2019 | 24/04/2019 | 25/04/2019 | 26/04/2019 | 27/04/2019 | 29/04/2019 | 30/04/2 019 | Not we |
| Medicinal chemistry | 22/04/2019 | 23/04/2019 | 24/04/2019 | 25/04/2019 | 26/04/2019 | 27/04/2019 | 29/04/2019 | 30/04/2 019 | for the same of th |
| Pharma. Formulations | 22/04/2019 | 23/04/2019 | 24/04/2019 | 25/04/2019 | 26/04/2019 | 27/04/2019 | 29/04/2019 | 30/04/2 019 | Lu |

Krupanidhi Callege of Pharmacy Chikkabellandur, Carmelaram Post, Varthur Hobil, Bangalore - 560 035

DETAILS OF REMEDIAL CLASSES

A Bangal

I PHARM D-2018-19

| SL. NO | STUDENT NAME | HAP | | | PCEUTICS | | MBC | | POC | | | PIC | | |
|-----------|-----------------------------|-------------|---------|---------|--------------|--------------|----------|--------------|---------|-------------|-------------|------------------|------------------|--------------|
| | | 2/05/ 19 | 3/05/19 | 4/05/19 | 16/05 /19 | 17/05/1 9 | 13/05/19 | 14/05/1 9 | 6/05/19 | 8/05/1 9 | 9/05/1 9 | 10/ 05/ 19 | 11/ 05/ 19 | 12/05/1 9 |
| 1. | Aishwarya Rakesh | Р | P | P | Р | P | P | P | P | P | P | P | P | P |
| 2. | Anika Varsha Thamra S | A | A | A | A | A | A | A | A | A | A | Α | А | A |
| 3. | Divya M | Р | Р | P | Р | Р | P | Р | Р | Р | Р | Р | Р | P |
| 4. | Lomash Timsina | Р | Р | P | Р | Р | P | P | P | Р | Р | P | Р | P |
| 5. | Moulidhara n R | A | A | A | А | A | A | A | A | A | A | A | A | A & |
| 6. | Pawan Kumar K | A | А | A | A | А | P | P | Р | P | Р | Р | Р | P |
| 7. | Sahana G | Р | Р | Р | Α | А | Α | A | Α | P | Р | Р | Р | P |
| 8. | Shiwangi Bhandari | Р | Р | P | Р | Р | P | P | Р | P | Р | P | P | P |
| 9. | Sobin Thomas | A | Α | A | A | A | A | A | A | A | A | Α | A | A |
| 10 | Rashmitha | P | P | P | P | B | P | P | P | P | P | P | P | P |

freehin

Krupanidhi Conses of Phormacy Chikkabellandur, Carmelaram Post, Varthur Hobli, Bangalore - 560 036

(A)

Chikkabellandur, Carmelaram Post, Varthur Hobii, Bangalore - 560 035

KRUPANIDHI COLLEGE OF PHARMACY, BANGALORE REMEDIAL CLASSES, March 2019 FIRST SEMESTER B.PHARM, ATTENDANCE OF MENTEES

Subject: Pharmaceutical analysis / HAP / pharmaculis / PIC. Teacher In-Charge:

| Students' Name | 08/03/19 | 09/03/19 | 11/03/19 | 12/03/19 | 13/03/19 |
|-------------------------------|----------|------------|-----------------|----------|----------|
| | (HAP) | (Analysis) | pharmaceitics-I | (PIC) | HAP- |
| Sahana A | P | ₽ | P | P | A |
| Santhala Chaithanya Prasad | 4 | P | A | P | P |
| Sasikirana S | P | 4 | P | 4 | ₽ |
| Shiv Kumar M | P | P | P | P | P |
| Shivangi Chaudhary | P | P | P | P | P |
| Siddharth Bairaagi | P | P | A | A | P |
| Snigdha Senapati | P | P | P | P | 4 |
| Sobana S | P | A | P | P | P |
| Suchitra G | P | P | P | 4 | P |
| Suravi Dutta | P | P | P | P | P |
| Swetha M | P | ρ | A | P | P |
| Tamil Selvan | A | A | P | P | A |
| Tathagat Singh | P | P | A | P | P |
| Uday Kiran | ρ | P | P | P | P |
| Velavan P | A | P | A | 4 | P |
| Venhatachalam M | ρ | ρ | P | P | A |
| Venu G | A | A | A | ρ | P |
| Vijaylakshmi M | P | P | P | P | P |
| | | | | | |

PROPERTY Krupanidhi Chiegle Joanarmacy Chikkabellandur, Carmelaram Post Varthur Hobli, Bangalore - 560 03

Krupanidhi Delde Oroman hikkabellandur, Carmelaram arthur Hobli, Bangalore - 5

13 03 19.

KRUPANIDHI COLLEGE OF PHARMACY, BANGALORE REMEDIAL CLASSES, March 2019 FIRST SEMESTER B.PHARM, ATTENDANCE OF MENTEES

Subject:PIC

Teacher In-Charge: Arnika Das

| Students' Name | 8/3/19 | 9/3/19 | 11/3/19 | 12/3/19 | 13/3/19 |
|--------------------|--------|--------|---------|---------|----------|
| Ajith | | 171.1 | 1 | ~ | · 5/5/1/ |
| Abhilash | | | | - | |
| Aleena | | | (X) | - | _ |
| Azzam | X | ~ | | - | |
| Ashwini R | | / | V | V | - |
| Kavya nikitha | X | ~ | V | | |
| Anisha | X | × | V | ~ | • |
| Anusha | X | / | ~ | ~ | 1 |
| Ashiwini Ramaswamy | ~ | / | ~ | ~ | L |
| Chandana | ~ | | ~ | ~ | X |
| Babul | V | V | | V | 1 |
| Binuka | ~ | ~ | V | ~ | <u></u> |
| Chaitanya | ~ | ~ | ~ | 4 | X |
| Yaseen | | V | | | ~ |
| Angelin | | | | | |
| Rashmi | | | X | | - |
| Acksa | | / | ~ | ~ | |