**Formula Sheet 2 – Additional Formulae to Those Given In the Inside Cover of Griffiths**

(When quoting a formula from here write down **the** formula **and** its number)

**1. DEFINITIONS**

Source charges & currents usually denoted by primes:

 (1.1)

 (1.2)

 (1.3)

**2. ELECTROSTATICS**

 (2.1)

 (2.2)

 (2.3)

 (2.4)

 (2.5)

 (2.6)

 (2.7)

 (2.8)

 (2.9)



 (2.10)

 (2.11)

 (2.12)

 (2.13)

 (2.14)

 (2.15)

**3. SPECIAL TECHNIQUES**

 (3.1)

 (3.2)

For arbitrary charge distribution at the origin :

 (3.3)

 (3.4)

 (3.5)

 (3.6)

**4. STATIC ELECTRIC FIELDS IN MATTER**

 (4.1)

 (4.2)

 (4.3)

 (4.4)

 (4.5)

 (4.6)

 (4.7)

 (4.8)

 (4.9)

 (4.10)

 (4.11)

 (4.12)

 (4.13)

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**5. MAGNETOSTATICS**

 (5.1)

 (5.2)

 (5.3)

 (5.4)

 (5.5)

 (5.6)

 (5.7)

 (5.8)

 (5.9)

 (5.10)

(5.11)

 (5.12)

 (5.13)

 (5.14)

For an arbitrary current distribution at the origin and  the angle between  and :

 (5.15)

 (5.16)

**6. STATIC MAGNETIC FIELDS IN MATTER**

 (6.1)

 (6.2)

 (6.3)

 (6.4)

 (6.5)

 (6.6)

 (6.7)



 (6.8)

 (6.9)

 (6.10)

 (6.11)

**7. ELECTRODYNAMICS**

 (7.1)

 (7.2)

 (7.3)

 (7.4)

 (7.5)

 (7.6)



(7.7)

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