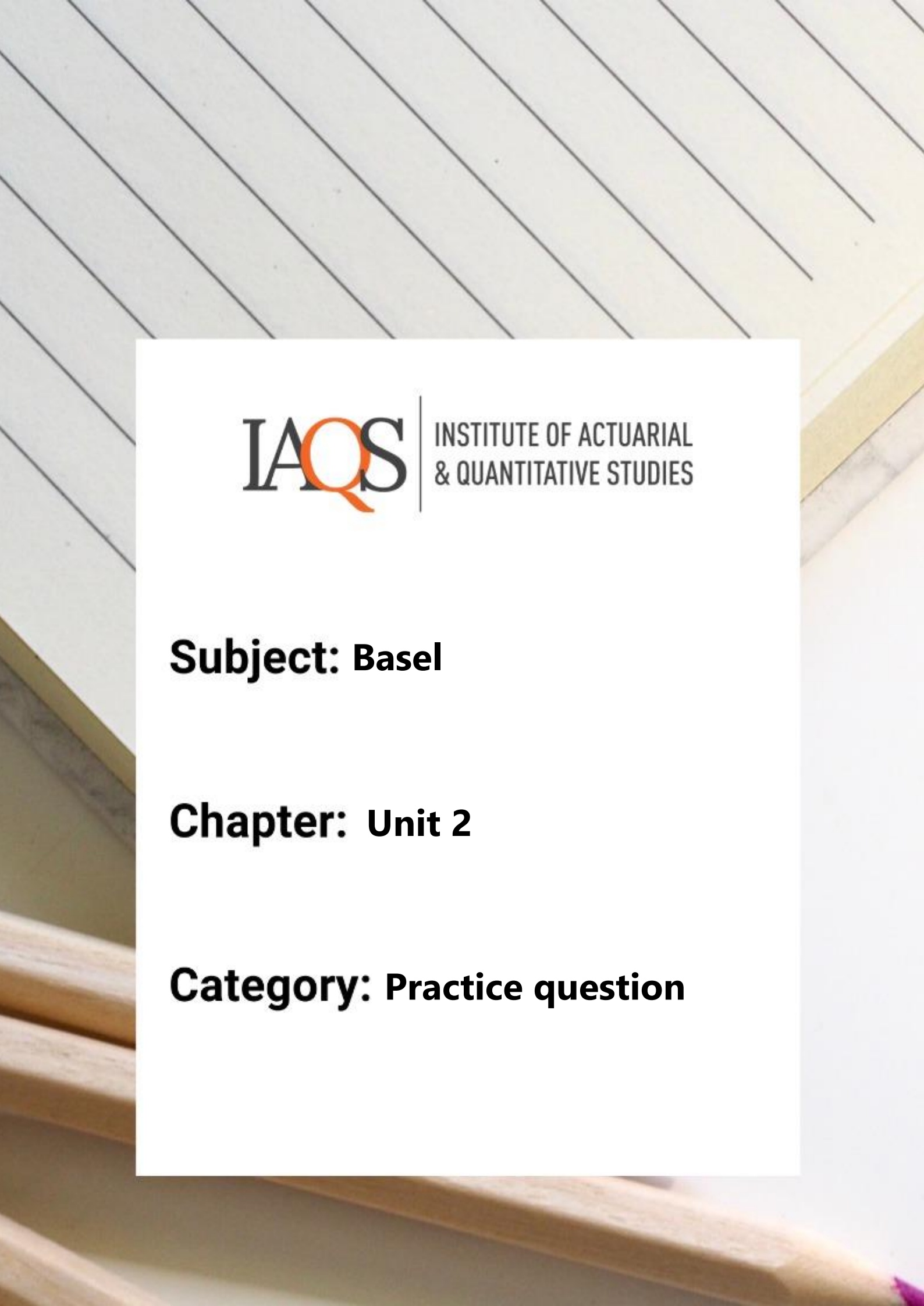

Subject: Basel

Chapter: Unit 2

Category: Practice question

1. The banking book of an international bank contains $300 million of OECD claims, $100 million of Uninsured residential mortgages, $ 200 million of OCED Banks claims & $ 400 non-OECD bank claims, $ 500 million of Corporate loans. Calculate the Risk-weighted assets under Credit risk of BASEL I.

2. The assets of Blue Star Bank consist of $20 million in U.S. Treasury bills, $20 million in insured mortgages (by U.S. government), $50 million in uninsured residential mortgages, and $150 million in corporate loans, Freddie Mac Claims of $ 750. Using the risk weights, calculate the bank's risk-weighted assets and total capital (Cooke ratio), Tier 1, and Tier 2 capital adequacy requirement.

3. Dantara Bank is trying to calculate the shortfall in its Tier 1 capital based on its Risk-weighted assets and capital adequacy requirements of BASEL I.

Liabilities	**Amt in Mn**	**Assets**	**Amt in Mn**
Deposits	1420	OECD claims	300
99-year Debenture	25	Uninsured residential mortgages	100
15 yr Subordinated Debts	25	OCED Banks claims	200
Cumulative perpetual preferred Stock	10	Non-OECD bank claims	400
Non-cumulative perpetual preferred Stock	10	Corporate loans	500
Common Equity	10		
TOTAL	**1500**	**TOTAL**	**1500**

A. $19,600,000

B. $20,400,000

C. $39,600,000

D. $79,200,000

4. Saugatuck National Bank uses the internal model-based approach to set market risk capital as prescribed by the 1996 Amendment to the 1988 Basel Accord. The bank has backtested its 99%, one-day VaRs against the actual losses over the last 250 trading days. Based on the results of the backtesting, the bank recorded 11 exceptions. Based on these results, the multiplicative factor (m_c) in the model should be set:

A. less than3

B. equal to 3

C. between 3.1 and 3.9

D. equal to 4

5. If Delta Bank has negative revenue in any business line, it can offset capital charges that year up to a maximum benefit of zero capital (***division by 3 for less than 3 years considered***). Beta Bank has had the following revenue (in $100 millions) for the past three years for its two lines of business: corporate finance and retail banking**.**

Business line	**Year 1 (2XX8)**	**Year 2 (2XX7)**	**Year 3 (2XX6)**	**Year 4 (2XX5)**
Corporate Finance	5	10	-10	15
Retail Banking	15	25	14	5
Retail Broking	20	60	31	40
Trade Settlements	30	-30	-60	42
Agency / Custody Services	50	40	-50	-40
Asset Management	60	-60	-60	-60

Calculate the operational risk capital requirement under TSA.

6. Calculate operational risk Capital under BIA

Gross Income (amount in $ millions)	**Year 1 (2XX4)**	**Year 2 (2XX5)**	**Year 3 (2XX6)**	**Year 4 (2XX7)**
Gross Income (amount in $ millions)	500	100	600	200

A. $ 60,000,000
B. $ 45,000,000
C. $ 30,000,000
D. $ 15,000,000

7. T. Saran Bank is calculating the market risk capital requirements as per the Internal models approach. T. Saran, the proud CEO & CRO of the business which did not observe any exception in the previous year (Actual loss was not greater than the estimated loss), has calculated the approximate values for the same.

- 5-day VaR at a 99% confidence interval over an average 60 day period = $130 million
- 10-day VaR at a 99% confidence interval over an average 60 days period = $140 million
- 20-day VaR at a 99% confidence interval over an average 60 days period = $150 million
- 5-day VaR at 95% confidence interval over the previous day = $150 million
- 10-day VaR at 95% confidence interval over the previous day = $300 million
- 20-day VaR at 95% confidence interval over the previous day = $450 million