

國立嘉義大學 104 學年度
水生生物科學系碩士班招生考試試題

科目：專業英文

Translate the paragraph into Chinese.

1. The seawater hard clam *Meretrix lusoria* is an important aquaculture species in Asian countries. Its diet comprises mainly microalgae species from the culture ponds. Because of the benefits of n-3 highly unsaturated fatty acids, such as eicosapentaenoic acid and docosahexaenoic acid, toward cardiovascular disease, many cultured aquatic animals are enriched with these fatty acids through dietary treatments to increase their nutritional values. This practice can be applied to bivalve culture using microalgae as the dietary fatty acid provider. (25%)

2. Translate the terms into Chinese (25%)

- (1) analysis of variance;
- (2) tocopherol;
- (3) cage culture;
- (4) biodiversity;
- (5) tuna;
- (6) mangrove;
- (7) soybean meal;
- (8) phytic acid;
- (9) mitochondria;
- (10) grouper;
- (11) *E. coli*;
- (12) retinol;
- (13) limnology;
- (14) bioavailability;
- (15) catfish;
- (16) phytoplankton;
- (17) myosin;

- (18) methionine;
- (19) parasite;
- (20) vertebrates;
- (21) standard deviation;
- (22) ascorbic acid;
- (23) nutrient;
- (24) nitrogen-free extract;
- (25) protein sparing effect.

3. Ventilation refers to the movement of water over the gill. The fish respiratory system moves water over the gills by the coordinated expansion and contraction of the buccal and opercular cavities. It is difficult to measure this, as the result, there is an indirect method one can count visually the opercular beat.(25%)
4. In fish the branchial heart is contained within a pericardial sac, consists of four chambers, the sinus venosus, the atrium, the ventricle, and either the bulbus arteriosus (in teleosts) or the conus arteriosus (in cyclostomes and elasmobranchs).(25%)