## Kanbay Sample Paper 3

1. Which is greater (1000) pow1001 and 1001 pow999
2. One container contains milk and water in the ratio $3: 7$ and the other contains $8: 11$, in what ratio these two containers is to be mixed so that the ratio of milk and water is 4:5.
3. There are two simple problems on time and work
4. Four points will be given and you have to frame two st. line eq.s in such a way that their point of interesection lies in one of the four options
5. There are two to three problems on profit and loss which are little bit time taking ,so i didn't attempt. a series of nos will be given where the ans can be found by observing the diff bet two consecutive nos

## Logical Reasoning

6. air is cloud cloud is rain rain is water wateris sand so what is cloud? ans :sand
7. one quesion on relations
8. trafic: signal ans : river :dam
9. dsoighkl now if lk-(?)-sd, find letter in 4th place
10.some mammals are donkeys allbuffalos will have horns based on this 3 quesions $r$ ther
11.cube is of size $5 * 5 * 5$.every side has been coloured. it is divided into 125 equal parts.

1 ) what is the no. of parts having only one side coloured - 54 .
2) no. of parts having two sided coloured 36 .
3) having no side coloured - 27
12.find the no. of occurrence of T which is immediately preceded y P and not immediately followed by S in some series for eg. (TPTSTRUST.......) ans - 3
13..Four persons are there wearing different coloured shirts eg. A,B,C,D wearing blue ,green, red, yellowNow,

1. A cannot wear yellow.
2. B can wear blue or green.
3. C/D is wearing yellow.

You have to find who is wearing which coloured shirt
14.Find the root of $4 a 2+b 2+c 2+4 a b-2 b c-4 a c$ Ans: $2 a+b-c$
15.Two pipes can fill a tank in 5 hrs and 8 hrs . while a hole can empty it in 40 hrs . What will be the time taken to fill if each operate at a time.Soln: $1 \backslash \mathrm{x}==1 \backslash 5+1 \backslash 8-1 \backslash 40$
16.A can beat B by 20 mts . While C can beat B by 40 mts . In a race of 100 mts . By how much can C beat A? Soln: 75 mts .
17.If u start your journey 30 minutes late, $u$ have to increase your speed by $250 \mathrm{kms} \backslash \mathrm{hr}$. to cover up 1500 kms . In same time. What is your usual speed? Ans: 750 kms hhr.
18.For a circle, radius is inc. by some $\%$, find net change in area?
19.How is impedance matching done and why do we need it (basically can talk about ideal power supply needing a low internal resistance and high load to function properly. so one stage of transistor amplifier has to have low o/p resistance and high $\mathrm{i} / \mathrm{p}$ resistance for next stage- do look up all basic electronics) ( also about sinking high currents without damage)
20.what is a smith chart used for
21.Name all flipflops u know and working esp. master slave.
22.progaming - program to find how many 1's are present in an integer variable using bitwise operators. something about dynamic allocation, static functions, macros
23.c++ virtual functions
24.what is an inode in unix?
25.small program in pascal to add a node to a linked list. (You have to tell what the program does)
26.C stremp program (You have to tell what the program does)
27.Set of dos commands testing basic familiarity with dir, ren *.t?t, cd etc.
28.What is the order of binary search?
29.what is the order of strassens matrix multiplication?
30.you have to maintain the sorted order of integers and insert ntegers . which data structure would you use? (tree, list, queue,array?)
31.There are two lists of integers to be merged. Which method would you not use?
32.n an online database system when is data written to disk? (onpressing enter, when commit or update is encountered, at end of data,all of the above)
33. Small prolog function which prints 2345 true. You need to tell output.
34.Lisp program given. what does it do? (GCD, LCM, Multiplies mxn?)
35.What is paging?
36.what is segmentation?

