

EDUCATION COMMITTEE OF THE SOCIETY OF ACTUARIES (SOA)

INTRODUCTORY STUDY NOTE

EXAM SESSION: FALL 2020

EXAM: FOUNDATIONS OF CORPORATE FINANCE AND ERM

DATE: Wednesday, October 28, 2020

1. The examination will consist of five hours and fifteen minutes of written-answer questions worth 100 points.
2. The following link shows a recommended FSA module/exam sequence for each track:
<http://www.soa.org/Education/Exam-Req/edu-new-fsa-recommended.aspx>

This order is NOT mandated. Each candidate will determine the appropriate sequence based on factors including readiness to sit for an exam, exam administration schedules, or study time available. However, the Education committees believe that these recommendations provide the most effective guide for candidate success. An examination/module may assume familiarity with material that is covered in any requirement that is recommended to come before that examination or module.

3. The Syllabus material includes textbooks, online readings, and the study notes listed in the Appendix. The Appendix also may contain additional important information regarding this exam. A complete listing of the Syllabus and Learning Objectives is located in this exam's home page on the SOA Web site. Study notes listed with an asterisk (*) will also be included in the Revision set of study notes.
4. Several book distributors carry some or all of the textbooks for the Society of Actuaries exams. A list appears on the SOA Web site: <http://www.soa.org/education/exam-req/resources/edu-txt-manuals.aspx>.
5. Any changes in the Syllabus for this exam will be published under "Updates" in this exam's home page on the SOA Web site.
6. Past exams, solutions and case studies are available at: <http://www.soa.org/education/exam-req/syllabus-study-materials/edu-multiple-choice-exam.aspx>
7. A case study will be used as a basis for some questions on the examination. Be sure to answer the questions asked by referring to the case study. For example, if asked for advantages of a particular plan design to a company referenced in the case study, limit your response to the specifics for that company. Other advantages should not be listed as they are extraneous to the question and will result in no additional credit. Further, if they conflict with the applicable advantages, no credit will be given. Candidates are advised to familiarize themselves with the case study. A copy will be included in the examination booklet. Candidates will not be allowed to bring their study note copy of the case study into the examination room.
8. The candidate should be very familiar with the Learning Objectives. These Learning Objectives are the first ingredient in developing the syllabus and also guide the examination committee

when writing questions. The Learning Objectives set out the cognitive level needed to pass this exam. You will notice that the candidates are expected to “analyze,” “explain,” “calculate,” “describe,” “apply,” etc. While studying the syllabus material, candidates may want to refer back to the Learning Objectives to remain focused on the goals of the exam.

9. The examination questions for this exam will be based on the required readings for this exam. If a conflict exists (in definitions, terminology, etc.) between the readings for this exam and the readings for other exams, the questions should be answered on the basis of the readings for this exam.
10. Candidates may ONLY use these battery or solar-powered Texas Instruments models: BA-35, BA II Plus*, BAII Plus Professional*, TI-30Xa, TI-30X II* (IIS solar or IIB battery), and TI-30X MultiView* (XS solar or XB battery). Candidates may use more than one of the approved calculators during the examination.

Calculator instructions may not be brought into the exam room. During the exam, the calculator must be removed from its carrying case so the supervisor can confirm that it is an approved model. Candidates using a calculator other than the approved models will have their exams disqualified.

Candidates can purchase calculators directly from: Texas Instruments, Attn: Order Entry, PO Box 650311, Mail Station 3962, Dallas, TX 75265, phone 800/842-2737 or <http://epsstore.ti.com>.

The memory of the **BA II Plus, BA II Plus Professional, TI-30X II and TI-30X MultiView calculators will need to be cleared by the examination supervisor upon the candidate's entrance to the examination room.*

11. A list of various seminars/workshops and study manuals appears on the SOA Web site <http://www.soa.org/education/exam-req/resources/edu-sem-workshops.aspx> and <http://www.soa.org/education/exam-req/resources/edu-txt-manuals.aspx>. These seminars/workshops and study manuals do not reflect any official interpretation, opinion, or endorsement of the Society of Actuaries or its Education Committee.

Please note that the Education Committee expects candidates to read the material cited in the *Syllabus* and to use other material as a complement to the primary sources rather than a substitution for them.

12. The Society of Actuaries provides study notes to persons preparing for this examination. They are intended to acquaint candidates with some of the theoretical and practical considerations involved in the various subjects. While varying opinions are presented where appropriate, limits on the length of the material and other considerations sometimes prevent the inclusion of all possible opinions. These study notes do not, however, represent any official opinion, interpretation or endorsement of the Society of Actuaries. The Society is grateful to the authors for their contributions in preparing study notes.

The American Academy of Actuaries, the Canadian Institute of Actuaries, the Conference of Consulting Actuaries, and the Society of Actuaries jointly sponsor various examinations administered by the Society of Actuaries.

APPENDIX

Study notes for this exam

Code	Title
F-20-20†	Course Overview (link only; not included in study note sets)
F-113-14	Securitization, Insurance, and Reinsurance
F-131-16	Heavy Models, Light Models and Proxy Models
F-132-17	Capital Structure, Executive Compensation, and Investment Efficiency
F-133-19	Chapter 10 of <i>Handbook of Corporate Finance: Empirical Corporate Finance</i>
F-134-19	Chapter 15 of <i>Damodaran on Valuation, Second Edition</i>
F-135-19	Why are the Parts Worth More Than the Sum? “Chop Shop,” A Corporate Valuation Model
F-136-19	Corporate Value Creation, Governance and Privatisation
F-137-19	Hurdle Rates, Cost of Capital & Capital Structure: CFO Spotlight
F-139-19	How to Improve the Quality of Stress Tests Through Backtesting
F-138-20	A Framework for Board Oversight of Enterprise Risk (link only; not included in study note sets)
F-140-19	The Costs and Benefits of Reinsurance
F-142-19	An Analysis of Delta Air Lines’ Oil Refinery Acquisition
F-143-19	Managing Supply Chain Disruptions
F-146-20*	2012 Fuel Hedging at JetBlue Airways
F-147-20*	Chapter 11 of <i>Modelling in Life Insurance a Management Perspective</i>
F-148-20*	A Guide to Risk Measures, Capital Allocation & Related Decision Support Issues
F-149-20*	Catastrophe Bonds: An Important New Financial Instrument
F-150-20*	A Fundamental Approach to Cyber Risk Analysis
F-151-20*	Ch. 11 of <i>Foundations of Airline Finance: Methodology and Practice</i> , 3 rd Edition
F-152-20*	Demystifying the Risk Margin: Theory, Practice and Regulation
F-153-20*	Commodity Hedging—The Advent of a New Paradigm
F-154-20*	Is Longevity an Insurable Risk? Hedging the Unhedgeable

The following additional information applies to this exam:

†Study Note F-20-20 is designed to provide an overview of the CFE Track and this exam. Candidates should read it prior to beginning preparation for the exam. While it can be a valuable aid in preparation, the material in this note will not be tested.

ERRATA:

- **Measuring Market Risk**

Formula (15.3) on Page 329: The first n11 in the exponent should be n10.

- **Study Note F-113-14** corrected equation (3):

$$\sigma_N^2 = \sum_{i=1}^N \sigma_i^2 + 2 \sum_{j=2}^N \sum_{i=1}^{j-1} \sigma_{ij},$$