GATE-2018

## ANALYSIS OF GATE 2018*

## Instrumentation Engineering



IN ANALYSIS-2018_4-Feb_Afternoon

| SUBJECT | No. of Ques. | Topics Asked in Paper(Memory Based) | Level of Ques. | Total <br> Marks |
| :---: | :---: | :---: | :---: | :---: |
| Engineering <br> Mathematics | $\begin{aligned} & 1 \text { Marks: } 5 \\ & 2 \text { Marks: } 5 \end{aligned}$ | Linear Algebra; Statistics and Probability; Calculus; | Easy | 15 |
| Network Theory | 1 Marks: 3 <br> 2 Marks: 3 | Basic Components and types of circuits; Basic Laws and Methods; Steady state analysis of AC Circuits | Tough | 9 |
| Signals and Systems | $\begin{aligned} & 1 \text { Marks: } 2 \\ & 2 \text { Marks: } 3 \end{aligned}$ | Fourier Representation of Signals; Frequency Response of LTI Systems and Diversified Topics | Tricky/Easy | 8 |
| Control Systems | $\begin{aligned} & 1 \text { Marks: } 2 \\ & 2 \text { Marks: } 3 \end{aligned}$ | Bode Plots; Phase Margin. | Tricky/Easy | 8 |
| Analog Circuits | 1 Marks: 4 <br> 2 Marks: 4 | Diode Circuits-Analysis and Application; Operational Amplifiers \& Its Applications | Tough | 12 |
| Digital Circuits | 1 Marks: 3 <br> 2 Marks: 3 | Combinational \& Sequential Digital Circuits; Introduction to Microprocessor | Tricky/Easy | 9 |
| Communications | 1 Marks:0 <br> 2 Marks:0 |  |  | 0 |
| Measurement | 1 Marks: 2 <br> 2 Marks: 4 | Basics of Measurements and Error Analysis; Measurements of Basic Electrical Quantities Electronic Measuring Instruments | Tough/Medium | 10 |
| Transducers | $\begin{aligned} & 1 \text { Marks: } 2 \\ & 2 \text { Marks: } 3 \end{aligned}$ | Strain Gauge; Ultrasonic Flow Meter | Medium | 8 |
| Process Control | 1 Marks: 0 <br> 2 Marks: 0 |  | - | 0 |
| Optical Instrumentation | 1 Marks: 2 2 Marks:2 | Optical Sources and Detectors; | Tough | 6 |
| General Aptitude | $\begin{aligned} & 1 \text { Marks: } 5 \\ & 2 \text { Marks: } 5 \end{aligned}$ | Algebra, Vocabulary, Data Interpretation, TSD | Easy | 15 |
| Total | 65 |  |  | 100 |
| Faculty Feedback | Majority of the question were concept based. General Aptitude And Mathematics is Very Easy. Core Subject Questions were 50\% easy, 30\% medium and $20 \%$ tough. |  |  |  |

## GATE 2018 Examination*

## Instrumentation Engineering

Test Date: 4/02/2018
Test Time: 2:00 PM 5:00 PM
Subject Name: Instrumentation Engineering

## General Aptitude

## Q.1-Q. 5 Carry One Mark each.

1. Inspite of multiple warning, he did not correct his $\qquad$ behaviour.
(A) Good
(B) Jovial
(C) Erratic
(D)
[Ans. C]
2. $(x-2)^{2}=2 x-1$, find the minimum value of $x$, satisfying the given condition.
(A) 1
(B) 2
(C) 3
(D) 0
[Ans. A]
3. Graph

(A) Birth of crow depends on sale of cracker.
(B) Sale of crackers depends on the birth of crow.
(C) There is strong correlation between birth of crow and sale of cracker.
(D) Birth of crow will influence the sale of cracker.
[Ans. C]
4. If $x^{2}+x-1=0$, find the value of $x^{4}+\frac{1}{x^{4}}$
[Ans. 7]
5. She fell down from $\qquad$ and she got more $\qquad$ than help.
(A) Stair, Stare
(B) Stare, Stair
(C) Stare, Stare
(D) Stair, Stair
[Ans. A]

## Q.6-Q. 10 Carry Two Mark each.

6. A person is travelling from city A to city B and return to city A in the same route. His speed was constant both onwards and return and the rate was $60 \mathrm{~km} / \mathrm{hrs}$ and $90 \mathrm{~km} / \mathrm{hrs}$ respectively. Find the average speed.
[Ans. 72]
7. Area of equilateral triangle is $\sqrt{3}$. Find Perimeter.
[Ans. 6]

> MORE QUESTIONS UPDATE SOON

