

GUJARAT TECHNOLOGICAL UNIVERSITY
B.E SEM-VII Examination-Nov/Dec.-2011

Subject code: 171805**Date: 29/11/2011****Subject Name: Marine Internal Combustion Engines-II****Time: 10.30 am-01.00 pm****Total marks: 70****Instructions:**

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

Q.1 (a) Explain the Advantages of camless engines 07
(b) Draw neat sketch of indicator instrument and explain how will you take indicator diagrams 07

Q.2 (a) With the help of diagrams explain crank shaft deflection in marine IC engine. 07
(b) Sketch a typical starting air system to start marine diesel engine including air compressors, air bottles. 07

OR

(b) Explain Four stroke engine timing diagram. 07

Q.3 (a) Explain Fuel injection system in marine diesel engine. 07
(b) Explain Electronic fuel injection system. 07

OR

Q.3 (a) What are the functions of Lubrication system in marine diesel engine? 07
(b) Explain various types of lubrication system. 07

Q.4 (a) Explain **MAN** diesel engine used in marine diesel engine. 07
(b) Explain **SULZER** diesel engine in marine diesel engine. 07

OR

Q.4 (a) Why governing is necessary for marine diesel engine? 07
(b) Explain with neat sketch any one type of governor used in marine diesel engine. 07

Q.5 (a) Why maintenance is necessary for marine diesel engine? 07
(b) Explain various types of maintenance used in marine diesel engine. 07

OR

Q.5 (a) Explain construction and design features of gas turbine used in marine diesel engine. 07
(b) Explain trouble shooting in diesel engine. 07
