YLIOPISTOTENTTI - UNIVERSITY EXAM

Opiskelijan nimi / Student name:	Opiskelijanumero / Student number:

Opettaja täyttää / Lecturer fills in:

Opintojakson koodi and nimi / The code and the name of the course:
721190S   **Advanced Firm Valuation**

Tiedekunta / Faculty: Oulu Business School

Tentin pvm / Date of exam: 4.10.2016	Tentin kesto tunteina / Exam in hours: 3
Tentin nro / No. of the exam: 2. uusinta (esim. Tentti, 1. uusinta, 2. uusinta / e.g. Exam, 1. retake, 2. retake)	**Opintopistemäärä / Credit units: 6**
Tentaattori(t) / Examiner(s): **Juha-Pekka Kallunki**	**Sisäinen postios. / Internal address:** **Laskentatoimi/TaTK**

Sallitut apuvälineet / The devices allowed in the exam:

☒ Nelilaskin / Standard calculator   ☒ Funktiolaskin / Scientific calculator   ☐ Ohjelmoitava laskin / Programmable calculator

☐ Muu materiaali, tarkennettu alla / Other material, specified below:

Tenttiin vastaaminen / Please answer the questions:
☐ Suomeksi / in Finnish   ☒ Englanniksi / in English

Suomenkielisessä tutkinto-ohjelmassa olevalla opiskelijalla on oikeus käyttää arvioitavassa opintosuorituksessa suomen kieltä, vaikka opintojakson opetuskieli olisi englanti. Tämä ei koske vieraan kielen opintoja. (Kts. Koulutuksen johtosääntö 18 §)

In a Finnish degree programme a student has a right to use Finnish language for their study attainment, even though the language of instruction is English, (excluding language studies) even when the language of instruction is other than Finnish. (See the Education Regulations 18 §)

Kysymyspaperi on palautettava / Paper with exam questions must be returned:
☒ Kyllä / Yes   ☐ Ei / No

1. Below you can find six statements. Answer whether they are true or false [correct answer = 1p., wrong answer = -1p., no answer = 0p. Min: 0p., max 6p.]

   a) Dichev, Graham, Harvey and Rajgopal (2013) examine in their article *"Earnings quality: Evidence from the field"* firm valuation models.

   b) Penman and Zhu (2014) report in their article *"Accounting Anomalies, Risk, and Return"* that the observed "anomalous" returns associated with accounting numbers are consistent with irrational pricing.

   c) IAS 33 regulates how per-share numbers are calculated.

   d) Net operating assets = Non-current assets + Current assets.

   e) An excellent company cannot be a bad investment.

   f) According to the Dupont Identity, ROE =
      (Net Income / Revenues) × (Revenues / Invested Capital).

2. Schiller & Co. Ltd. has the following data at the end of December 2013:

Book value of equity:	4.00 per share

Expected earnings for the next four years:	
	(31 Dec 2014) 2.00 per share
	(31 Dec 2015) 2.50 per share
	(30 Dec 2016) 2.80 per share
	(30 Dec 2017) 3.20 per share

Schiller & Co. Ltd is not expected to pay any dividends during this period. Expected cost of equity capital is 10 percent. The perpetual growth in abnormal earnings after 2017 is equal to the growth in residual income between 2016 and 2017.

   a) Using the abnormal earnings model, calculate the intrinsic value of a share of Schiller & Co. Ltd on 31 December 2013. [6p]
   b) Calculate the expected ROE (return on equity) in year ended 31 December 2017 by using the average equity of the beginning and ending balance sheet. [6p]