1	If f(k)=1 then Z transform of $\{f(k)\}$ is given by a)$\frac{z}{z-1}, \|z\| < 1$ b)$\frac{1}{z-1}, \|z\| > 1$ c)$\frac{z}{z-1}, \|z\| > 1$ d)$\frac{z}{1-z}, \|z\| > 1$	C
2	If f(k)=$2^k, k \geq 0$, then Z transform of $\{2^k\}$ is given by a)$\frac{z}{z-2}, \|z\| < \|2\|$ b)$\frac{1}{z-2}, \|z\| > \|2\|$ c)$\frac{z}{z-2}, \|z\| > \|2\|$ d)$-\frac{z}{z-2}, \|z\| > \|2\|$	C
3	If f(k)=$5^k, k \geq 0$, then Z transform of $\{5^k\}$ is given by a)$\frac{z}{z-5}, \|z\| < \|5\|$ b)$\frac{1}{z-5}, \|z\| > \|5\|$ c)$\frac{z}{z-5}, \|z\| > \|5\|$ d)$-\frac{z}{z-5}, \|z\| > \|5\|$	C
4	If f(k)=$\left(\frac{1}{4}\right)^k, k \geq 0$, then Z transform of $\left(\frac{1}{4}\right)^k, k \geq 0$,is given by a)$\frac{4z}{4z-1}, \|z\| < \left\|\frac{1}{4}\right\|$ b)$\frac{4z}{4z-1}, \|z\| > \left\|\frac{1}{4}\right\|$ c)$\frac{z}{z-4}, \|z\| > \left\|\frac{1}{4}\right\|$ d)$\frac{z}{z-4}, \|z\| < \left\|\frac{1}{4}\right\|$	B
5	If f(k)=$\frac{1}{3^k}, k \geq 0$, then Z transform of $\frac{1}{3^k}, k \geq 0$,is given by a)$\frac{3z}{3z-1}, \|z\| < \left\|\frac{1}{3}\right\|$ b)$\frac{3z}{3z-1}, \|z\| > \left\|\frac{1}{3}\right\|$ c)$\frac{z}{z-3}, \|z\| > \left\|\frac{1}{3}\right\|$ d)$\frac{z}{z-3}, \|z\| < \left\|\frac{1}{3}\right\|$	B
6	If f (k)=$3^k, k < 0$, then Z transform of $\{3^k\}$ is given by a)$\frac{z}{3-z}, \|z\| < \|3\|$ b)$\frac{z}{z-3}, \|z\| < \|3\|$ c)$\frac{1}{3-z}, \|z\| > \|3\|$ d)$\frac{z}{3-z}, \|z\| > \|3\|$	A
7	If f(k)=$2^k, k < 0$, then Z transform of $\{2^k\}$ is given by a)$\frac{z}{z-2}, \|z\| < \|2\|$ b)$\frac{1}{z-2}, \|z\| > \|2\|$ c)$\frac{z}{z-2}, \|z\| > \|2\|$ d)$-\frac{z}{z-2}, \|z\| < \|2\|$	D

8	If f(k)=$\left(\frac{1}{4}\right)^k$, $k<0$, then Z transform of $\left(\frac{1}{4}\right)^k$, $k<0$,is given by a)$-\frac{4z}{4z-1}$, $\|z\|<\left\|\frac{1}{4}\right\|$ b) $\frac{4z}{4z-1}$, $\|z\|>\left\|\frac{1}{4}\right\|$ c)$\frac{z}{z-4}$, $\|z\|>\left\|\frac{1}{4}\right\|$ d) $\frac{z}{z-4}$, $\|z\|<\left\|\frac{1}{4}\right\|$	**A**
9	If $\{X(k)\}=\left\{\frac{1}{1^k}\right\}*\left\{\frac{1}{2^k}\right\}$ then Z$\{X(k)\}$ is given by a)$\left(\frac{z}{z-1}\right)\left(\frac{2z}{2z-1}\right)$, $\|z\|>1$ b)$\left(\frac{z}{z-1}\right)+\left(\frac{2z}{2z-1}\right)$, $\|z\|>1$ c)$\left(\frac{z}{z-1}\right)-\left(\frac{2z}{2z-1}\right)$, $\|z\|>1$ d)$\left(\frac{z}{z-1}\right)\div\left(\frac{2z}{2z-1}\right)$, $\|z\|>1$	**A**
10	If $\{X(k)\}=\{2^k\}*\{3^k\}$ $k\geq0$ then Z$\{X(k)\}$ is given by a)$\left(\frac{z}{z-2}\right)\left(\frac{z}{z-3}\right)$, $\|z\|>3$ b)$\left(\frac{z}{z-2}\right)\left(\frac{z}{z-3}\right)$, $\|z\|<3$ c)$\left(\frac{z}{z-2}\right)\left(\frac{z}{z-3}\right)$, $\|z\|<2$ d)$\left(\frac{z}{z-2}\right)\left(\frac{z}{z-3}\right)$, $\|z\|>2$	**A**
11	If f(k)=$\cos 2\,k$, $k\geq0$, then Z transform of $\{\cos2k\}$ is given by a)$\frac{z(z+\cos 2)}{z^2-2z\cos 2+1}$, $\|z\|>1$ b)$\frac{z(z-\cos 2)}{z^2+2z\cos 2+1}$, $\|z\|>1$ c)$\frac{z(z-\cos 2)}{z^2-2z\cos 2+1}$, $\|z\|<1$ d)$\frac{z(z-\cos 2)}{z^2-2z\cos 2+1}$, $\|z\|>1$	**D**
12	If f(k)=$\sin 2\,k$, $k\geq0$, then Z transform of $\{\sin2k\}$ is given by a)$\frac{z\sin 2}{z^2-2z\cos 2+1}$, $\|z\|>1$ b)$\frac{z\sin 2}{z^2+2z\cos 2+1}$, $\|z\|>1$ c)$\frac{z(z-\sin 2)}{z^2-2z\cos 2+1}$, $\|z\|>1$ d)$\frac{z\sin 2}{z^2+2z\cos 2+1}$, $\|z\|<1$	**A**

13	If f(k)=$\cos 3\,k, k \geq 0$, then Z transform of $\{cos3k\}$ is given by	D
	a)$\frac{z(z+\cos 3)}{z^2-2z\cos 3+1}, |z| > 1$ b)$\frac{z(z-\cos 3)}{z^2+2z\cos 3+1}, |z| > 1$	
	c)$\frac{z(z-\cos 3)}{z^2-2z\cos 3+1}, |z| < 1$ d)$\frac{z(z-\cos 3)}{z^2-2z\cos 3+1}, |z| > 1$	
14	If f(k)=$\sin 4\,k, k \geq 0$, then Z transform of $\{sin4k\}$ is given by	A
	a)$\frac{z\sin 4}{z^2-2z\cos 4+1}, |z| > 1$ b)$\frac{z\sin 4}{z^2+2z\cos 4+1}, |z| > 1$	
	c)$\frac{z(z-\sin 4)}{z^2-2z\cos 4+1}, |z| > 1$ d)$\frac{z\sin 4}{z^2+2z\cos 4+1}, |z| < 1$	
15	If f(k)=$\cos \pi\,k, k \geq 0$, then Z transform of $\{cos\pi k\}$ is given by	D
	a)$\frac{z(z-1)}{(z+1)^2}, |z| > 1$ b)$\frac{(z-1)}{z+1}, |z| > 1$	
	c)$\frac{z(z+1)}{(z-1)^2}, |z| > 1$ d)$\frac{z}{z+1}, |z| > 1$	
16	If f(k)=$\cos \frac{\pi}{2}k, k \geq 0$, then Z transform of $\{cos\frac{\pi}{2}k\}$ is given by	A
	a)$\frac{z^2}{z^2+1}, |z| > 1$ b)$\frac{z^2}{z^2-1}, |z| > 1$	
	c)$\frac{z}{z+1}, |z| > 1$ d)$\frac{z}{z-1}, |z| < 1$	

17	If f(k)=$\sin\frac{\pi}{2}K, k \geq 0$, then Z transform of $\{sin\frac{\pi}{2}k\}$ is given by a)$\frac{z}{Z^2-1}, |z| < 1$ b)$\frac{z^2}{Z^2+1}, |z| > 1$ c)$\frac{z}{Z^2+1}, |z| > 1$ d)$\frac{z}{Z^2-1}, |z| > 1$	C
18	If f(k)=$\sinh 2k, k \geq 0$, then Z transform of $\{sinh2k\}$ is given by a)$\frac{z \sinh 2}{z^2+2z \cosh 2-1}, |z| > max(|e^2|or|e^{-2}|)$ b)$\frac{z(z-\cosh 2)}{z^2-2z \cosh \alpha+1}, |z| > max(|e^2|or|e^{-2}|)$ c)$\frac{z \sinh 2}{z^2-2z \cosh 2+1}, |z| > max(|e^2|or|e^{-2}|)$ d)$\frac{z(z-\cosh 2)}{z^2-2z \cosh 2+1}, |z| < max(|e^2|or|e^{-2}|)$	C
19	If f(k)=$\cosh 2k, k \geq 0$, then Z transform of $\{cosh2k\}$ is given by a)$\frac{z \sinh 2}{z^2-2z \cosh \alpha+1}, |z| > max(|e^2|or|e^{-2}|)$ b)$\frac{z(z-\cosh 2)}{z^2-2z \cosh 2+1}, |z| > max(|e^2|or|e^{-2}|)$ c)$\frac{z(z+\cosh 2)}{z^2+2z \cosh 2+1}, |z| > max(|e^2|or|e^{-2}|)$ d)$\frac{z(z-\cosh 2)}{z^2-2z \cosh 2+1}, |z| < max(|e^2|or|e^{-2}|)$	B
20	If f(k)=$\sinh k, k \geq 0$, then Z transform of $\{sinhk\}$ is given by a)$\frac{z \sinh 1}{z^2+2z \cosh 1-1}, |z| > max(|e^1|or|e^{-1}|)$	C

b)$\dfrac{z(z-\cosh 1)}{z^2-2z\cosh 1+1}, |z| > max(|e|\,or\,|e^{-1}|)$

c)$\dfrac{z\sinh 1}{z^2-2z\cosh 1+1}, |z| > max(|e^1|\,or\,|e^{-1}|)$

d)$\dfrac{z(z-\cosh 1)}{z^2-2z\cosh 1+1}, |z| < max(|e^1|\,or\,|e^{-1}|)$