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**Unit IV : Assessment: Assignments**

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**Assignment – Lecture 68**

**1.**

A 4 pole DC motor is connected to 500V DC supply and takes an armature current of 80A. The resistance of the armature circuit is  $0.4\Omega$ . The armature is wave wound with 522 conductors and a useful flux per pole is 0.025Wb. Calculate i) back EMF of the motor ii) speed of the motor iii) the torque in Nm developed by the armature.