GANPAT UNIVERSITY
B. TECH SEM- IV (Marine)
REGULAR EXAMINATION– APRIL-JUNE 2017
2MR603 Marine Internal Combustion Engine II

TIME: 3 HRS   **TOTAL MARKS: 60**

Instructions: (1) This Question paper has two sections. Attempt each section in separate answer book.
   (2) Figures on right indicate marks.
   (3) Be precise and to the point in answering the descriptive questions.

SECTION: I

Q.1 (a) What is the purpose of Fuel Injection System?   **(05)**

   (b) With reference to air starting systems, on board ship give reasons for failure of starting air   **(05)**
   system.

OR

Q.1 What do you mean by VIT? Why is it required to introduce in Fuel Pump systems? Explain   **(10)**
   with Sketch and related graph?

Q.2 (a) What do you mean by Intelligent Engine?   **(5)**

   (b) Enlist the various safety features incorporated in Main Engine Starting and Reversing   **(5)**
   System.

OR

Q.2 Sketch and Describe an Electronic Governor.   **(10)**

Q.3 Explain with sketch, how the starting and reversing of a large main propulsion engine is   **(10)**
   accomplished?

SECTION: II

Q.4 How is wear in a cylinder liner measured? Give causes of liner wear and its pattern. What is   **(10)**
   the effect of running an engine with more than the recommended maximum wear?

OR

Q.4 Describe the procedure for dismantling main bearing of a slow speed marine diesel engine.   **(10)**
   What are criteria for rejection of bearing?

Q.5 (a) What are the causes of crankshaft slippage? What steps are taken in case of excessive   **(05)**
   slippage?

   (b) What are the requirements for Unmanned Machinery Space operation?   **(05)**

OR

Q.5 (a) State briefly the difficulties in lubrication of crosshead bearings in large two-stroke **(05)**
engines. What methods are employed to overcome these problems?

(05)

(b) Why is a chain used for camshaft drive of a diesel engine? Give the causes for loss of
tension and its effects and how may it be compensated for?

Q.6 Sketch indicator diagrams for a slow running large two stroke diesel engine. How diagrams **(10)**
taken and information gained from them? How is power balancing carried out?

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