

類 科：輪機技術

科 目：輔機

考試時間：2 小時

座號：_____

※注意：(一)禁止使用電子計算器。

(二)不必抄題，作答時請將試題題號及答案依照順序寫在試卷上，於本試題上作答者，不予計分。

(三)本科目除專門名詞或數理公式外，應使用本國文字作答。

- 一、海面因為某種原因浮現大量 C 油，欲將此油緊急抽上船舶，應選用何種泵較為恰當？並請說明此種泵的工作原理。(20 分)
- 二、船舶冷凍裝置在日常運轉中的檢查時，經驗上可分成看、聽與摸，請就此論述之。(20 分)
- 三、操舵時，發現舵葉的轉動滯後於操舵動作，這時可能是什麼現象發生？請就這些現象分析其個別原因。(20 分)
- 四、錨機和絞纜機常組成一聯動機組，它們工作時須具備那些要求？(20 分)
- 五、請將下列句子翻譯成中文。(20 分)

International Maritime Organization (IMO) has taken the active interest in ship discharges that contaminate the ocean environment. The international convention for the Prevention of Pollution from Ships, which is known as the MARPOL 73/78 protocol, prohibits the discharge of various pollutants from marine vessels except under specific conditions. The most notable potential sources of pollution are the cargo-oil piping and ballast system on crude-oil tankers. The other sources of pollution such as the bilge systems, sewage system and the gas emissions from engines and boilers also require a rigorous analysis and the careful controls in order to comply with the international regulations. Furthermore, in order to prevent the marine growth in seawater system, these systems are often fitted with connections for the continuous injection of chemical poisons. This could also affect the marine environment even if its impact is almost negligible.