

Probabilità e Statistica - 10 Dicembre 2008

	C1	C2	C3	C4	E1	E2
F1	1.60231	Poisson 0.08030 Binomiale 0.07937	25	5	(a) $k = \frac{3}{8}\theta^3$ (b) $T = \frac{4}{3}\bar{X}_n$ (c) T corretto (d) $MSE[T] = \frac{\theta^2}{3n}$	$p = \frac{1}{2}, q = \frac{1}{3}, r = \frac{1}{6}$ X, Y dipendenti $\rho_{X,Y} = -\sqrt{\frac{1}{10}}$
F2	0.81652	Poisson 0.32332 Binomiale 0.32332	70	10	(a) $k = 81\theta^3$ (b) $T = \frac{2}{9}\bar{X}_n$ (c) T corretto (d) $MSE[T] = \frac{\theta^2}{3n}$	$p = \frac{2}{3}, q = \frac{1}{6}, r = \frac{1}{6}$ X, Y dipendenti $\rho_{X,Y} = -\sqrt{\frac{3}{35}}$
F3	1.22096	Poisson 0.57681 Binomiale 0.58022	34	10	(a) $k = \frac{1}{9}\theta^3$ (b) $T = 2\bar{X}_n$ (c) T corretto (d) $MSE[T] = \frac{\theta^2}{3n}$	$p = \frac{1}{4}, q = \frac{1}{4}, r = \frac{1}{2}$ X, Y dipendenti $\rho_{X,Y} = \sqrt{\frac{1}{33}}$
F4	1.52416	Poisson 0.93803 Binomiale 0.94071	78	5	(a) $k = 24\theta^3$ (b) $T = \frac{1}{3}\bar{X}_n$ (c) T corretto (d) $MSE[T] = \frac{\theta^2}{3n}$	$p = \frac{1}{6}, q = \frac{1}{2}, r = \frac{1}{3}$ X, Y dipendenti $\rho_{X,Y} = \sqrt{\frac{1}{17}}$

	X			
Y	-1	0	1	
1	0	q	0	q
2	p	0	r	$p+r$
	p	q	r	1