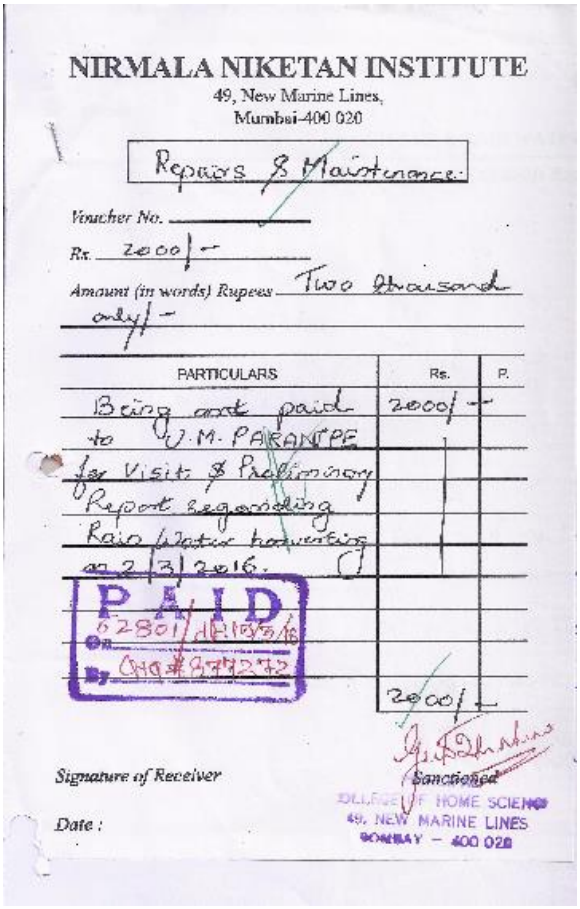
7.1.6



NIRMALA NIKETAN INSTITUTE
49, New Marine Lines,
Mumbai-400 020

Repairs & Maintenance

Voucher No. _____

Rs. 2000/-

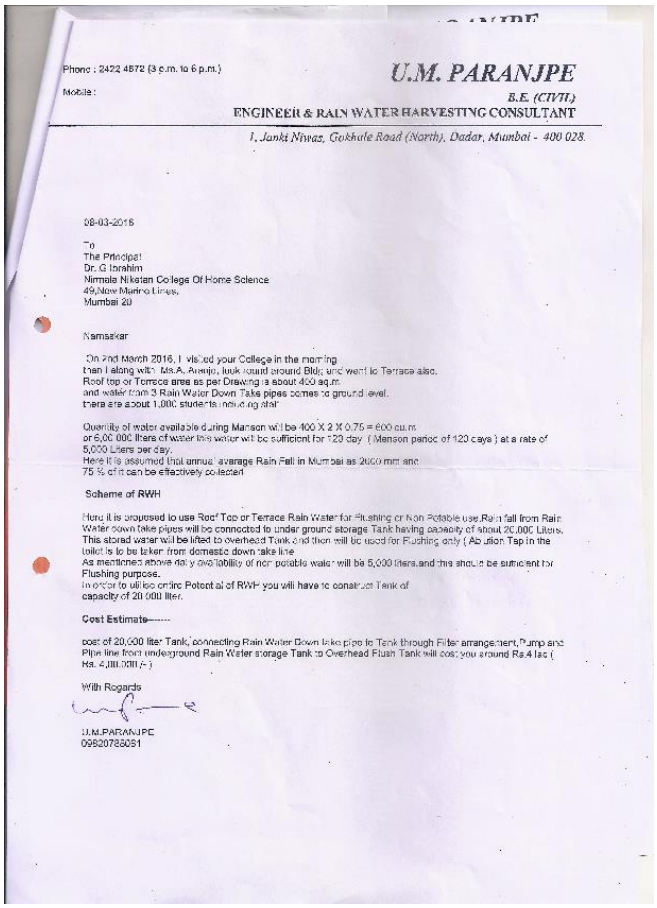
Amount (in words) Rupees Two thousand only/-

PARTICULARS	Rs.	P.
Being cost paid to U.M. PARANJPE for Visit & Preliminary Report regarding Rain Water harvesting on 2/3/2016.	2000/-	
PAID 02801 dt 10/3/16 On: By: CHQ # 977273		
	2000/-	

Signature of Receiver

Date :

Sanctioned
COLLEGE OF HOME SCIENCE
49, NEW MARINE LINES
BOMBAY - 400 020



Phone : 2422 4572 (9 a.m. to 6 p.m.)
Mobile :

U.M. PARANJPE
B.E. (CIVIL)
ENGINEER & RAIN WATER HARVESTING CONSULTANT
1, Janki Nivas, Gokhale Road (North), Dadar, Mumbai - 400 028.

08-03-2016

To
The Principal
Dr. G Ibrahim
Nirmala Niketan College Of Home Science
49,New Marine Lines,
Mumbai 20

Namaskar

On 2nd March 2016, I visited your College in the morning
than I along with Ms.A. Avenje, took round around Bldg and went to Terrace also.
Roof top or Terrace area as per Drawing is about 400 sq.m.
and water from 3 Rain Water Down Take pipes comes to ground level.
there are about 1,000 students including staf

Quantity of water available during Monson will be 400 X 2 X 0.75 = 600 cu.m
or 6,00,000 liters of water this water will be sufficient for 120 day (Monson period of 120 days) at a rate of
5,000 Liters per day.
Here it is assumed that annual average Rain Fall in Mumbai as 2000 mm and
75 % of it can be effectively collected

Scheme of RWH

Here it is proposed to use Roof Top or Terrace Rain Water for Flushing or Non Potable use.Rain fall from Rain Water down take pipes will be connected to under ground storage Tank having capacity of about 20,000 Liters.
This stored water will be lifted to overhead Tank and then will be used for Flushing only (Ablution Tap in the toilet is to be taken from domestic down take line
As mentioned above daily availability of non potable water will be 5,000 liters,and this should be sufficient for Flushing purpose.
In order to utilise entire Potential of RWH you will have to construct Tank of capacity of 20,000 liter.

Cost Estimate------

cost of 20,000 liter Tank, connecting Rain Water Down take pipe to Tank through Filter arrangement, Pump and Pipe line from underground Rain Water storage Tank to Overhead Flush Tank will cost you around Rs.4 lac (Rs. 4,00,000 /-)

With Regards

U.M.PARANJPE
09820758051

COLLEGE OF HOME SCIENCE
Dr. (Mrs.) Geeta Ibrahim
Principal
College of Home Science
Nirmala Niketan
49, New Marine Lines,
Mumbai - 400 020.