

Certificate Course

On

Clinical Laboratory Tests

2022-2023



CO ORDINATOR

Dr B.SUJATHA

Principal

Dr E V Suresh Kumar Kumar

Dr R.Sreenivasa Rao

Department of Chemistry

PRR & VS Govt College

VIDAVALURU

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: Venue:

Clinical Laboratory,

Janatha Diagnostics

Vidavaluru

Duration: 10-11-2022 to 15-12-2022

CIRCULAR
CERTIFICATE COURSE

The Department of Chemistry is going to organize certificate course in Laboratory Clinical tests Which Trains the participants to acquire practical knowledge in doing blood tests. Lipid profile etc. The trained student will be issued certificates. Which can be used to establish diagnostic labs or employment as lab technicians in super specialty hospitals?

Science students who are interested to join should enroll their names at Dr B. Sujatha, Principal /Chemistry department on or before 09-11-2022.

B. Sujatha

Principal
PRINCIPAL

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VIDAVALUR- 524 318.
Sri Potti Sriramulu Nellore Dt.

LIST OF BLOOD TESTS AND OTHER TESTS

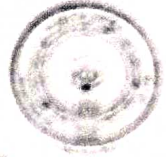
1. FULL BLOOD COUNT TEST
2. KIDNEY TEST-RENAL PROFILE
3. LIVER FUNCTION TEST
4. CHOLESTEROL TEST-LIPID PROFILE TEST
5. BLOOD GLUCOSE TEST
6. URINE TESTS AND OTHER



PRR & VS GOVERNMENT COLLEGE

Vidavalur - 524318, S.P.S.R Nellore Dist., A.P.

Re-accredited with 'B' grade by NAAC



vidavalur@prvsn.ac.in

http://prvsn.ac.in

Dr. B. Sujatha
Principal

To

The Manager

Janatha Diagnostic

Janatha Hospital

Vidavaluru

Dear Sir

I Express My Sincere thanks to the Management of Janatha Diagnostic, Gudur for providing opportunity to our students to learn clinical Laboratory tests. I enclose the list of students participating in training. Kindly allow our students to learn the following tests from your lab.
Authorities / Technicians.

- Full Blood count profile
- Kidney Test-Renal Profile
- Liver function Test
- Cholesterol test-Lipid profile test
- Blood Glucose Test
- Urine Test

Your kind help will be remembered for ever.

Thanking you

with best regards

Yours Sincerely


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From

The Manager

Janatha Diagnostic

Janatha Hospital

Vidavaluru

To

The Principal

PRR & VS Government College

Vidavaluru

Respected sir,

As per your request we are pleased to inform you that we will train your students on various clinical laboratory tests which are available in our diagnostic centre. Please inform us your convenient date and timings so that we will make some necessary arrangements.

Thanking you

Yours faithfully


(K.Venu Gopal)

Manager

To
The Manager
Janatha Diagnostic
Janatha Hospital
Vidavaluru

DEPARTMENT OF CHEMISTRY
CERTIFICATE COURSE
CLINICAL LABORATORY TESTS
2020-2021 (100 marks)
Syllabus

Sir,

Sub: PRR & VS GDC, VIDAVALURU-Certificate Course on Clinical tests by students-
permission required to lend support to students in analysis -visit by our students to our
centre-request -regd.

I am glad to bring to your notice that the BSc Students of this college are willing to
take up a certificate course on clinical tests for this year. As your centre is doing the analysis
for clinical tests, I request your Cooperation and helping hand for our students also to have a
learning experience and inputs for the preparation of certificate course. I further request you
to allow our students to get benefitted from your centre.

Thanking you Sir

Yours faithfully


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**DEPARTMENT OF CHEMISTRY
CERTIFICATE COURSE**

**CLINICAL LABORATORY TESTS
2020-2021(on words)**

Syllabus

UNIT I

- A. Lab ethics- Punctuality, Promptness, Accuracy, Confidentiality, Generosity, Sincerity, Standards, Major disciplines
- B. Safety Practices – Acids & Bases, Precautions, Carcinogenic Chemicals, Toxic & Harmful Chemicals, Oxidising Chemicals, Infectious Samples, Glass Ware, First aid.

UNIT -II

- A. Techniques- Flame photometer, Beer- Lamberts law, Galvanometer, Centrifugation, electrophoresis, Chromatography.
- B. Serological tests- Widal Slide Agglutination test, VDRL Slide test, ELISA Test, Antibiotic Sensitivity Test.

UNIT -III

Staining Techniques- Gram Staining, acid fast staining, Mycobacterium staining, Albert staining.

Sterilization:- Autoclave, Hot air oven, Incubator, Chemical sterilization.

Culture Media- Nutrient Agar medium, Blood Agar Medium, Chocolate agar Medium, McConkey Agar Medium, Czapeckdox Agar Medium, YEMA Medium.

UNIT IV:- Estimations

Estimation Of Serum of Plasma Proteins, blood Glucose, serum bilirubin, Serum creatinine, Serum alkaline Phosphatase, serum calcium

Haematological Tests:-

WBC Count, Platelet Count, Reticulocyte count, eosinophil Count, Differential Count, haemoglobin estimation, Erythrocyte Sedimentation rate, Bleed time & clotting time, packed cell volume.

UNIT-V

Clinical Pathological tests- physical Examination of urine, Detecting Albumin in urine, blood in urine, Ketone bodies & sugar in urine, Bile salts & Bile pigments in urine.

Mycotic infections- Wet Mounting in Alkaline solutions, subcutaneous mycoses, Systemic mycoses.

Parasitology- Blood collection from a Malaria patient Microscopic Examination of Stool.

DEPARTMENT OF CHEMISTRY

CERTIFICATE COURSE CLINICAL LABORATORY TESTS 2022-2023

COURSE END EXAMINATION

Multiple choice questions

1. Purine Associated with

- a) Adenine
- b) Uric acid
- c) RNA
- d) Guanine

2. One Jaundice patient has yellow skin his bilirubin is

- a) 2.5Mg/dl
- b) 5.0Mg/dl
- c) 1.2Mg/d
- d) 1.6Mg/d

3. Low effective Sterilization With

- a) Methyl Alcohol
- b) Chloroform
- c) 5% Phenol
- d) 5% Cresol
- e) ethyl alcohol 70%

4. The microscope which used in investigate syphilis is

- a) Light Microscope
- b) dark field
- c) Ultra -Violet

5. one of these cell the the largest leukocyte cell

- a) Basophil
- b) Monocyte
- c) Lymphocyte

d)Neutrophil

e)Eosinophil

6. The malarial sporozoite in man invades

a)RBCS

b) White blood cells

c)Reticulo endothelial cells

d)All of the above

7. For Glucose tolerance test

a)Collect 5 blood samples only

b)Collect 5 Urin samples only

C)Collect 5 blood samples+5 Urin Samples

8. The most source of ATP in cell is

a)Cytoplasm

b)Nucleus

c)Cell wall

d)Mito chondria

9. Streptococci responsible for the majority of human infections are

a)Bacitracin-S and camp(-)

b)Group A

c)Beta-haemolytocoeci

b) All of these

e)None of these

10. Serious that causes food poisoning

a) Staph albus

b)salmonella enteritidis

c)salmonella typhi

11. The trophozoite which contains red blood cells in the cytoplasm is called
parasite

- a) *Trichomonas hyaliformis*
- b) *Trichomonas coli*
- c) *Trichomonas gingivale*
- d) *Trichomonas foetus*
- e) None of the above

12. The only enrichment medium of following is

- a) Blood agar
- b) Chocolate agar
- c) Selenite broth
- d) MacConkey agar
- e) Cysteine lactose electrolyte Deficient (CLEED)

13. The organs of adhesion in bacteria are

- a) Flagella
- b) Fimbriae
- c) Slimlayer
- d) 30 days
- e) Microcapsule

14. Life span of red blood cell in the circulation (body)

- a) 80 days
- b) 120 days
- c) 7 days

15. What practical cardiolipin is applicable in laboratory work

- a) FTA
- b) RPR only
- c) VDRL only

16. A semen specimen, containing sugar source of the spermatozoan energy is

- a) Glucose
- b) Mannose
- c) Fructose
- d) Sucrose
- e) Galactose

17. To differentiate between *Neisseria gonorrhoea* and *Neisseria meningitidis*

- a) Fermentation of dextrose and lactose
- b) Fermentation of dextrose and maltose
- c) Fermentation of maltose and lactose
- d) Fermentation of maltose and sucrose

18. Significant bacteruria, puria and alkaline urine probably indicate urinary tract infection due to

- a) *Staphylococcus epidermidis*
- b) *E. coli*
- c) *Proteus vulgaris*
- d) *Pseudomonas aeruginosa*
- e) *Enterococcus faecalis*

19. Organism soluble in bile

- a) Staph
- b) Streptococci
- c) Haemophilus influenza
- d) Pneumococci (*Streptococcus pneumoniae*)

20. The following organisms are lactose fermenters except

- a) *E. coli*
- b) *Proteus* spp
- c) *Shigella sonnei*

Certificate Course on Clinical Lab Tests

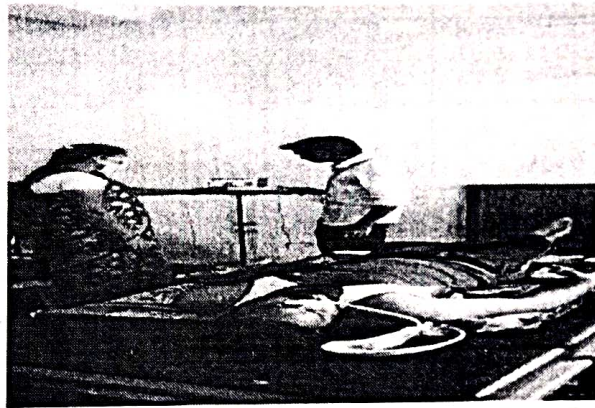
Dr B.Sujatha Principal and A. Bramhanandam private Hospital was addressing the Students Selected for certificate course in the inaugural function on 10-11-2022. The Department of Chemistry PRR & VS Govt. Degree College Vidavaluru Organized a Certificate Course on Clinical Lab Tests to their Students .



B. Sujatha
PRINCIPAL

PRR & VS GOVT. DEGREE COLLEGE VIDAVALURU

Picture 1
Picture 2: In the Clinical Lab of Janatha Diagnostics, Students and Instructors



Lab Technician S. Lalitha was explaining the procedure of blood test.

a B. su
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PRR&VS Government College, Vidavaluru, SPSR Nellore DT

Department of Chemistry

CERTIFICATE COURSE ATTENDANCE SHEET(2022-23)

S.No	Name of the Student	10-11-22	11-11-22	14-11-22	15-11-22	16-11-22	17-11-22	18-11-22	19-11-22	21-11-22	22-11-22
	A. Saiteja	P	P	a	P	P	P	a	P	P	P
	Ch. Vamsi Krishna	a	P	P	P	a	P	P	a	P	P
	Chappidi Jagan	P	a	P	P	a	P	P	P	P	a
	Chenna Naresh	P	P	P	a	P	P	P	a	P	P
	Jadda Jashuva	P	a	P	P	P	a	P	P	a	P
	Pidugu Rakesh	P	P	a	P	P	a	P	P	a	P
	Potluru Chakri	a	P	P	P	a	P	a	P	P	P
	S. Siddartha	P	P	P	P	a	P	P	P	P	a
	Sadepalli Satheesh	P	a	P	a	P	P	P	P	a	P
	Thandra Indrāja	P	P	a	P	P	P	P	a	P	P
	Udayagiri Rajesh	P	a	P	P	P	a	P	a	P	P
	Animeti Lahari	a	P	P	a	P	P	P	P	a	a
	Balli Sowmya	P	a	P	P	P	a	P	a	P	P
	Gollapalli Meghana	a	P	a	P	P	P	a	P	P	P
	Mettukuru Vinutha Sree	P	a	P	P	P	a	P	P	P	P
	Pokuru Kavya	P	P	a	P	P	a	P	a	P	P
	Revuru Venkata Asritha	P	P	P	a	P	P	a	P	P	P
	Sadepalli Vindhya	a	P	P	P	P	a	P	P	a	P
	Shaik Esha Parwez	P	P	P	a	P	P	P	a	P	P
	Balli Prasanth	P	a	P	P	P	a	P	P	a	P
	Chappidi Deva Kumar	P	P	a	P	P	P	P	a	P	P
	Chemudugunta Sreemahendra	a	P	P	P	a	P	P	a	P	P
	Chemukula Haritha	P	P	P	a	P	P	P	a	P	P
	Gangapatnam Simhadri	a	P	P	P	a	P	a	P	P	P
	Kakani Jasveer	a	P	a	P	P	a	P	P	P	a
	Kosuru Naveen	P	a	P	P	a	P	P	a	P	a
	Makkena Hemalatha	P	a	P	P	P	a	P	P	a	P
	Panem Vamsi Krishna	P	P	a	P	P	a	P	a	P	P
	Sodam Sireesha	P	a	P	P	P	a	P	a	P	a
	Talapala Kulavardhan	a	P	a	P	P	a	P	P	a	P
	V Balaji	P	a	P	P	a	P	a	a	P	P
	Yepuru Ankitha	a	P	P	a	P	P	P	P	a	P

B. Su

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Sri Potti Sriramulu Nellore Dt.

PRR&VS Government College, Vidavaluru, SPSR Nellore DT
Department of Chemistry

CERTIFICATE COURSE ATTENDANCE SHEET(2022-23)

S.No	Name of the Student	23-11-22	24-11-22	25-11-22	26-11-22	28-11-22	29-11-22	30-11-22	1-12-22	8-12-22	15-12-22
	A. Saiteja	P	P	P	P	P	P	P	P	P	P
	Ch. Vamsi Krishna	P	P	P	P	P	P	P	P	P	P
	Chappidi Jagan	P	P	P	P	P	P	P	P	P	P
	Chenna Naresh	P	P	P	P	P	P	P	P	P	P
	Jadda Jashuva	P	P	P	P	P	P	P	P	P	P
	Pidugu Rakesh	P	P	P	P	P	P	P	P	P	P
	Potluru Chakri	P	P	P	P	P	P	P	P	P	P
	S. Siddartha	P	P	P	P	P	P	P	P	P	P
	Sadepalli Satheesh	P	P	P	P	P	P	P	P	P	P
	Thandra Indraja	P	P	P	P	P	P	P	P	P	P
	Udayagiri Rajesh	P	P	P	P	P	P	P	P	P	P
	Animeti Lahari	P	P	P	P	P	P	P	P	P	P
	Balli Sowmya	P	P	P	P	P	P	P	P	P	P
	Gollapalli Meghana	P	P	P	P	P	P	P	P	P	P
	Mettukuru Vinutha Sree	P	P	P	P	P	P	P	P	P	P
	Pokuru Kavya	P	P	P	P	P	P	P	P	P	P
	Revuru Venkata Asritha	P	P	P	P	P	P	P	P	P	P
	Sadepalli Vindhya	P	P	P	P	P	P	P	P	P	P
	Shaik Esha Parwez	P	P	P	P	P	P	P	P	P	P
	Balli Prasanth	P	P	P	P	P	P	P	P	P	P
	Chappidi Deva Kumar	P	P	P	P	P	P	P	P	P	P
	Chemudugunta Sreemahendra	P	P	P	P	P	P	P	P	P	P
	Chemukula Haritha	P	P	P	P	P	P	P	P	P	P
	Gangapatnam Simhadri	P	P	P	P	P	P	P	P	P	P
	Kakani Jasveer	P	P	P	P	P	P	P	P	P	P
	Kosuru Naveen	P	P	P	P	P	P	P	P	P	P
	Makkena Hemalatha	P	P	P	P	P	P	P	P	P	P
	Panem Vamsi Krishna	P	P	P	P	P	P	P	P	P	P
	Sodam Sireesha	P	P	P	P	P	P	P	P	P	P
	Talapala Kulavardhan	P	P	P	P	P	P	P	P	P	P
	V Balaji	P	P	P	P	P	P	P	P	P	P
	Yepuru Ankitha	P	P	P	P	P	P	P	P	P	P

B. Srinivasulu

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PRR&VS Government College, Vidavaluru, SPSR Nellore DT
Department of Chemistry

CERTIFICATE COURSE ATTENDANCE SHEET(2022-23)

S.No	Name of the Student	4.12.22	5.12.22	6.12.22	7.12.22	8.12.22	9.12.22	10.12.22	11.12.22	14.12.22	15.12.22
	A. Saiteja	P	P	P	P	P	P	P	P	P	P
	Ch. Vamsi Krishna	P	P	P	P	P	P	P	P	P	P
	Chappidi Jagan	P	P	P	P	P	P	P	P	P	P
	Chenna Naresh	P	P	P	P	P	P	P	P	P	P
	Jadda Jashuva	P	P	P	P	P	P	P	P	P	P
	Pidugu Rakesh	P	P	P	P	P	P	P	P	P	P
	Potluru Chakri	P	P	P	P	P	P	P	P	P	P
	S. Siddartha	P	P	P	P	P	P	P	P	P	P
	Sadepalli Satheesh	P	P	P	P	P	P	P	P	P	P
	Thandra Indraja	P	P	P	P	P	P	P	P	P	P
	Udayagiri Rajesh	P	P	P	P	P	P	P	P	P	P
	Animeti Lahari	P	P	P	P	P	P	P	P	P	P
	Balli Sowmya	P	P	P	P	P	P	P	P	P	P
	Gollapalli Meghana	P	P	P	P	P	P	P	P	P	P
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	Pokuru Kavya	P	P	P	P	P	P	P	P	P	P
	Revuru Venkata Asritha	P	P	P	P	P	P	P	P	P	P
	Sadepalli Vindhya	P	P	P	P	P	P	P	P	P	P
	Shaik Esha Parwez	P	P	P	P	P	P	P	P	P	P
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	Chappidi Deva Kumar	P	P	P	P	P	P	P	P	P	P
	Chemudugunta Sreemahendra	P	P	P	P	P	P	P	P	P	P
	Chemukula Haritha	P	P	P	P	P	P	P	P	P	P
	Gangapatnam Simhadri	P	P	P	P	P	P	P	P	P	P
	Kakani Jasveer	P	P	P	P	P	P	P	P	P	P
	Kosuru Naveen	P	P	P	P	P	P	P	P	P	P
	Makkena Hemalatha	P	P	P	P	P	P	P	P	P	P
	Panem Vamsi Krishna	P	P	P	P	P	P	P	P	P	P
	Sodam Sireesha	P	P	P	P	P	P	P	P	P	P
	Talapala Kulavardhan	P	P	P	P	P	P	P	P	P	P
	V Balaji	P	P	P	P	P	P	P	P	P	P
	Yepuru Ankitha	P	P	P	P	P	P	P	P	P	P

B. [Signature]
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Department of Chemistry
PRR & VS Govt. College
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Vidavalur, SPSR Nellore Dist


Course Completion Certificate

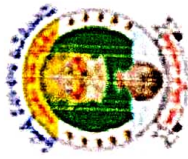
This is to certify that Mr./Ms. B. Teja Sri, Bsc (BZC) group has successfully completed the certificate course 'Clinical Laboratory Tests' conducted by the Department of Chemistry from 10th Nov. 2022 to 15th Dec.2022 (30 Contact hours)


Incharge


Course-
coordinator


IQAC
Coordinator


Principal
PRR & VS GOVT. COLLEGE
VIDAVALUR - 524318.
SPSR NELLORE DT.



Department of Chemistry
PRR & VS Govt. College
(Accredited with B Grade by NAAC)
Vidavalur, SPSR Nellore Dist

Course Completion Certificate

This is to certify that Mr./Ms. _____, _____ group has
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