AMRITA VISHWA VIDYAPEETHAM

Amrita School of Computing

23CSE211

Design and Analysis of Algorithms

WEEK – 6 (19 Feb 2026)

Susendran M

CH.SC.U4CSE24154

BACHELOR OF TECHNOLOGY

IN

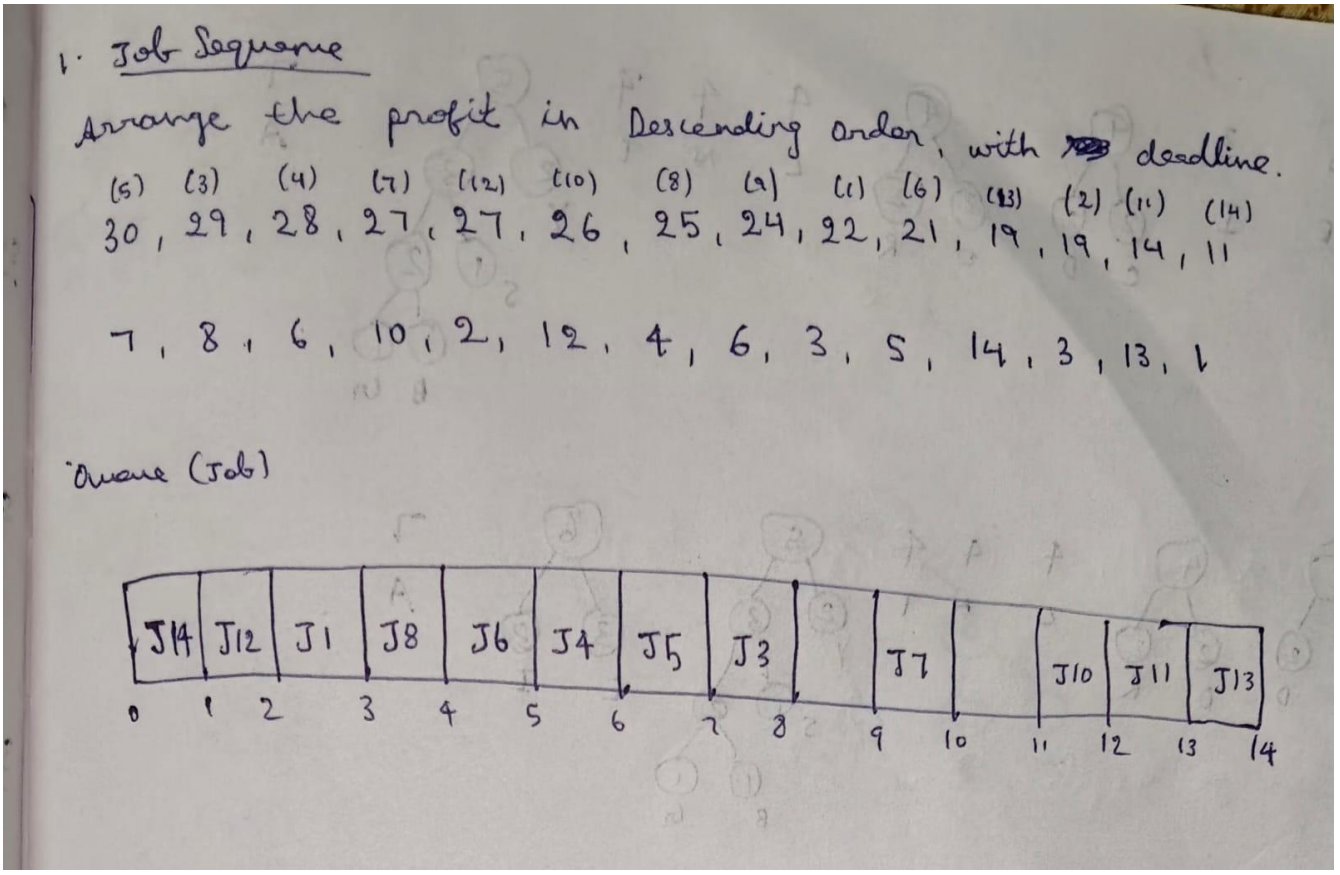
COMPUTER SCIENCE AND ENGINEERING

AMRITA VISHWA VIDYAPEETHAM

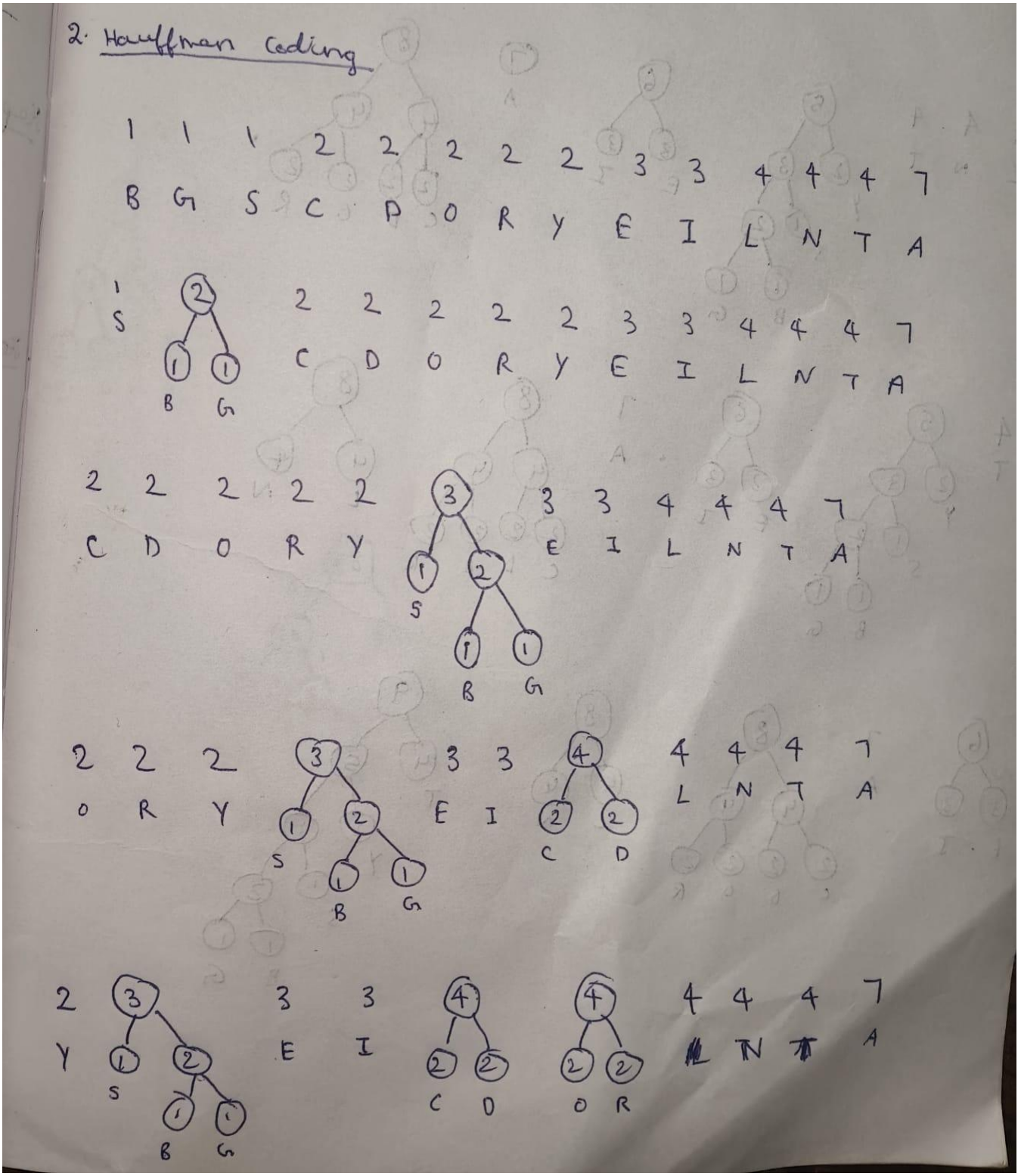
AMRITA SCHOOL OF COMPUTING

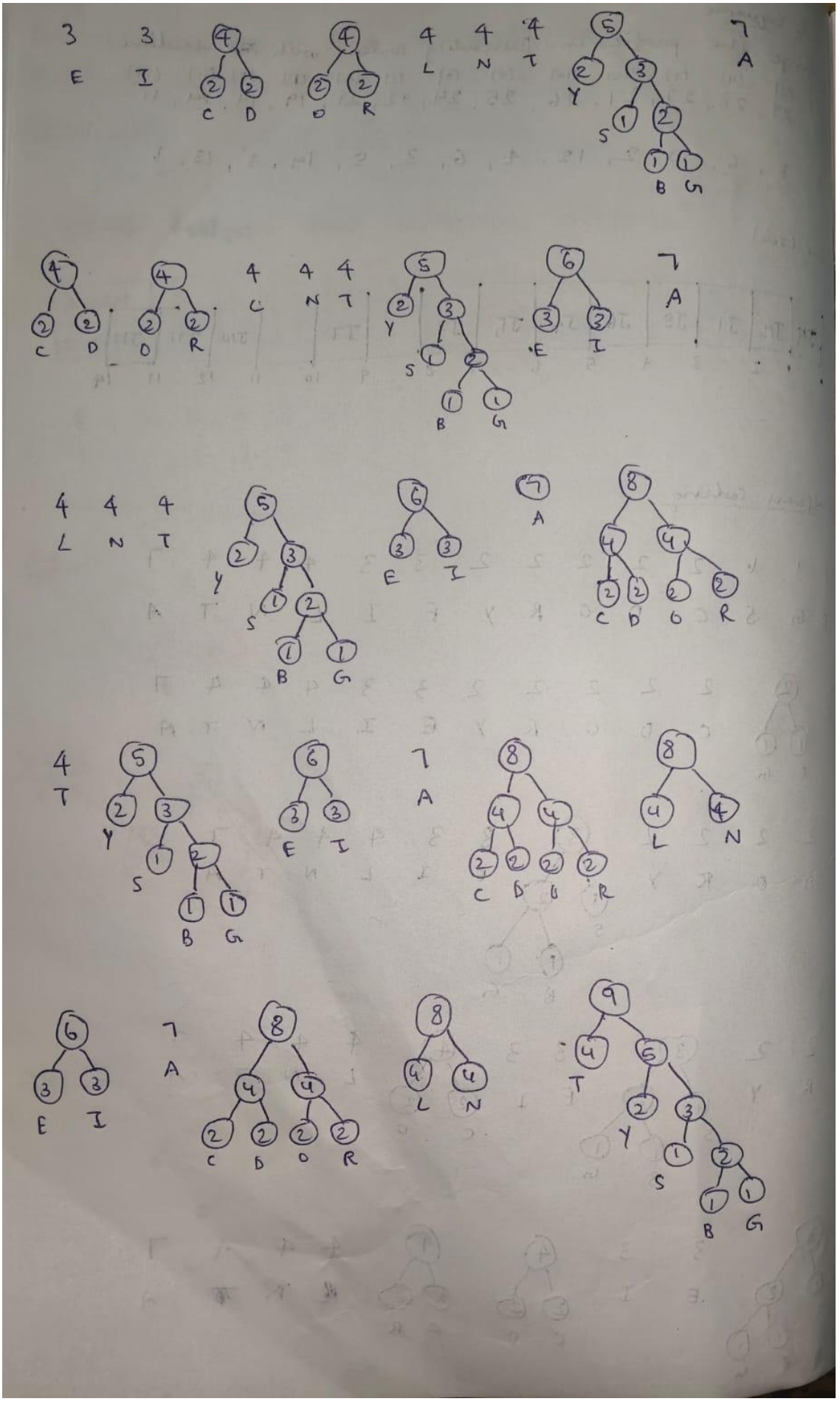
CHENNAI

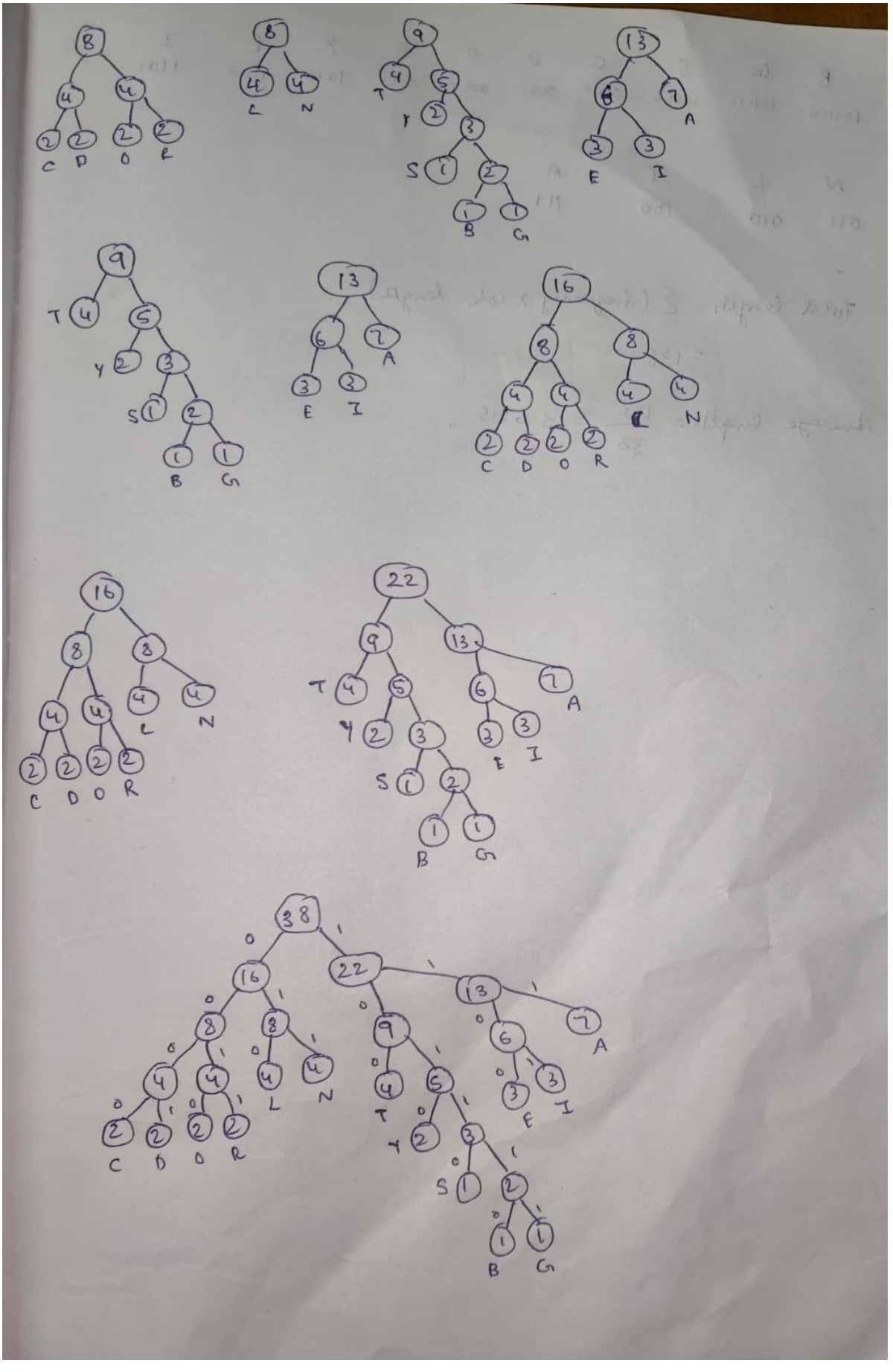
Job Sequencing :



Hauffman Coding :




3 E
3 I
4 C D
4 O R
4 L
4 N
4 T
5 Y S 1 2 1 1 B G
7 A
6 3 3 E I
8 4 4 4 4 C D O R
4 L
4 N
4 T
5 Y S 1 2 1 1 B G
6 3 3 E I
7 A
8 4 4 4 4 C D O R
4 T
5 Y S 1 2 1 1 B G
6 3 3 E I
7 A
8 4 4 4 4 C D O R
8 4 4 L N
6 3 3 E I
7 A
8 4 4 4 4 C D O R
8 4 4 L N
9 4 5 T 2 3 Y 1 2 S 1 1 B G


C D O R
L N
T Y S B G
E I A
T Y S B G
E I A
C D O R
L N
C D O R
T Y S B G
E I A
C D O R
L N
T Y S B G
E I A

B	G	S	C	D	O	R	Y	E	I
10110	10111	10110	0000	0001	0010	0011	1010	1100	1101

N	L	T	A
011	010	100	111

Total length = Σ (frequency x code length)

= 138

Average length = $\frac{138}{38}$ = 3.6315