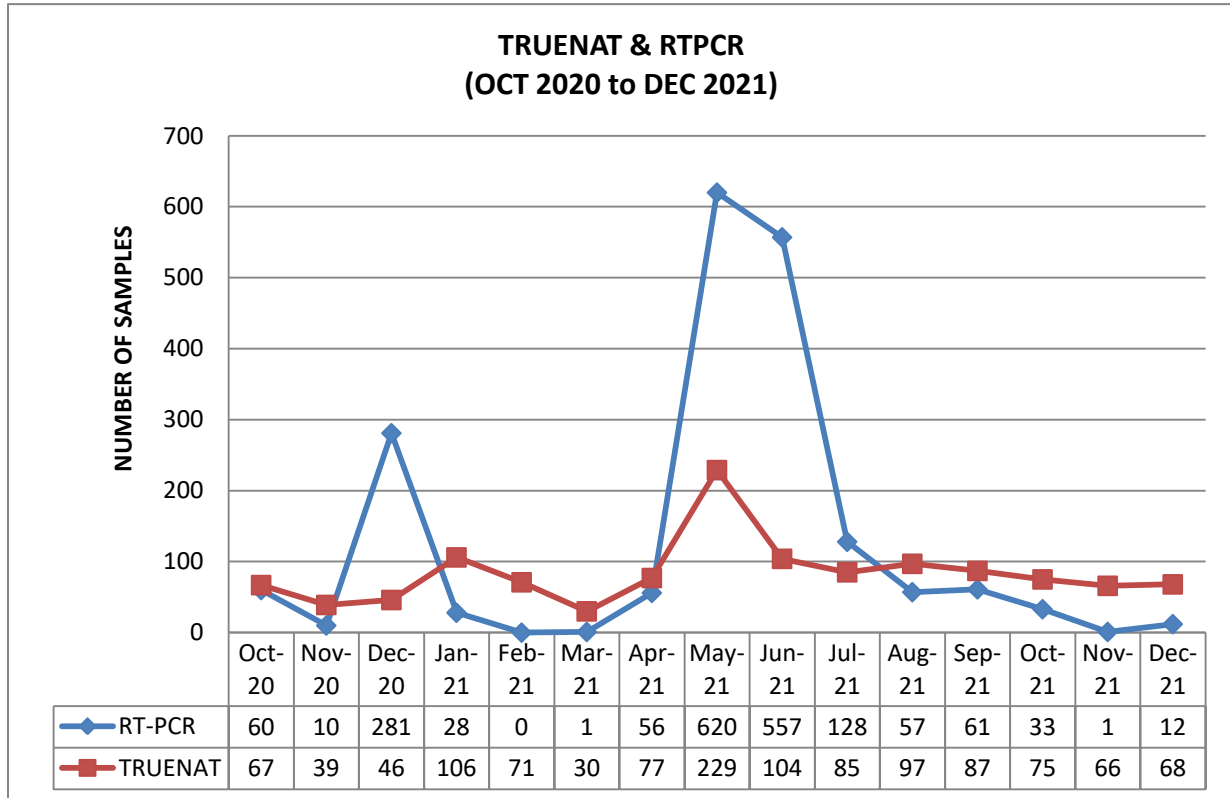




**ANNAPOORNA MEDICAL COLLEGE
MOLECULAR RESEARCH LABORATORY - BSL 2**

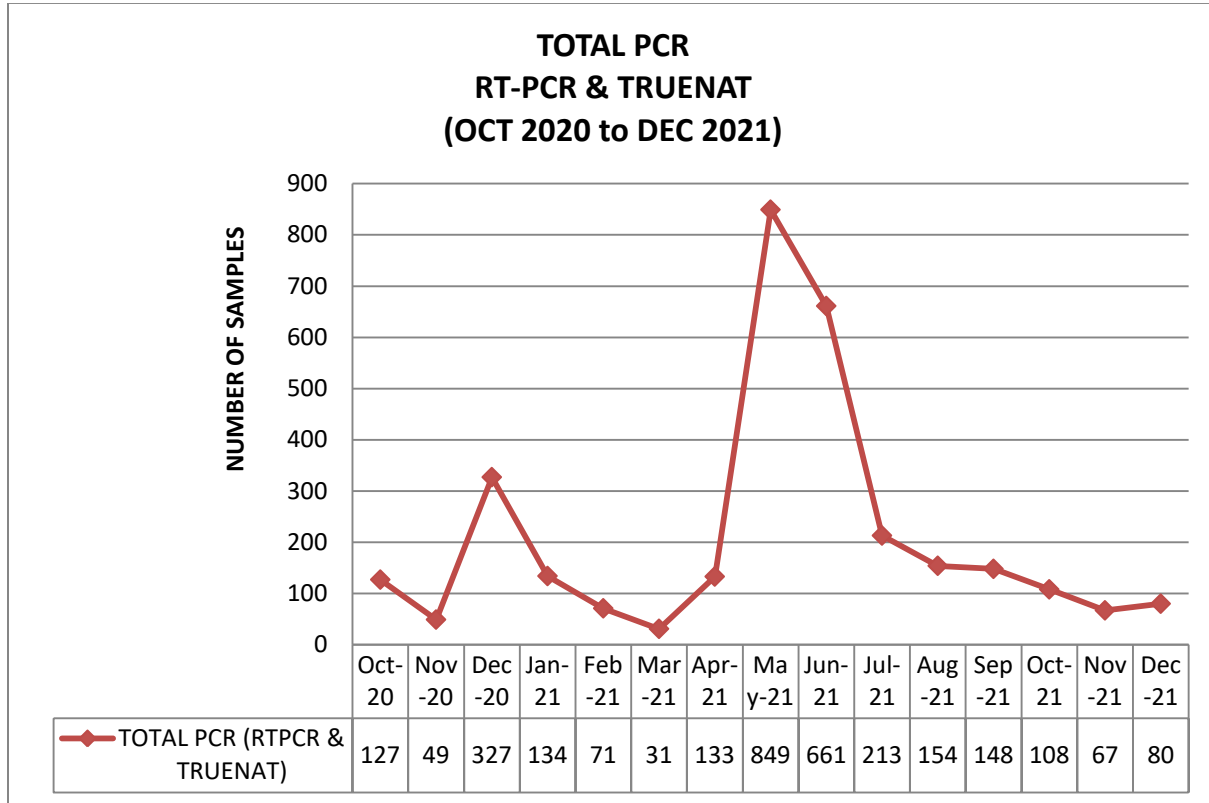
COVID 19 STATISTICS MONTHWISE - 2021



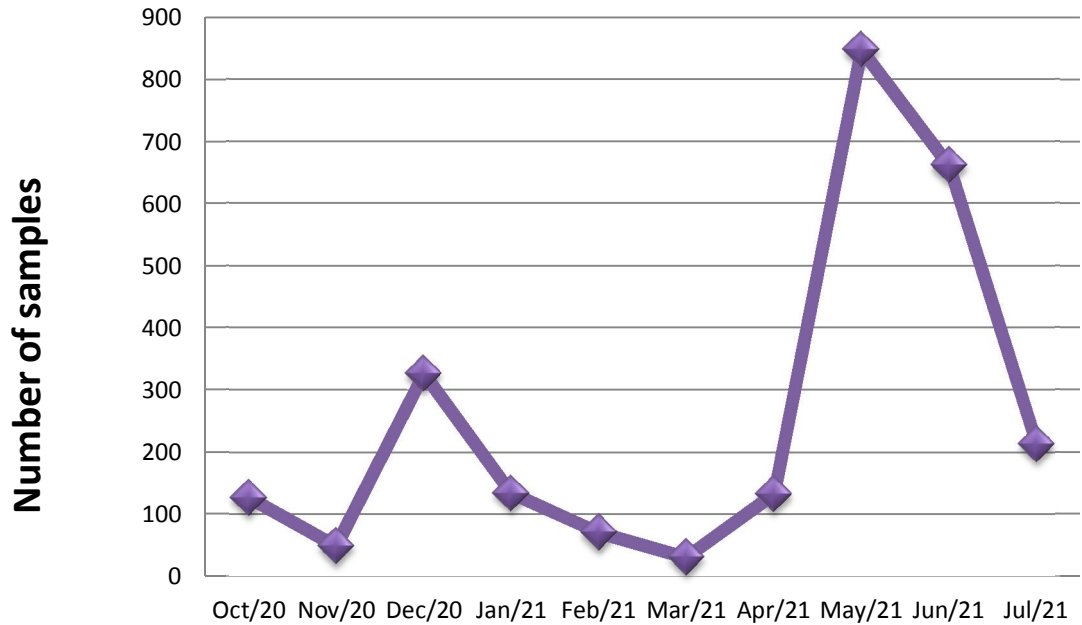



ANNAPOORNA MEDICAL COLLEGE MOLECULAR RESEARCH LABORATORY - BSL 2

COVID 19 STATISTICS MONTHWISE - 2021

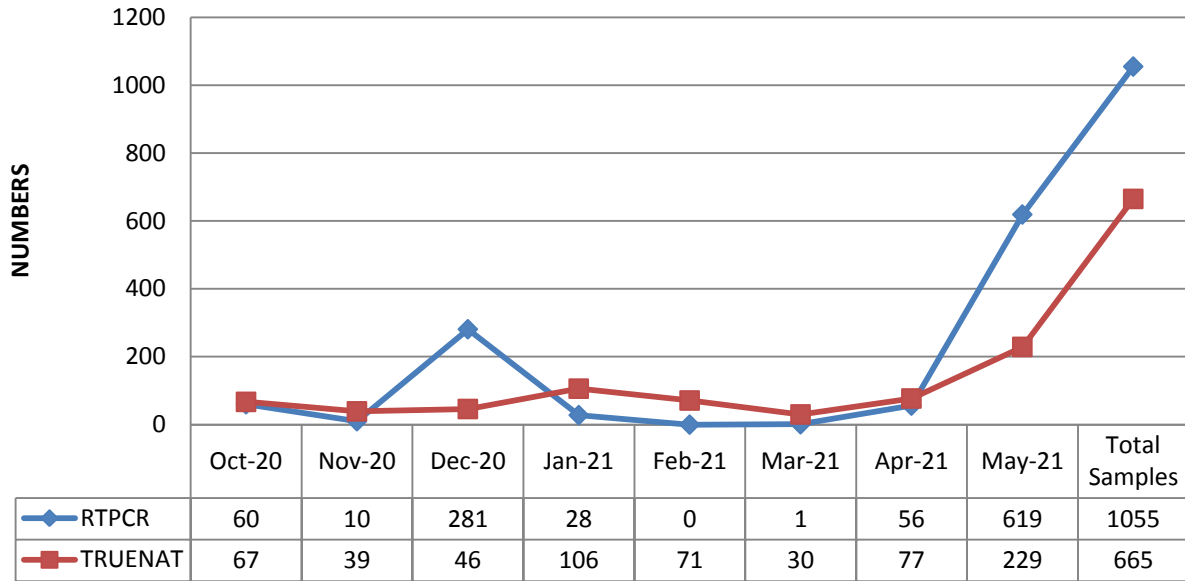


TOTAL PCR (RTPCR & TRUENAT)

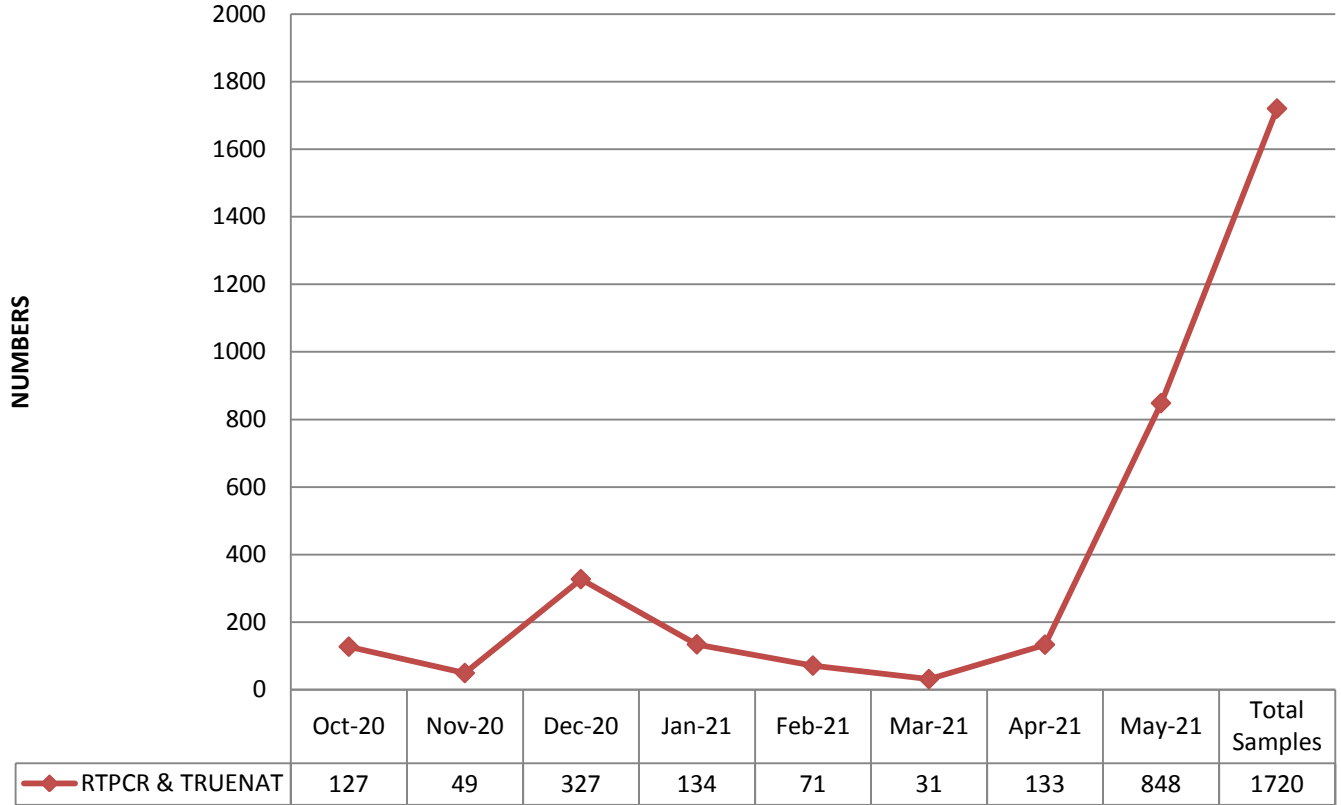


	Oct/20	Nov/20	Dec/20	Jan/21	Feb/21	Mar/21	Apr/21	May/21	Jun/21	Jul/21
 TOTAL PCR (RTPCR & TRUENAT)	127	49	327	134	71	31	133	848	662	213

**ANNAPOORANA MEDICAL COLLEGE AND HOSPITALS, SALEM
MOLECULAR RESEARCH LABORATORY BSL-2
COVID-19 TESTING**



COVID-19 TOTAL PCR (RTPCR & TRUENAT)



Clinical Biochemistry Laboratory

The biochemical tests during the concerning hours of pandemic done in our Biochemistry laboratory are **D-dimer test, Ferritin, LDH and Glucose**. These tests are beneficial for monitoring the patient's progression to Covid-19 and help in timely medical intervention to reduce morbidity & mortality.

Let us put a brief about these tests.

D-Dimer:

D-Dimer is one of the fibrin degradation products. The D Dimer shows the presence of clots in the body. A higher level of D-dimer in the body can be a dangerous sign when affected with COVID. The higher their D-dimer, higher is the number of clots in the lungs and the higher the chances that they will need oxygen. So we use D-Dimer to assess for severity of COVID disease.

Ferritin:

Ferritin is an intracellular iron storage protein. Higher value shows a serially rising trend which could even denote cytokine storm, as COVID virus and especially black fungus (mucormycosis), as they both survive on higher iron stores. The other complication of high iron stores is the possibility of prothrombotic event in view of blood stasis due to hyper-coagulable state. Especially in this Covid 19 pandemic, ferritin levels have a significant prognostic value. Higher the ferritin, the worse is the prognosis.

LDH:

The lactate dehydrogenase (LDH) test looks for signs of damage to the body's tissues. LDH has been shown to be a potential prognostic biomarker in patients with COVID-19. Elevated LDH signifies tissue hypo-perfusion indicates the extent of the disease, hence, may affect prognosis. In Covid -19 infected patients it helps in predicting acute respiratory distress syndrome.

Glucose:

Low grade, inflammatory nature of diabetes and hyperglycemia may promote the virus inflammatory surge. Older people and people with pre-existing medical conditions appear to be more vulnerable to becoming severely ill with the COVID-19 virus. Blood glucose may independently indicate poor prognosis in COVID-19 patients. Poor glycemic control predicts an increased need for medications and hospitalizations, and increased mortality.

Microbiology Laboratory

The Following are Covid-19 Diagnostics' performed by department of Microbiology

1. RTPCR & TRUENAT:

The above two tests are done to diagnose COVID 19 by detecting SARS COV2 viral nucleic acid in Nasopharyngeal & Oro-pharyngeal samples. These are Confirmatory tests for COVID 19.

These tests are done at our Molecular Lab which is NABL Accredited Bio-safety level-2 Infectious disease laboratory with infra structure, design& Equipments as per NABL. We have trained technicians and consultant as per the norms of NABL to perform & interpret the test.

a. RTPCR-(Open platform)

This is a Molecular test where the test kits and protocols are used on open PCR platform (Quant Studio-5) and performed as Batch test along with Quality controls. The viral RNA extraction is done on suspected Patient sample manually & Amplification of SARSCOV2 viral Nucleic acid if present is detected by PCR reaction. The approximate **Turnaround Time (TAT) for this test is 6-12 hours**. The reports of the test are uploaded in ICMR portal on the same day

b. TRUENAT (Closed Platform)

This is also molecular test where the test kits and protocols are used on Closed PCR platform (Molbio) which uses Automation. It is Chip based RTPCR test. The viral RNA extraction is done on suspected Patients sample by automation & Amplification of SARS COV2 viral Nucleic acid if present is detected by PCR reaction. The approximate **Turnaround Time (TAT) for this test is 2-3 hours**. The reports of the test are uploaded in ICMR portal on the same day

2. C Reactive Protein Test(CRP):

This test is a supportive test to guide clinician with regards to initiation of COVID 19 treatment. This test is performed on Serum Samples and it is an indicator of inflammation. The Principle of the test performed here is by Latex Agglutination. **Turnaround Time (TAT) for this test is 1-2 hours**.

Central Laboratory Services



Central Laboratory Services



Central Laboratory Services



Central Lab – Auto Analyzer



800MA X Ray Unit



Ultra Sound with Doppler



CT Scan



MRI Scan

