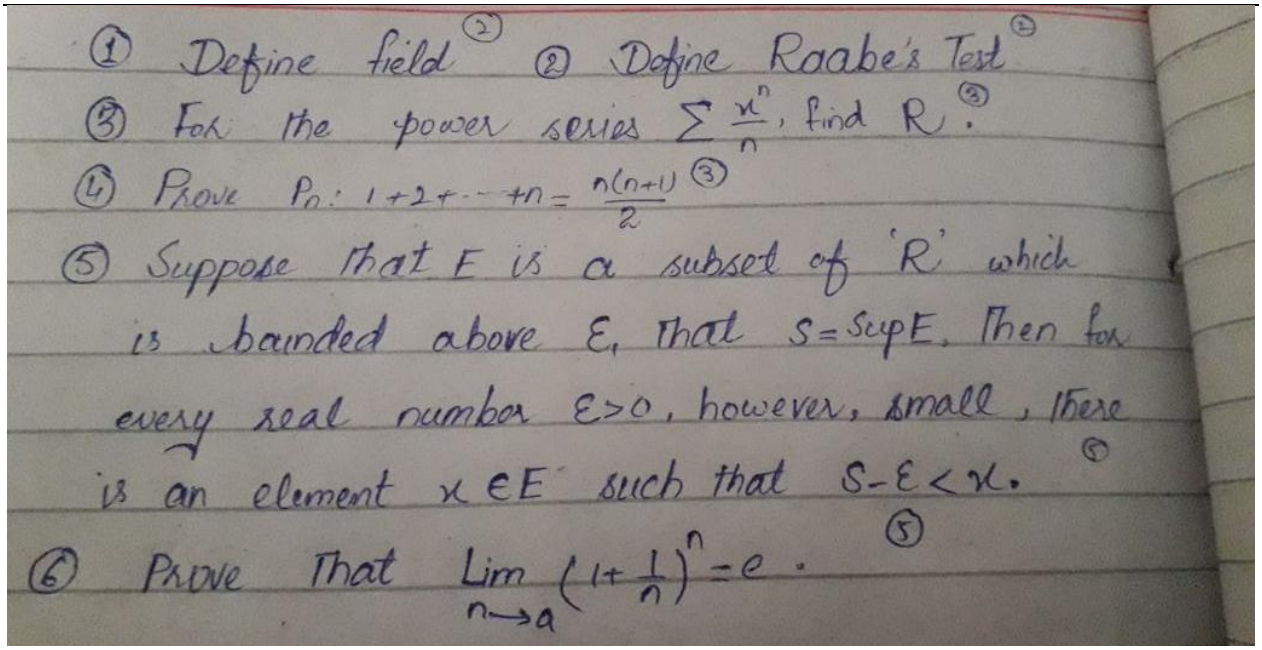
MTH621 Current papers 2018



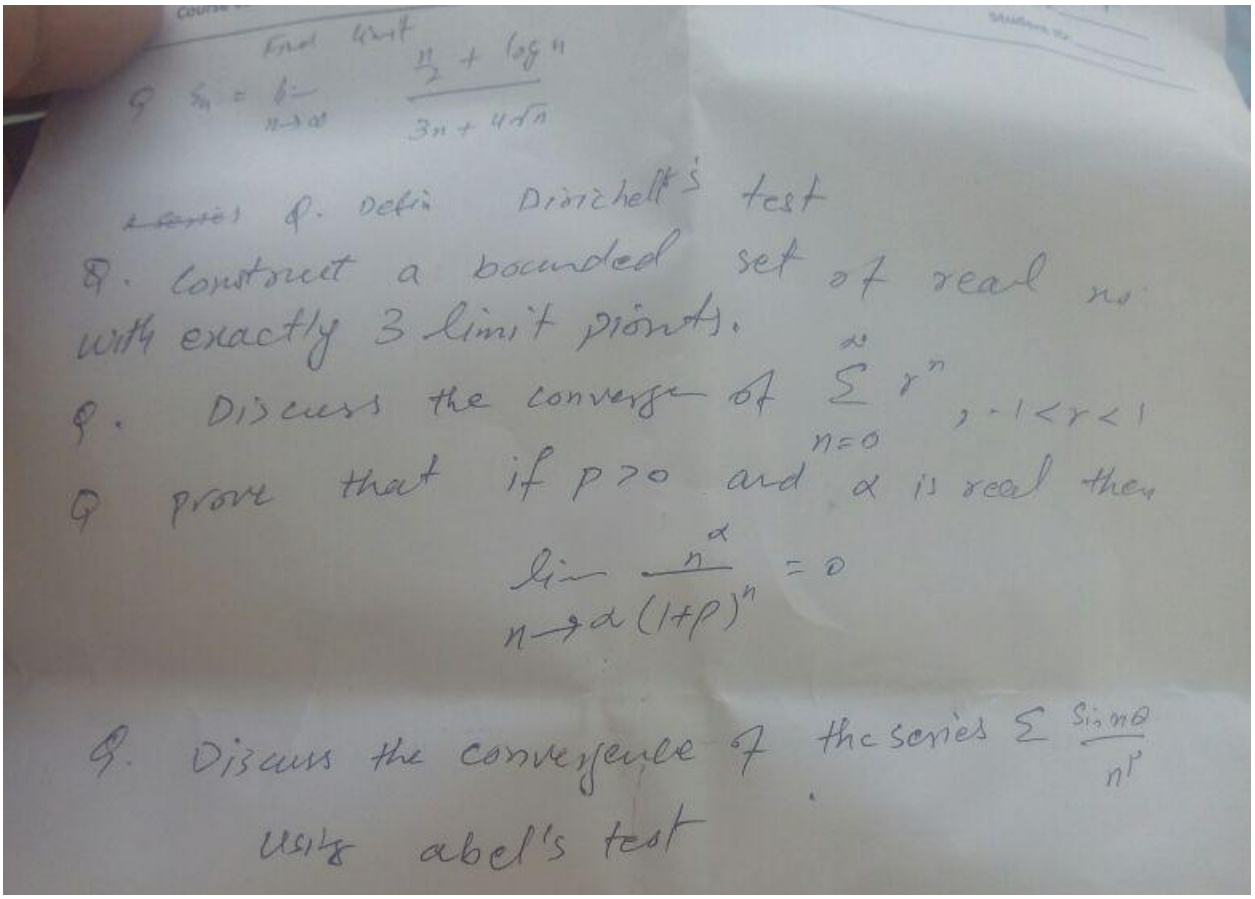
① Define field ② Define Raabe's Test

③ For the power series $\sum \frac{x^n}{n}$, find R.

④ Prove $P_n: 1+2+\cdots+n = \frac{n(n+1)}{2}$

⑤ Suppose that E is a subset of 'R' which is bounded above & that $s = \sup E$. Then for every real number $\varepsilon > 0$, however, small, there is an element $x \in E$ such that $s - \varepsilon < x$.

⑥ Prove That $\lim_{n \to \infty} \left(1 + \frac{1}{n}\right)^n = e$.



Find limit $\lim_{n \to \infty} \frac{n_2 + \log n}{3n + 4\sqrt{n}}$

Q. Defn Dirichelt's test

Q. Construct a bounded set of real no. with exactly 3 limit points.

Q. Discuss the converge of $\sum_{n=0}^{\infty} r^n$, $-1 < r < 1$

Q prove that if $p > 0$ and α is real then

$$\lim_{n \to \infty} \frac{n^\alpha}{(1+p)^n} = 0$$

Q. Discuss the convergence of the series $\sum \frac{\sin n\theta}{n^p}$ using abel's test

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Mth 621 ... define power series . Define sprenum ..r aik.limit wala question tha

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Today was my Mth 621 paper.....
Mcqs are based on concept....
1-define ratio test...(2)
2-define upper bound...(2)
3-chek whether the series is convergent or divergent (3)
4-prove tha 12 under root is a irrational num...(5)
5-prove that the given series is divergent.. (5)...

Mth 621 paper
Prove underroot8 is irrational number 5 marks
Tell the convergence of Summation r power n -1<r<1

Qno 1 . Test the convergence of sequence(simple by evaluation of limi)
Qno 2. Define upper boun
Q.no 3: define limitinfimum
Qno4 ; state ables test
Qno5: prove e = lim(1+1/n)^n
Qno 6: regarding upperbound
Mcqs
1. E =limit (n+1/n)^n
2.ables test
3.upper bound
4.power series
5.conerge when inf=supp=limit
6.completness
7.archamedian prperity
8.limit evaluation
9.irrational number
10. Supp of rational no

Mth621
Long q
Prove e=(1+1/n)^n
ArchiMedian properrty
Short q
Stat Bolzano theom
Find o

MTH621
Q 1- If S={x|x≥-2} then find SupS and Inf S
Q 2- State definition of Ratio Test
Q 3- Show that
Q 4-Prove that {sn} is non decreasing then sn=Sup{sn}

MTH621:

1) if A is a set , and A is finite ,
Is A a subset of N? (And other other options

2) the set of real numbers is :
Natural and complete
Irrational and complete
Natural and finite

3) which system is bounded :
Sn = [1 + (-1)^n]n
(-1)^n
{n}
{1/n + n}

4) R^n -1<r<1
Is divergent using which conditions of Comparison Test

5) Sup sn = - infinity
Is sn convergent or divergent

6) limit sn = s (- infinity to + infinity)
For sub sequence
Limit Sn < s (? There was multiple choice , I chose this)

7) when seq {sn} is convergent , what's relation between Sn, Inf Sn, Sum sn?
Are they all equal , not equal or mix ?

8) s = (-infinity, -1) U (1,2)U{3}

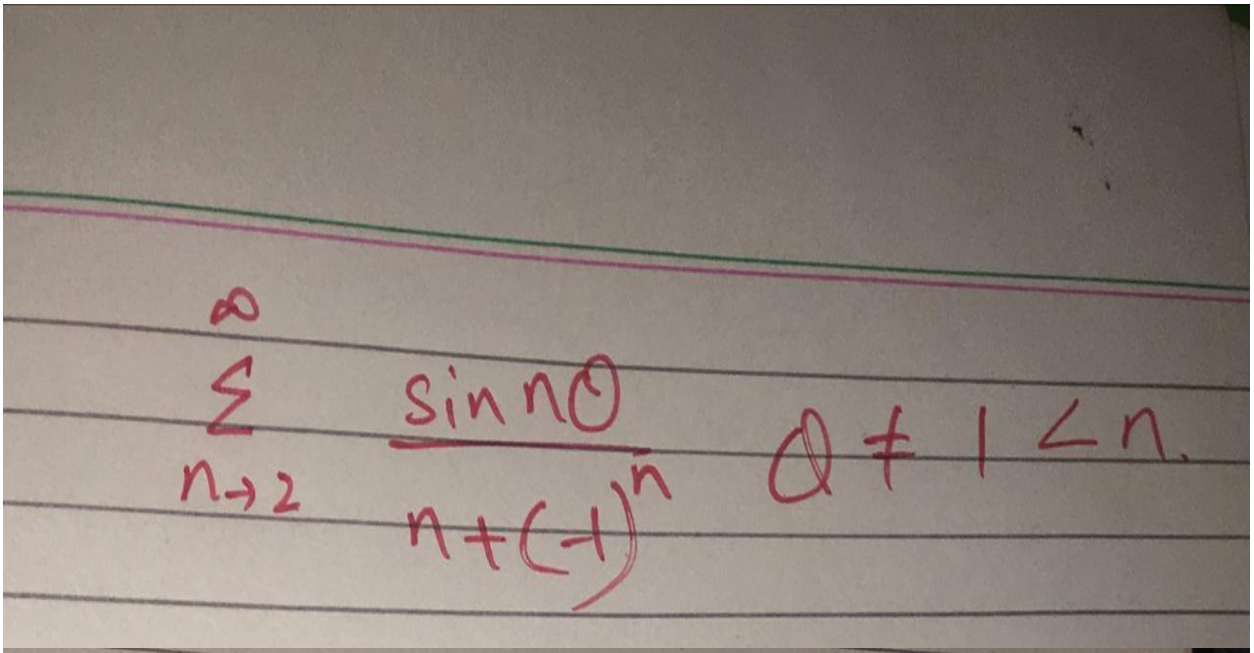
9) tell a sequence which doesn't converge but it's subsequence does

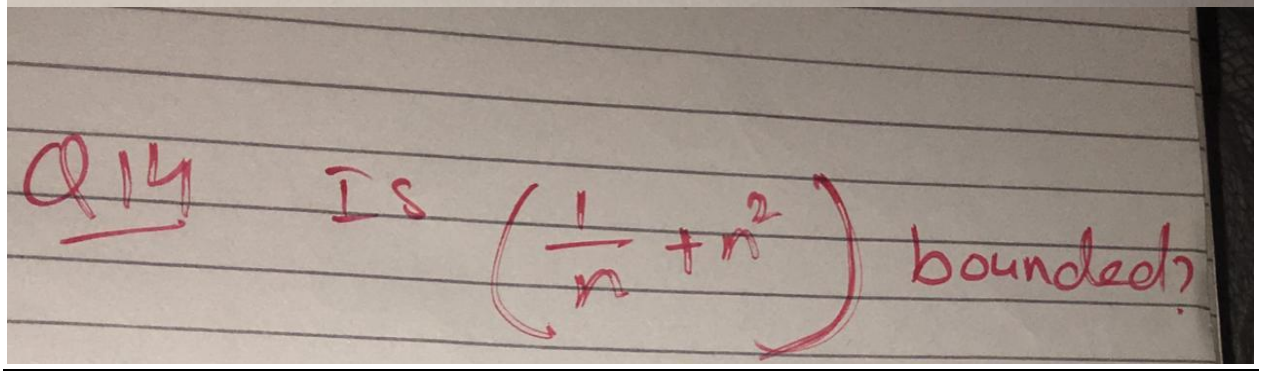
10) Find the open cover of S =[0,1]

11) Prove n< 3^n for n E N

12) State Dirichilet's Test

13) Apply Dirichilits Test of convergence for a series





2017

Mth621mid term paper 2017

Ratio test, completenes axiom, ek question ki divergnce discus krni 1 long question tha 17,18,5,15,7 K leay AVL tree ka programme likna tha

2*(9+6) is tra ka kuch relation tha jis ka postfix algorithm likhn Stak, infix etc mention krn

1, 5 marks ka question bohat easy tha table k columns match krny thyJis me definition likhi hui thi

Define theseReference variable

Constant keyword

1 dangling fn

*+ab-cd is ka b postfix ya infix likhna tha.

(VISIT VURANK FOR MORE)