

Table 5: Critical Values of the Chi-Square distribution

| D.F | Level of Significance | | | | | | | | | | | |
|-----|-----------------------|----------|----------|--------|-------|-------|-------|-------|-------|-------|-------|-------|
| | 0.995 | 0.99 | 0.975 | 0.95 | 0.9 | 0.75 | 0.5 | 0.25 | 0.1 | 0.05 | 0.025 | 0.01 |
| 1 | 0.000039 | 0.000157 | 0.000982 | 0.0039 | 0.016 | 0.102 | 0.455 | 1.323 | 2.706 | 3.841 | 5.024 | 6.635 |
| 2 | 0.01 | 0.0201 | 0.0506 | 0.103 | 0.211 | 0.575 | 1.386 | 2.773 | 4.605 | 5.991 | 7.378 | 9.21 |
| 3 | 0.0717 | 0.115 | 0.216 | 0.352 | 0.584 | 1.213 | 2.366 | 4.108 | 6.251 | 7.815 | 9.348 | 11.35 |
| 4 | 0.207 | 0.297 | 0.484 | 0.711 | 1.064 | 1.923 | 3.357 | 5.385 | 7.779 | 9.488 | 11.14 | 13.28 |
| 5 | 0.412 | 0.554 | 0.831 | 1.145 | 1.61 | 2.675 | 4.351 | 6.626 | 9.236 | 11.07 | 12.83 | 15.09 |
| 6 | 0.676 | 0.872 | 1.237 | 1.635 | 2.204 | 3.455 | 5.348 | 7.841 | 10.65 | 12.59 | 14.45 | 16.81 |
| 7 | 0.989 | 1.239 | 1.69 | 2.167 | 2.833 | 4.255 | 6.346 | 9.037 | 12.02 | 14.07 | 16.01 | 18.48 |
| 8 | 1.344 | 1.646 | 2.18 | 2.733 | 3.49 | 5.071 | 7.344 | 10.22 | 13.36 | 15.51 | 17.54 | 20.09 |
| 9 | 1.735 | 2.088 | 2.7 | 3.325 | 4.168 | 5.899 | 8.343 | 11.39 | 14.68 | 16.92 | 19.02 | 21.67 |
| 10 | 2.156 | 2.558 | 3.247 | 3.94 | 4.865 | 6.737 | 9.342 | 12.55 | 15.99 | 18.31 | 20.48 | 23.21 |
| 11 | 2.603 | 3.053 | 3.816 | 4.575 | 5.578 | 7.584 | 10.34 | 13.7 | 17.28 | 19.68 | 21.92 | 24.73 |
| 12 | 3.074 | 3.571 | 4.404 | 5.226 | 6.304 | 8.438 | 11.34 | 14.85 | 18.55 | 21.03 | 23.34 | 26.22 |
| 13 | 3.565 | 4.107 | 5.009 | 5.892 | 7.042 | 9.299 | 12.34 | 15.98 | 19.81 | 22.36 | 24.74 | 27.69 |
| 14 | 4.075 | 4.66 | 5.629 | 6.571 | 7.79 | 10.17 | 13.34 | 17.12 | 21.06 | 23.69 | 26.12 | 29.14 |
| 15 | 4.601 | 5.229 | 6.262 | 7.261 | 8.547 | 11.04 | 14.34 | 18.25 | 22.31 | 25 | 27.49 | 30.58 |
| 16 | 5.142 | 5.812 | 6.908 | 7.962 | 9.312 | 11.91 | 15.34 | 19.37 | 23.54 | 26.3 | 28.85 | 32 |
| 17 | 5.697 | 6.408 | 7.564 | 8.672 | 10.09 | 12.79 | 16.34 | 20.49 | 24.77 | 27.59 | 30.19 | 33.41 |
| 18 | 6.265 | 7.015 | 8.231 | 9.39 | 10.87 | 13.68 | 17.34 | 21.61 | 25.99 | 28.87 | 31.53 | 34.81 |
| 19 | 6.844 | 7.633 | 8.907 | 10.117 | 11.65 | 14.56 | 18.34 | 22.72 | 27.2 | 30.14 | 32.85 | 36.19 |
| 20 | 7.434 | 8.26 | 9.591 | 10.851 | 12.44 | 15.45 | 19.34 | 23.83 | 28.41 | 31.41 | 34.17 | 37.57 |
| 21 | 8.034 | 8.897 | 10.283 | 11.591 | 13.24 | 16.34 | 20.34 | 24.94 | 29.62 | 32.67 | 35.48 | 38.93 |
| 22 | 8.643 | 9.542 | 10.982 | 12.338 | 14.04 | 17.24 | 21.34 | 26.04 | 30.81 | 33.92 | 36.78 | 40.29 |
| 23 | 9.26 | 10.196 | 11.689 | 13.091 | 14.85 | 18.14 | 22.34 | 27.14 | 32.01 | 35.17 | 38.08 | 41.64 |
| 24 | 9.886 | 10.856 | 12.401 | 13.848 | 15.66 | 19.04 | 23.34 | 28.24 | 33.2 | 36.42 | 39.36 | 42.98 |
| 25 | 10.52 | 11.524 | 13.12 | 14.611 | 16.47 | 19.94 | 24.34 | 29.34 | 34.38 | 37.65 | 40.65 | 44.31 |
| 26 | 11.16 | 12.198 | 13.844 | 15.379 | 17.29 | 20.84 | 25.34 | 30.44 | 35.56 | 38.89 | 41.92 | 45.64 |
| 27 | 11.808 | 12.879 | 14.573 | 16.151 | 18.11 | 21.75 | 26.34 | 31.53 | 36.74 | 40.11 | 43.2 | 46.96 |
| 28 | 12.461 | 13.565 | 15.308 | 16.928 | 18.94 | 22.66 | 27.34 | 32.62 | 37.92 | 41.34 | 44.46 | 48.28 |
| 29 | 13.121 | 14.256 | 16.047 | 17.708 | 19.77 | 23.57 | 28.34 | 33.71 | 39.09 | 42.56 | 45.72 | 49.59 |
| 30 | 13.787 | 14.953 | 16.791 | 18.493 | 20.6 | 24.48 | 29.34 | 34.8 | 40.26 | 43.77 | 46.98 | 50.89 |



TABLE 10 A : Critical Values for Kolmogorov-Smirnov Test

| n | $\alpha = .20$ | $\alpha = .10$ | $\alpha = .05$ | $\alpha = .02$ | $\alpha = .01$ | n | $\alpha = .20$ | $\alpha = .10$ | $\alpha = .05$ | $\alpha = .02$ | $\alpha = .01$ |
|------|----------------|----------------|----------------|----------------|----------------|-----|----------------------|----------------------|----------------------|----------------------|----------------------|
| 1 | .900 | .950 | .975 | .990 | .995 | 21 | .226 | .259 | .287 | .321 | .344 |
| 2 | .684 | .776 | .842 | .900 | .929 | 22 | .221 | .253 | .281 | .314 | .337 |
| 3 | .565 | .636 | .708 | .785 | .829 | 23 | .216 | .247 | .275 | .307 | .330 |
| 4 | .493 | .565 | .624 | .689 | .734 | 24 | .212 | .242 | .269 | .301 | .323 |
| 5 | .447 | .509 | .563 | .627 | .669 | 25 | .208 | .238 | .264 | .295 | .317 |
| 6 | .410 | .468 | .519 | .577 | .617 | 26 | .204 | .233 | .259 | .290 | .311 |
| 7 | .381 | .436 | .483 | .538 | .576 | 27 | .200 | .229 | .254 | .284 | .305 |
| 8 | .358 | .410 | .454 | .507 | .542 | 28 | .197 | .225 | .250 | .279 | .300 |
| 9 | .339 | .387 | .430 | .480 | .513 | 29 | .193 | .221 | .246 | .275 | .295 |
| 10 | .323 | .369 | .409 | .457 | .489 | 30 | .190 | .218 | .242 | .270 | .290 |
| 11 | .308 | .352 | .391 | .437 | .468 | 31 | .187 | .214 | .238 | .266 | .285 |
| 12 | .296 | .338 | .375 | .419 | .449 | 32 | .184 | .211 | .234 | .262 | .281 |
| 13 | .285 | .325 | .361 | .404 | .432 | 33 | .182 | .208 | .231 | .258 | .277 |
| 14 | .275 | .314 | .349 | .390 | .418 | 34 | .179 | .205 | .227 | .254 | .273 |
| 15 | .266 | .304 | .338 | .377 | .404 | 35 | .177 | .202 | .224 | .251 | .269 |
| 16 | .258 | .295 | .327 | .366 | .392 | 36 | .174 | .199 | .221 | .247 | .265 |
| 17 | .250 | .286 | .318 | .355 | .381 | 37 | .172 | .196 | .218 | .244 | .262 |
| 18 | .244 | .279 | .309 | .346 | .371 | 38 | .170 | .194 | .215 | .241 | .258 |
| 19 | .237 | .271 | .301 | .337 | .361 | 39 | .168 | .191 | .213 | .238 | .255 |
| 20 | .232 | .265 | .294 | .329 | .352 | 40 | .165 | .189 | .210 | .235 | .252 |
| Over | | | | | | | 1.07 | 1.22 | 1.36 | 1.52 | 1.63 |
| 40 | | | | | | | $\frac{1}{\sqrt{n}}$ | $\frac{1}{\sqrt{n}}$ | $\frac{1}{\sqrt{n}}$ | $\frac{1}{\sqrt{n}}$ | $\frac{1}{\sqrt{n}}$ |

