Errata to “Optimal Conflict-Avoiding Codes of Even Length and Weight 3”

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In [1], the following corrections are necessary.

a) In the proof of Lemma 2.4 (p. 5751), for the case \( s \equiv 3 \pmod{4} \), \( F = \{4s - 5, 4s - 3\} \) and \( s \geq 7 \),

\[
4s - 4 \in \{3, 4n - 1\}
\]

should be read

\[
4s - 4 \in \{3, 4s - 1\}.
\]

b) In the proof of Lemma 2.5 (p. 5751), for the case \( s \equiv 0 \pmod{4} \) and \( s \geq 8 \),

\[
4 \in \{3s - 11, 3s - 7\}
\]

should be replaced by

\[
4 \in \{3s - 7, 3s - 3\}.
\]

c) In Construction 3.1 (p. 5753):

\[
\Delta_2(C_a) = \{2i - 1 : (n + 4)/8 + 1 \leq i \leq n/4\} \\
\cup \{4i - 2 : (n + 4)/8 + 1 \leq i \leq n/4\}
\]

\[
\Delta_2(C_b) = \{4i : (n + 28)/32 + 1 \leq i \leq (n - 4)/16\} \\
\cup \{8i : (n + 28)/32 + 1 \leq i \leq (n - 4)/16\}
\]

should be replaced by

\[
\Delta_2(C_a) = \{2i - 1 : (n + 4)/8 + 1 \leq i \leq n/4\} \\
\cup \{4i - 2 : 1 \leq i \leq (n - 4)/8\},
\]

\[
\Delta_2(C_b) = \{4i : (n + 28)/32 < i \leq (n - 4)/16\} \\
\cup \{8i : (n + 28)/32 \leq i \leq (n - 4)/16\}.
\]

d) In Construction 3.1 (p. 5753):

\[
\Delta_2(N_{od}) = \{2i - 1 : 1 \leq i \leq (n - 4)/8 - 1, \ i \neq (n + 12)/16\} \\
\cup \{4i : 1 \leq i \leq (n - 4)/32\} \\
\cup \{8i : (n + 28)/32 \leq i \leq (n - 4)/16\}.
\]

should be replaced by

\[
\Delta_2(N_{od}) = \{2i - 1 : 1 \leq i \leq (n - 4)/8\} \\
\cup \{4i : 1 \leq i \leq (n - 4)/32\} \\
\cup \{8i : (n + 28)/32 \leq i \leq (n - 4)/16\}.
\]

e) In Construction 3.3 (p. 5754), all the congruent expressions \( m \equiv 1 \pmod{37} \), \( m \equiv 13 \pmod{96} \) and \( m \equiv 25 \pmod{96} \) should be read as modulo 48.

f) In Construction 3.4 (p. 5754), a codeword \( \{0, c, n/2 - 2\} \) in \( N_{od} \) should be replaced by \( \{0, c, n/2 - 3 + c\} \).

g) In Construction 3.6 (p. 5754), the sentence (3.6) for \( 1 \leq i \leq \lfloor (n - 20)/64 \rfloor - 1 \) should be replaced by (3.6) for \( 1 \leq i \leq \lfloor (n - 20)/64 \rfloor - 1 \).

h) In Construction 3.7 (p. 5754), the sentence \( C_k \) be the set of (3.7) for \( 1 \leq i \leq (n - 20)/32 \) should be replaced by \( C_k \) be the set of \( \{0, n/4 - 1 - 4i, n/2 - 2 - 8i\} \) for \( 1 \leq i \leq (n - 20)/32 \).

i) In Construction 3.8 (p. 5755),

\[
\{0, (n - 4)/16 + 6, (n - 4)/8 + 12\} \{0, n/6 + 1, n/3 + 2\}
\]

should be read

\[
\{0, (n - 4)/16 + 6, (n - 4)/8 + 12\}, \\
\{0, n/6 + 1, n/3 + 2\}
\]

so that (3.9) may indicate only \( \{0, n/6 + 1, n/3 + 2\} \).

j) In Construction 3.8 (p. 5755),

\[
\{0, (n - 4)/16 - 4, n/2 - 10\} \{0, n/3 - 1, n/2 - 2\}
\]

should be read

\[
\{0, (n - 4)/16 - 4, n/2 - 10\}, \\
\{0, n/3 - 1, n/2 - 2\}
\]

so that (3.11) may indicate only \( \{0, n/3 - 1, n/2 - 2\} \).

k) In Construction 3.10 (p. 5755), a codeword \( \{0, c, n/2 - 2\} \) in \( N_{od} \) should be replaced by \( \{0, c, n/2 - 3 + c\} \).

REFERENCES