**Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 27 August 2020**

**FYS 178 INDIVIDUAL QUIZ#02**

Choose the single best answer in Questions (1) – (3). Each question is worth five points for a total of 25 points.

(1) Vilhelm’s circulation theorem neglected two important forcings that he included in updated versions of the theorem. They were the effects of \_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_.

(a) density variations, earth’s rotation

(b) density variations, pressure variations

(c) friction, density variations

(d) friction, earth’s rotation, p. 39

(2) Otto Pettersson, very much interested in the scientific problems of \_\_\_\_\_\_\_\_, foresaw that Vilhelm’s circulation theorem could aid the Swedish \_\_\_\_\_\_\_\_ industry.

(a) meteorology, agriculture

(b) meteorology, aviation

(c) oceanography, fishing, p. 40

(d) oceanography, shipping

(3) The field of \_\_\_\_\_\_\_\_ commanded a comparatively healthy amount of research support in Sweden and Norway in the \_\_\_\_\_\_\_\_.

(a) geophysics, early 1900s, p. 47

(b) geophysics, late 1800s, p. 47

(c) physics, early 1900s

(d) physics, late 1800s

(4) In his book *Principles of Mechanics*, Hertz stated that the highest ideal of mechanics is to be able to do what?

pre-calculate (predict) future events [p. 52]

(5) What natural events happened in Sweden late in 1902 and again in 1903 that allowed Vilhelm and Ekholm to secure the funds to expand their network of upper air measurements?

a series of unusually severe storms [p. 52]