

1. Which one of the following definition correctly represents a Data Acquisition System (DAS)?
 - (a) DAS is a group of electronic devices that are connected to perform the measurement and quantization of electrical signals for digital processing
 - (b) DAS is a group of devices that are connected to store different signals
 - (c) DAS is a system to control a process
 - (d) DAS is a signal conditioner

[ESE-2004]
2. Digital data acquisition systems are used
 1. Only when the output of the transducers is in digital form
 2. When physical process being monitored is slowly varying (narrow bandwidth)
 3. When low accuracy can be tolerated
 4. When high accuracy and low per channel cost is required

Which of these statements are correct?

 - (a) 1, 2 and 3 (b) 1, 3 and 4
 - (b) 1 and 3 (d) 2 and 4

[ESE-2001]
3. In an analog Data Acquisition System (DAS), what is the correct sequence of the blocks (therein) starting from the input?
 - (a) Transducer – recorder – filter – signal conditioner
 - (b) Transducer – signal conditioner – recorder
 - (c) Signal conditioner – transducer – recorder
 - (d) Signal conditioner – filter – transducer – recorder.

[ESE-2007]
4. A voltage of $\{200\sqrt{2} \sin 314 t + 6\sqrt{2} \sin (942 t + 30^\circ) + 8\sqrt{2} \cos (1570 t + 30^\circ)\}$ V is given to a harmonic distortion meter. The meter will indicate a total harmonic distortion of approximately
 - (a) 5% (b) 6.5%
 - (c) 7.5% (d) 8.5%

[ESE-2000]
5. In microwave telemetry, repeater stations are required at every
 - (a) 2 km (b) 5 km
 - (c) 40 km (d) 100 km

[ESE-2006]
6. Match List-I with List-II and select the correct answer using the code given below the lists:

List-I

 - A. Digital Counter
 - B. Schering Bridge
 - C. Megger
 - D. Spectrum Analyzer

List-II

 1. Measurement of harmonics
 2. Measurement of frequency
 3. Measurement of dielectric loss
 4. Measurement of insulation resistance

Codes:

	A	B	C	D
(a)	1	3	4	2
(b)	2	4	3	1
(c)	1	4	3	2
(d)	2	3	4	1

[ESE-2006]
7. Spectrum analyser is a combination of
 - (a) narrow band superheterodyne receiver and CRO
 - (b) signal generator and CRO
 - (c) oscillator and wave analyser
 - (d) VTVM and CRO

[ESE-2001]