

LAGOS CITY POLYTECHNIC, IKEJA
SCHOOL OF ENGINEERING AND APPLIED SCIENCE
DEPARTMENT OF ELECT/ELECT AND COMPUTER ENGINEERING
2016/2017 SEMESTER EXAMINATION

COURSE TITLE: MECHANICAL ENG. SCIENCE	NO OF QUESTIONS : 6
COURSE CODE: MEC 107	TIME ALLOWED: 2 HRS
FOR WHOM: ND YR I CE, EE	PT
INSTRUCTIONS:	

ANSWER ANY

FOUR QUESTIONS

1. (a) Define Force
 (b) Differentiate between linear and angular motion.
 (c) Define (i) Speed (ii) Velocity (iii) Acceleration
 (d) Differentiate between static and dynamic friction
2. Define the following terms:
 (i) Energy
 (ii) Torque
 (iii) Couple
 (iv) Power
 (v) Work
 (vi) Friction
3. (a) With the aid of diagram show parallel vectors and anti-parallel vectors
 (i) What are the conditions for equality of vectors
 (b) State the advantages and disadvantages of friction.
4. (a) State Newtons first and second law of motion.
 (b) Explain centripetal and centrifugal forces
 (c) Define momentum
5. (a) Mention four types of fluid
 (b) Define processure
 (c) State the units of pressure
 (d) Differentiate between Lanunar flow and turbulent flow of fluid.
6. (a) What are methods of addition of vectors
 (b) List examples of vector and scalar quantities
 (c) Differentiate between scalar and vector quantities.