

SECTION I

Time—1 hour and 30 minutes

Material in the following table may be useful in answering the questions in this section of the examination.

PERIODIC TABLE OF THE ELEMENTS

DO NOT DETACH FROM BOOK.

1	H	1.0079	2	He	4.0026
3	Li	6.941	10	Ne	20.179
11	Na	22.99	17	Cl	35.453
19	K	39.10	34	Se	78.96
37	Rb	85.47	51	Sb	121.75
55	Cs	132.91	82	Pb	207.2
87	Fr	226.02	114	Sn	118.71
101	La	138.91	146	Am	243
119	Ac	227.03	173	Lu	174.967
137	Unk	261	188	Yb	173.054
151	Unk	262	201	Hg	200.59
165	Unk	263	216	Po	209
179	Unk	264	229	At	210
193	Unk	265	244	Rn	222
207	Unk	266	261		
221	Unk	267	286		
235	Unk	268	311		
249	Unk	269	336		
263	Unk	270	352		
277	Unk	271	369		
291	Unk	272	384		
305	Unk	273	400		
319	Unk	274	416		
333	Unk	275	432		
347	Unk	276	448		
361	Unk	277	464		
375	Unk	278	480		
389	Unk	279	496		
403	Unk	280	512		
417	Unk	281	528		
431	Unk	282	544		
445	Unk	283	560		
459	Unk	284	576		
473	Unk	285	592		
487	Unk	286	608		
501	Unk	287	624		
515	Unk	288	640		
529	Unk	289	656		
543	Unk	290	672		
557	Unk	291	688		
571	Unk	292	704		
585	Unk	293	720		
599	Unk	294	736		
613	Unk	295	752		
627	Unk	296	768		
641	Unk	297	784		
655	Unk	298	800		
669	Unk	299	816		
683	Unk	300	832		
697	Unk	301	848		
711	Unk	302	864		
725	Unk	303	880		
739	Unk	304	896		
753	Unk	305	912		
767	Unk	306	928		
781	Unk	307	944		
795	Unk	308	960		
809	Unk	309	976		
823	Unk	310	992		
837	Unk	311	1008		
851	Unk	312	1024		
865	Unk	313	1040		
879	Unk	314	1056		
893	Unk	315	1072		
907	Unk	316	1088		
921	Unk	317	1104		
935	Unk	318	1120		
949	Unk	319	1136		
963	Unk	320	1152		
977	Unk	321	1168		
991	Unk	322	1184		
1005	Unk	323	1200		
1019	Unk	324	1216		
1033	Unk	325	1232		
1047	Unk	326	1248		
1061	Unk	327	1264		
1075	Unk	328	1280		
1089	Unk	329	1296		
1103	Unk	330	1312		
1117	Unk	331	1328		
1131	Unk	332	1344		
1145	Unk	333	1360		
1159	Unk	334	1376		
1173	Unk	335	1392		</

***Lanthanide Series:**

† Actinide Series:

58	Ce	140.12	59	Pr	140.91	60	Nd	144.24	61	Pm	(145)	62	Sm	150.4	63	Eu	151.97	64	Gd	157.25	65	Tb	158.93	66	Dy	162.50	67	Ho	164.93	68	Er	167.26	69	Tm	168.93	70	Yb	173.04	71	Lu	174.97
90	Th	232.04	91	Pa	231.04	92	U	238.03	93	Np	237.05	94	Pu	(244)	95	Am	(243)	96	Cm	(247)	97	Bk	(247)	98	Cf	(251)	99	Es	(252)	100	Fm	(257)	101	Md	(258)	102	No	(259)	103	Lr	(260)