

Youtube link and contents for lectures on Digital control

Lecture No.	Youtube link	Contents
1	https://youtu.be/Ruxce-EdXzo	Introduction to digital control, block diagram of digital control system, advantages and limitations of digital control systems,
2	https://youtu.be/UhJ6aiP_DI	Analytical block diagram of digital control system, equivalent of ADC, DAC
3	https://youtu.be/IqdMTQtMWzA	Data conversion and quantization
4	https://youtu.be/rSvlk9Hg9qs	Sampling and reconstruction
5	https://youtu.be/NDeBFMMB1II	Sampling theorem and aliasing, factors deciding selection of sampling rate
6	https://youtu.be/cdjZycfFI-0	Zero order hold, its operation and its transfer function
7	https://youtu.be/x0RIZ4GY-5w	First order hold, its operation and its transfer function
8	https://youtu.be/SHiBb-OnE0Q	Review of Z transform, z transform pairs of standard signals, Laplace transform and z transform pairs
9	https://youtu.be/UYSV8ISjDic	Properties of z transform
10	https://youtu.be/dV6QxKS3LE8	Properties of z transform
11	https://youtu.be/udSepRI77zE	Numerical examples on z transform
12	https://youtu.be/4OejQ2FngKE	Inverse z transform by partial fraction method
13	https://youtu.be/QPDWrGXjeQo	Inverse z transform by residue method and power series method
14	https://youtu.be/k3xNSbxKFbc	Solution of difference equation by z transform approach
15	https://youtu.be/biwT9WyOgFI	Solution of difference equation by z transform approach
16	https://youtu.be/F7AEJE354j8	Concept of pulse transfer function and general procedure to determine pulse transfer function
17	https://youtu.be/OwloYqRCPW4	Numerical examples on pulse transfer function
18	https://youtu.be/xkokV0iZ7tY	Pulse transfer function of system with zero order hold, numerical examples
19	https://youtu.be/gpTDt010nLY	Numerical examples on pulse transfer function of system with zero order hold
20	https://youtu.be/ZojG2_2jpbE	Direct realization of pulse transfer function
21	https://youtu.be/Zuup6kAaTBo	Cascade realization of pulse transfer function
22	https://youtu.be/3jsCOpakE4g	Parallel realization of pulse transfer function
23	https://youtu.be/liU576Vz3kY	Mapping between s and z plane, Stability in z-plane
24	https://youtu.be/Y3NgGC4VSmg	Jury stability test, numerical example
25	https://youtu.be/MiBM3TryVr0	Numerical examples on Jury stability test
26	https://youtu.be/t7ZTZkXf-xc	Bilinear transformation and Routh stability test for stability analysis, numerical example
27	https://youtu.be/ytKp20hn6AA	Numerical examples