NTPC Paper Bangalore

Pattern 120 question technical 50 Aptitude

Weightage of subjects as follows

Technical
Instrumentation----15-20 question
Communication ------ 15-20
Control systems -------15-20
Microprocessors8085 ---4-5
Digital electronics ------9-11
Signal systems ------- 3-4
Electronics -----------13-15

Aptitude
English ----20
Quant------20
Reasoning---10

Question which I remember as follows
Technical

1)Gain bandwidth product of 2 stage CE amplifier compared to single stage
a). greater   b). lesser   c). same etc

2)Early effect in transistor leads in
a). Fast switch   b). slow switch etc

3)MOSFET acts as a
a). Resistor   b). inductor   c). capcitor etc

4)Normal PH is
a)7   b)2   c)5 etc

5)Gave number of bits as 8 and max voltage as 100V asked to calculate resolution

6)strain guage working principle
a). resistor   c). capacitor etc

7)Class AB property
a). More efficiency   b). avoids crossoverdistrotion

8)3-4 problems related to oscilloscope

9)Gave a simple block diagram asked to find TF

10)Gave discrete sequence asked to calculate DFT

11)x(at)------Ztransform---
a)1/aX(z/a) etc

12)Peak overshoot 100% calculate damping factor
a)0.707   b)1.732   c)0.5 etc

13)gave transfer function asked to calculate phase crossover frequency

14)If modulating frequency doubles then BW of FM becomes
a). twice   b). half   c). same etc

15)Gave unmodulated carrier power and modulated carrier power asked calculate
modulation index

16)In TDM system no: of telephone channels give asked to calculate o/p freequecy

17)3 to 4 problems on bridges and instrumentation

18)If range is more it leads in
a). More precision   b). more accuracy   c). more error

19)2to3 problems on ADC and DAC to calculate the number or output bits reqd

20)Problem based on channel capacity theorm

21)Vectorred interrupt among the following
a). RST 6.5   b). RST 5.5   c). TRAP d)INTR

22)Memory of 64x1k available 4 such memory clubbed together with single address line give
a)16x16k   b)256x1k etc

23)For a stable system
a) h[n]!=0 n>0
b) h[n]!=0 n<0
c) h[n]=0 n<0
b) h[n]=0 n>0

24)Wn in DFT a shifting property was asked

25)Wheat stone bidge used for measuring
a) resistor   b) inducator etc

26)RLC ckt response
a) exponentially increasing   b) decreasing etc

27)FET is a
a) VCVS   b) CCCS   c) VCCS   d) CCVS

28)Gave a TF asked to identify the poles and zeroes

29)Gave a characteristic equation asked to find number poles in right side

30)Optical wavelength
range asked

31)LASER abbreviation---------

32)Schotky TTL diode
is used to reduce
a) delay   b) gates   c) power   d) none

Aptitude

English
1) Prepostions 3 to 4

2)Synonyms & antonyms

3)grammer

Quant
1)Ratios

2)Profit & loss

3)Bar graph given asked to find several things

4)Puzzles related persons going to different offices

5)Words coding etc

That's all I remember All the Best