The determinations of omega-3 fatty acids i.e. linolenic acid (LNA, C18:3ω-3), eicosapentaenoic acid (EPA, C20:5ω-3) and docosahexaenoic acid (DHA, C22:6ω-3), in Corbicula javanica Mousson using gas chromatography have been done. The aim of this research was to obtain information of the health-valuable substances in Corbicula javanica Mousson. LNA, EPA, DHA as fat samples were extracted by Soxhlet extractor for 6 hours from Corbicula javanica Mousson’s meat using petroleum ether for 6 hours. The extracted fat was hydrolyzed with MeONa and converted to fatty acid methyl esters (FAMEs) using methanolic-BF3 as catalyst. The obtained FAMEs were extracted with heptane before being injected to GC. All of these determinations used tricosanoic methyl ester (TME) as internal standard. The GC condition used were: inlet temperature 250oC, detector temperature 300oC, oven temperature programmed as follows, 180 oC for 1 minute, increased by 1oC/minute to 200oC (hold for 1 minute), increased 10oC/minute to 280oC (hold for 3 minute), helium flow rate was 1.1 ml/minute. With above mentioned condition, it could be concluded that Corbicula javanica Mousson contain LNA, EPA and DHA i.e. (34.8±6.77)mg/100g, (5.64±1.03)mg/100g, (7.35±1.48)mg/100g respectively as fresh weight (70.3%±0.20% water content). Those EPA and DHA concentration were +100 times lower than their concentration in salmon fish, as main source of EPA and DHA but it might increase the value of Corbicula javanica Mousson as a popular staple food.