

# ABV-Indian Institute of Information Technology & Management, Gwalior

## EE201: Signals and Systems

Minor Examination – Session 2024–25

Maximum Time: 1.5 Hours

Max Marks: 25

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**Note: Attempt all questions. Clear steps carry credit.**

1. Define deterministic and random signals. Give two examples of each. (5 Marks)
2. For  $x(t) = e^{-2t}u(t)$ , test if it is an energy or a power signal. (5 Marks)
3. Check the periodicity of  $x[n] = \cos\left(\frac{3\pi n}{4}\right)$ . (5 Marks)
4. Compute  $(u(t) * \delta(t - 1))$ , where  $*$  denotes convolution. (5 Marks)
5. Write a short note on even and odd decomposition of signals. (5 Marks)